National Park Service
U.S. Department of the Interior

History Program
Pacific West Region

# Watershed Park

## Administrative History
## Redwood National and State Parks

Mark David Spence, PhD

# Watershed Park
## Administrative History
## Redwood National and State Parks

By Mark David Spence, Ph.D.

Prepared for under Task Agreement Number 004
Organization of American Historians
Cooperative Agreement: H0400000014

for

Dr. David Louter, History Program Lead
Pacific West Region
National Park Service

2011

# Contents

A Forest of Symbols and Values ..... 10

A Patchwork Park ..... 15

Shifting Landscapes ..... 18

Part One ..... 23

Making Claims and Making Parks, 1850s–1960s ..... 23

The Land-use Mosaic of Redwood National and State Parks ..... 24

Native American Landscapes ..... 26

Property and a New Environmental Order ..... 34

Industrial Logging ..... 38

Postwar Cutting within the Current Boundaries of RNSP ..... 43

The Recreational Landscape ..... 45

Save the Redwoods! ..... 50

The Movement for a Redwood National Park ..... 50

First Park Efforts ..... 53

The Successful National Park Movement Begins ..... 60

A New Park for a New Age ..... 67

Shortcuts and Shortcomings ..... 75

The Environmentalist Park ..... 79

False Starts and True Precedents, 1968–1976 ..... 91

“Under Fire from Every Direction” ..... 92

Early Park Planning, 1968–1973 ..... 96

A Conceptual Plan ..... 103

Working without a Plan, 1969–1976 ..... 107

Administration ..... 110

Cooperative Mandates and Resource Management, 1969–1974 ..... 113

The Failed Cooperative Agreements of 1974 ..... 119

Research and Resource Management ..... 123

Science and Expansion ..... 127

Expanding Redwood National Park, 1976–1980 ..... 135

A Landmark Environmental Law and the Push for Expansion ..... 138

Redwoods and Politics ..... 141

“Things no one has ever thought possible” ..... 145

The Redwood National Park Expansion Act of 1978 ..... 147

A New Planning Model for a New Park ..... 153

Planning for Visitor Use ..... 157

Reorganizing Park Administration ..... 161

Engaging Old Neighbors ..... 164

American Indians in a New Context ..... 167

Unfinished Business: State Parks and May Creek ..... 173

Managing the Second-growth of Redwood National Park, 1980–1993 ..... 190

Acting on the Will of Congress, 1978–1993 ..... 192

Acquisition, Compensation, Redevelopment, and Park Administration ..... 194

“The most expensive park ever” ..... 195

The Redwood Employee Protection Plan ..... 199

Regional Economic Development ..... 202

“Development and implementation of a program for . . . rehabilitation” ..... 204

Early Rehabilitation Work to 1980 ..... 205

Rehabilitation Matures, 1980–1983 ..... 208

Charting a New Future for Rehabilitation, 1984–1989 ..... 217

Transitions in the Rehabilitation Program, 1988–1989 ..... 223

Monitoring the Park Protection Zone and Upper Watershed, 1978–1983 ..... 226

Setbacks and Slowdowns in the PPZ and Upper Basin, 1983–1990 ..... 230

U.S. Highway 101 Bypass, 1980–1992 ..... 235
The Redwood Creek Estuary: Restoration, Engineering, and Cooperation, 1980–1988 ..... 238
The U.S. Highway 101 Bypass "Debacle" and new Directions for Redwood National Park ..... 244
Administering a More Meaningful Park, 1980–1993 ..... 246
Administration, Organization, and Management Facilities ..... 250
Resource Protection, Community Relations, Visitor Use, Cooperation, and Adaptive Management: A Brief History of the Requa Maintenance Facility, 1980–2000s ..... 252
Operating on a North-South Axis ..... 256
The Management Assistant and Community Relations, 1980–1984 ..... 261
The Role of Assistant and Deputy Superintendents, 1984–1990 ..... 266
Administering Natural Resource Management, 1980–1993 ..... 270
Rehabilitation in an Evolving Resource Management Context ..... 272
Watershed Rehabilitation: Programmatic Maturity and Restructuring ..... 274
Resources Management: Beyond Watershed Rehabilitation ..... 277
Cultural Resources Management ..... 282
Interpretation and the *Redwood Renaissance* ..... 291
Visitor Use ..... 295
Outdoor Education ..... 297
Settling on a Visitor Information Center ..... 300
Seeking a Southern Gateway ..... 303
Property Acquisition and Future Development ..... 308
Recreating Redwood through Cooperative Management and Partnerships, 1994–2003 ..... 327
A Return to Founding Principles: ..... 330
Old Promises and New Prospects, 1994–2003 ..... 330

Creating Redwood National and State Parks ..... 330

Administering RNSP: Implementing Cooperative Management ..... 339

The *General Management Plan/General Plan* ..... 344

Defining the Parks ..... 347

Cooperative Management: Visitor Use and Interpretation ..... 349

Resources and Visitor Use: Freshwater Lagoon Spit and Wilderness ..... 351

Planning and Transition: Davison Ranch and B-Mill Deck ..... 355

Echoes of the Davison Ranch Plan and New Directions for RNSP ..... 363

Endangered Species, Compliance, and the Passage of Time ..... 364

Resources Management: Sustaining the Primary Mission of RNSP ..... 369

Resources Management and Science Division: Continuity and Change ..... 375

Returning to the Upper Watershed ..... 379

A Forest of Information ..... 386

Integrated and Collaborative Resource Management: The Example of Restoring Cultural and Natural Landscapes in the Bald Hills since 1992 ..... 390

Cultural Resources Management: Old Challenges in a New Century ..... 395

Trials of a Twenty-First-Century Park ..... 398

# Introduction

*Administrative histories are important for all parks*, *but especially important for a park such as Redwood which has a controversial history*, *a unique resources management program and a record of complex relationships with the surrounding communities*.

--Ann King Smith (1994)

Redwood National and State Parks (RNSP) in far northwestern California is a composite of four park units cooperatively managed by the National Park Service (NPS) and the California Department of Parks and Recreation (CDPR). Redwood National Park (RNP), a federal park under the jurisdiction of the NPS, encompasses the lower third of the Redwood Creek watershed as well as several narrow stretches of coastline and forest between Jedediah Smith, Del Norte Coast, and Prairie Creek Redwoods state parks. Together these four contiguous parks span a 50-mile stretch of land that encompasses some 132,000 acres in Humboldt and Del Norte counties. Within this expanse, the federal and state parks protect about 39,000 acres of old-growth forest, but most of the total parks area is made up of second-growth trees—with some areas in the Mill Creek and Rock Creek drainages cut as recently as 1999.

This unbalanced mix of old-growth and second-growth forest not only reflects the history of lumbering along California's North Coast, but it also defines the two fundamental purposes of the parks: preservation and restoration. From the original purchase of 166 acres for Prairie Creek Redwoods State Park in 1923 to the establishment of Redwood National Park in 1968, the parks collectively represent the history of efforts to protect spectacular old-

growth forests from industrial timber harvesting. Since the expansion of Redwood National Park in 1978, which mostly involved the acquisition of heavily logged and roaded areas, the federal park has largely been devoted to watershed restoration. This mission recently also expanded to Del Norte Redwoods State Park with the acquisition of 25,000 acres of mostly cutover lands in the Mill Creek drainage.

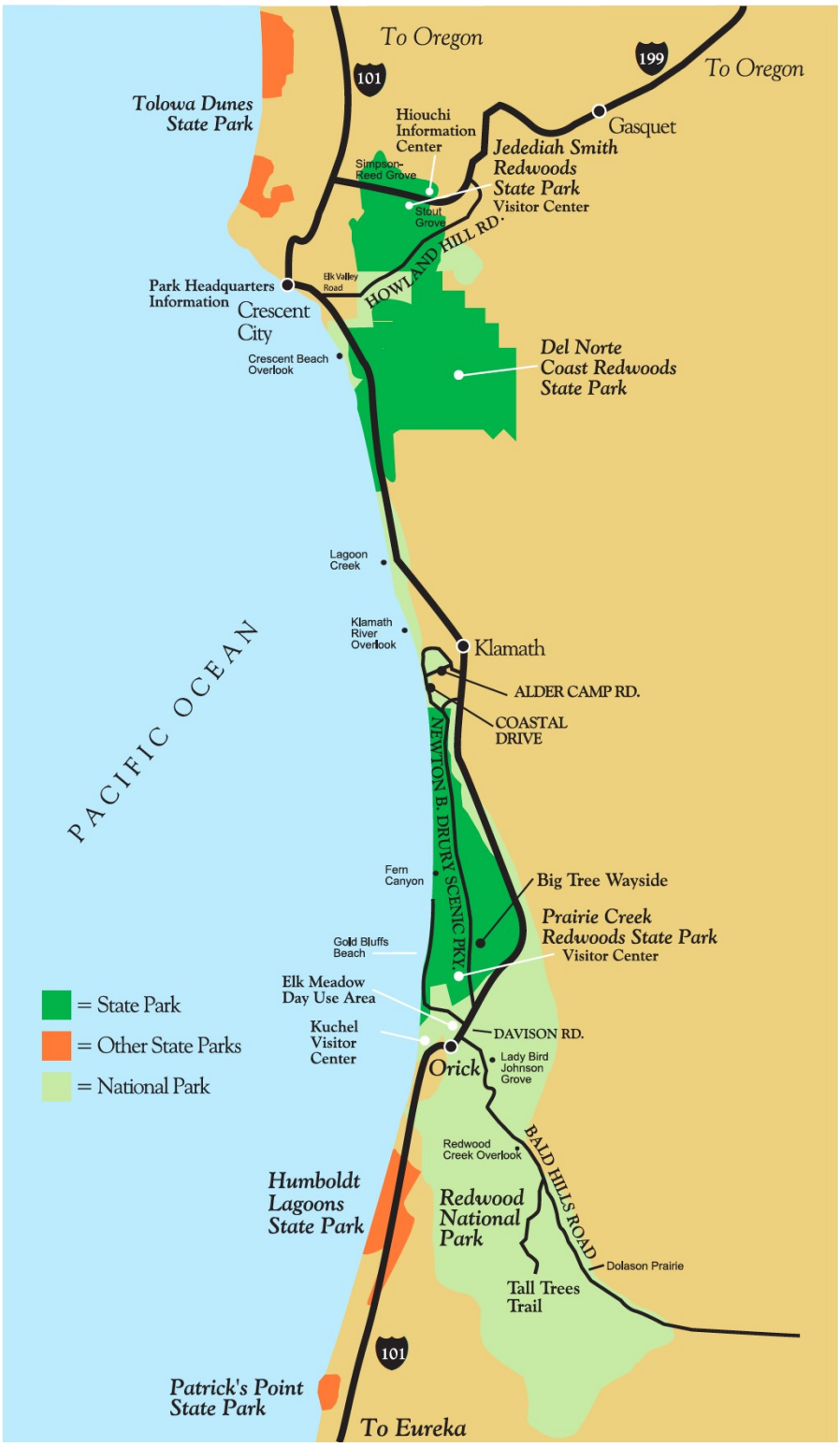


**Figure I.1 Redwood National and State Parks**. Source: NPS.

Renowned for tall trees and watershed restoration, RNSP also protects a 37-mile stretch of largely undeveloped coastline, traverses the lower reaches of the Smith and Klamath rivers—both of which are designated wild and scenic—and encompasses oak woodlands, upland and coastal prairies, lagoons, and tidewater environments. Within the park's narrow boundaries, which vary from as little as .5 to 8 miles wide and never extend more than 15 miles from the coast, elevations range from sea level to more than 3,000 feet.[1] The result is a diverse and tightly packed array of habitats that support 856 species of flora (699 native to the region, 157 exotic), 75 species of native terrestrial fauna, and 433 avifauna (398 native, 35 exotic). Some of the species that are either endangered or of special concern include Roosevelt elk (*Cervus elaphus Roosevelt*), Northern spotted owl (*Strix occidentalis caurina*), marbled murrelet (*Brachyramphus marmoratus*), western snowy plover (*Charadrius alexandrinus nivosus*), Coho salmon (*Oncorhynchus kisutch*), steelhead trout (*Oncorhynchus mykiss*), Chinook salmon (*Oncorhynchus tshawytscha*), southern torrent salamander (*Rhyacotriton variegatus*), and beach layia (*Layia carnosa*).[2] This rich and varied environment has supported and been shaped by human communities for thousands of years, and RNSP extends across the aboriginal territories of three distinct groups historically known as the Tolowa, Yurok, and Chilula. The protected and restored environments within the parks, as well as the numerous cultural sites they contain, remain places of ongoing significance for the native communities of the North Coast.

While the parks area protects a diverse ecosystem and reflects the vitality of American Indian cultures along the North Coast, it has also been profoundly shaped by the processes that dispossessed Native American peoples and created a completely new regime of land use and property holding that included mining, farming, ranching, fishing, and logging. Such historical developments are most readily seen in old ranch buildings, a long-closed fish hatchery, logging roads, and dense second-growth forests, but they are also evident in the variety of exotic plant and bird species inhabiting in the park, the levees lining the lower reach of Redwood Creek, and the major highways running through RNSP. Even the tallest,

most ancient stands of redwoods are marked by very human concerns—as evidenced in the more than 480 named and signed groves spread across the parks.[3] Although it is only partly managed as such, 60 percent or more of the total park acreage fits the NPS definition of a cultural landscape: "A geographic area, including both cultural and natural resources and the wildlife or domestic animals therein associated with a historic event, activity, or person, or that exhibits other cultural or aesthetic values."[4]

A combination of old-growth forests, previously cutover lands, undeveloped coastline, rehabilitated watersheds, scenic roadways, and former ranches and farms, RNSP's landscapes neatly trace the varied history of industrial, recreational, agricultural, and ecological approaches to redwoods over the past century. Yet the fundamental purpose of the parks has largely been defined by the effort to physically erase this land-use history. As noted in the parks' *General Management Plan/General Plan* (2000), the ultimate goal of natural resource management in the parks complex is to "restore and maintain the RNSP ecosystems as they would have evolved without human influences since 1850 and perpetuate ongoing natural processes."[5] Undoing the past to create, in effect, a different future is itself a very historically specific undertaking—and in many respects, that endeavor is the central subject of this study. Because the past has many advocates and the future many prophets, the history of Redwood has been a complicated affair—defined as much by the claims and counterclaims of various public and private interests as new and sometimes revolutionary developments within the Park Service.

The ideals and conceits behind efforts to restore the aboriginal landscapes of 1850 (or some proximate condition of ecological integrity), necessarily raise a difficult set of questions about the fundamental purpose of RNSP: Should preservation and restoration promote the vitality of social and cultural systems from seven generations ago? Is the parks complex primarily for the benefit and enjoyment of nonresident tourists? Can RNSP be a functional part of—rather than apart from—the broader system of North Coast timber management and harvesting? Can the parks foster the diversification and recovery of the

region's resource based economy? Is the costly acquisition and restoration of economically valuable land an appropriate emphasis for the NPS? At various times, and to varying degrees, the answers to these and related questions have been yes. And on different occasions, they have been no or maybe. Understanding how and when these questions have been answered is central to understanding the history of Redwood National and State Parks, and to making sense of the parks' future development.

As is the case in all NPS units, the administration of RNSP has reflected the external contexts in which the parks are situated as well as the internal dynamics of the parks themselves. At RNSP, this has resulted in a number of unique approaches to park management that include multiagency administration and study of park resources, a pronounced emphasis on watershed and habitat restoration, and a commitment to public-private cooperative agreements for the protection of park resources. These and other developments have not always occurred by active design, but have often developed in response to budgetary and bureaucratic limitations, or because of conditions and concerns from outside the parks. In every case, however, the history of RNSP has been shaped by the dynamic arrangement and interaction of many different factors, including the timing of the parks' creation, expansion, and coadministration, the political, economic, geographic, and social contexts of their management, the nature of the resources they protect, and the competing concerns of interested or affected agencies, groups, and individuals.

## A Forest of Symbols and Values

Unlike most national parks, which tend to be named after and defined by a specific place, RNSP is defined by a resource that extends well beyond the parks' boundaries. The parks complex is near the northern extreme of the coast redwood's (*Sequoia sempervirens*) range, which covers a narrow 450-mile band from just north of the Oregon-California border southward to the Santa Lucia Range in Monterey County. For the most part, only 5 to 25

miles across, the Redwood Belt is generally a low elevation forest whose range is limited by rainfall, soil conditions, and the inland extent of the summer fog bank.[6] To understand the unique history of RNSP and its broader significance requires an introductory sense of the coast redwood as well the reasons this particular stretch of the larger Redwood Belt is a protected park area. Likewise, a basic appreciation for the special conditions of the lands within the parks, and their larger regional context, is essential for understanding the history of the parks' creation, expansion, and management.

**Figure I.2 RNSP within the Coast Redwood Belt.** Adapted from information produced by Save-the-Redwoods League and NPS.

Like the Grand Canyon or a Yosemite waterfall, coast redwoods possess tremendous symbolic power and instill an awesome reverence among first-time visitors. John Steinbeck, who lived near the redwood forests of the Monterey Bay area his whole life, noted that even the "vainest, most slap-happy and irreverent of men, in the presence of redwoods, goes

under a spell of wonder and respect. One feels the need to bow to unquestioned sovereigns."[7] Redwoods also bring forth a penchant to list their many superlative attributes. Reaching heights of more than 370 feet, coast redwoods are the tallest living things on the planet. The oldest and largest specimens are more than 2,000 years old and extend some 30 feet around at the base. The trunks of some giants can soar upward of 250 feet before reaching the first major branches of the upper canopy. Under certain conditions, the biomass of a single acre of old-growth redwoods can exceed 1,500 tons—the highest concentration of living material anywhere on earth and more than seven times the average biomass density in the Amazon rainforest.[8] Such dry calculations seem to add to rather than detract from the sense that an ancient grove of redwoods is a special world unto itself, where the air, light, and sounds are different, and the gigantic scale and proportions of the trees both humble and inspire at the same time.

For all their transcendent virtues, coast redwoods also possess an equally awesome set of commercial attributes. Indeed, many of the tree's unique botanical characteristics have made it one of the world's most valuable sources of lumber. The remarkably straight grain of the ancient trees, the near absence of limbs along the length of their tremendous boles, the weather-resisting properties of the tannin-rich wood, the incredible rate of growth in young trees, the ability of a cut forest literally to "replant" itself from sprouts—all these qualities make redwood one of the most prized of all softwoods. Much like statistics about biomass per acre, commercial measures can also stagger the imagination. A single tree in Humboldt County, for instance, once yielded 480,000 board feet of prime lumber—enough to build twenty-two average-sized houses during the post–World War II housing boom.[9]

For Americans, the aesthetic and industrial appreciation of redwoods has an equally long history. When Walt Whitman published his poem "Song of the Redwood-Tree" in 1874, which equated the clearing of the "stalwart trees imperial" with the great destiny of a "swarming and busy race settling and organizing everywhere," other Americans feared that unregulated lumbering on the West Coast would destroy the celebrated redwoods and the rest of the

nation's last great forests much as had already occurred in the east. The imminent destruction of the redwoods was not at hand in the 1870s, nor were the forests in the midst of—as Whitman put it—their final "death-chant chanting" a sacrificial paean to the "Empire New." Yet at the core of both sentiments, redwoods served as potent national symbols: for Whitman, as a measure and instrument of America's commercial, political, and moral destiny to be a "New Society at last, proportionate to Nature"; and for early conservationists, as supreme examples of America's natural virtues—manifest in the grand arrangement of western mountains, rivers, waterfalls, and trees that surpassed anything in the known world.[10] In both contexts, redwoods served as a kind of divine representation of America's special greatness. A land that could produce such tremendous trees, especially ones found nowhere else on earth, was surely a chosen nation.

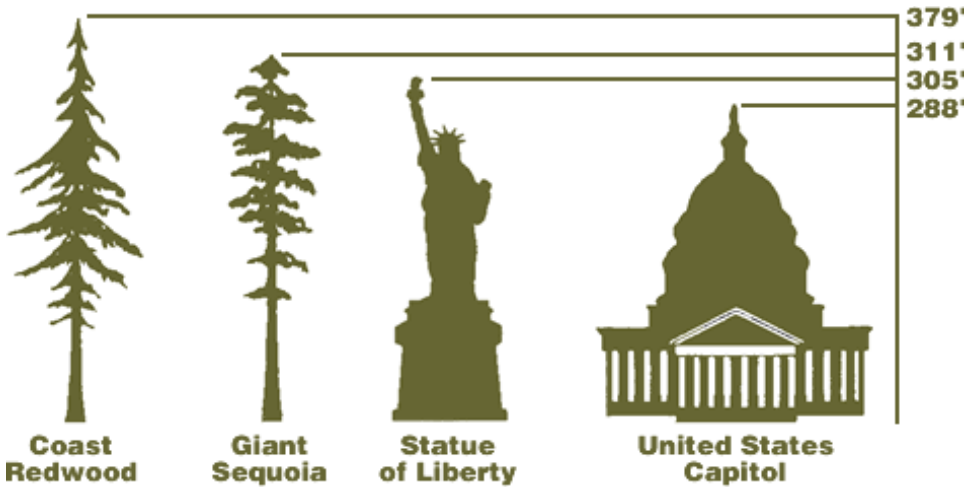


**Figure I.3: Coast Redwood compared with Statue of Liberty and U.S. Capitol.** Comparison indicates scale and national symbolic importance of an old-growth redwood tree. Source: Save-the-Redwoods League.

Perhaps only Niagara Falls, with its combination of hydroelectric potential and scenic grandeur, ever possessed the same array of symbolic attributes that has defined northern California's much-touted "Redwood Empire."[11] Like the more specific debates over the limiting or promoting of industrial development at Niagara in the nineteenth and twentieth centuries, advocacy for the logging or preservation of redwoods has always rested on a

fundamental claim about the meaning of America. At the heart of these disagreements is the irresolvable dynamic of private versus public rights that has lain at the core of national culture and governance since the beginning of the republic. Claims about the fate and purpose of old-growth redwoods have thus always reflected essential questions about the nation. The sometimes-polarizing intensity of the debate has drawn in a wide array of interest groups and agencies, and for more than a century, the world's tallest trees have variously become the most logged, most fought over, most visited, and most rehabilitated in the world.

## A Patchwork Park

A singular fact about the lands that comprise Redwood is essential for understanding the history of park: most large national parks that protect an iconic place or resource were carved out of the federal public domain, but nearly every acre of RNSP was valuable private property that had to be purchased in order to make it public park land. Because of redwood lumber's extraordinary commercial value, garnering enough private and public funds to create or enlarge a park was always a difficult prospect. Even when combined, the boundaries of the national park and the individual state parks have never amounted to what might be considered an ideal park—one large enough to afford full protection to the resource and offer visitors an expansive encounter with old-growth forest.

The odd shape of the parks' boundaries might not make any ecological sense, but they do represent the basic logic of the marketplace: availability and cost. Before World War II, northern Humboldt and Del Norte counties were situated at one of the furthest removes from the historical markets and processing centers of the redwood lumber industry.[12] Consequently, there was a great deal of old-growth forest that could be acquired for the three state parks in the 1920s and 1930s without seriously affecting the timber industry. During the postwar housing boom of the 1950s and 1960s, however, market demand for North Coast redwood logs soared, the price of lumber rose, and ancient forests were clear-

cut at an unprecedented rate. In this context, any effort to create more redwood park land operated with a double handicap: not only was redwood acreage more expensive than ever before but areas that had been the most desired for park acquisition also were being cut down. Instead of the stately groves of giant redwoods that flourished in the more accessible lowlands—and most appealed to tourists and early park advocates—the remaining stretches of uncut forest were concentrated in steep areas where redwoods tended to be smaller and were more intermixed with Douglas fir (*Pseudotsuga menziesii*) and other tree species. This basic reality is clearly reflected in the 1968 establishment of Redwood National Park and its subsequent expansion in 1978. These actions represented two of the most expensive park acquisitions in NPS history; yet they were relatively small in terms of acreage because of the extraordinary costs involved, and generally comprised mixed redwood and fir forests along with recently cutover lands.

If a larger national park could have been acquired earlier in the twentieth century, or even in the late nineteenth century, it would not resemble the present boundaries of RNSP and it would probably be in a different part of the Redwood Belt. Almost certainly, the park would be closer to large population centers in San Francisco and Sacramento, and it likely would have included the towering groves that once covered good stretches of southern Humboldt and northern Mendocino counties. If such a park had been established, it almost certainly would not have a watershed rehabilitation program nor would it need to depend so much on the cooperation of private timber companies near its boundaries. As it is, the location, shape, and content of RNSP reflects the historical contexts from which the parks came. To look at a color-coded resource management map of the parks is to take in a dizzying array of shapes and colors that correspond to various forest types, the location and date of past clear-cuts, the rate and type of regrowth in these previously cutover areas, the consequences of past land-use regimes, the strategies associated with their current management, the ecological conditions and properties of nonforested areas, and a host of

other environmental and administrative concerns. The result is a crazy-quilt pattern more colorful and more varied than most urban zoning maps—let alone other national parks.

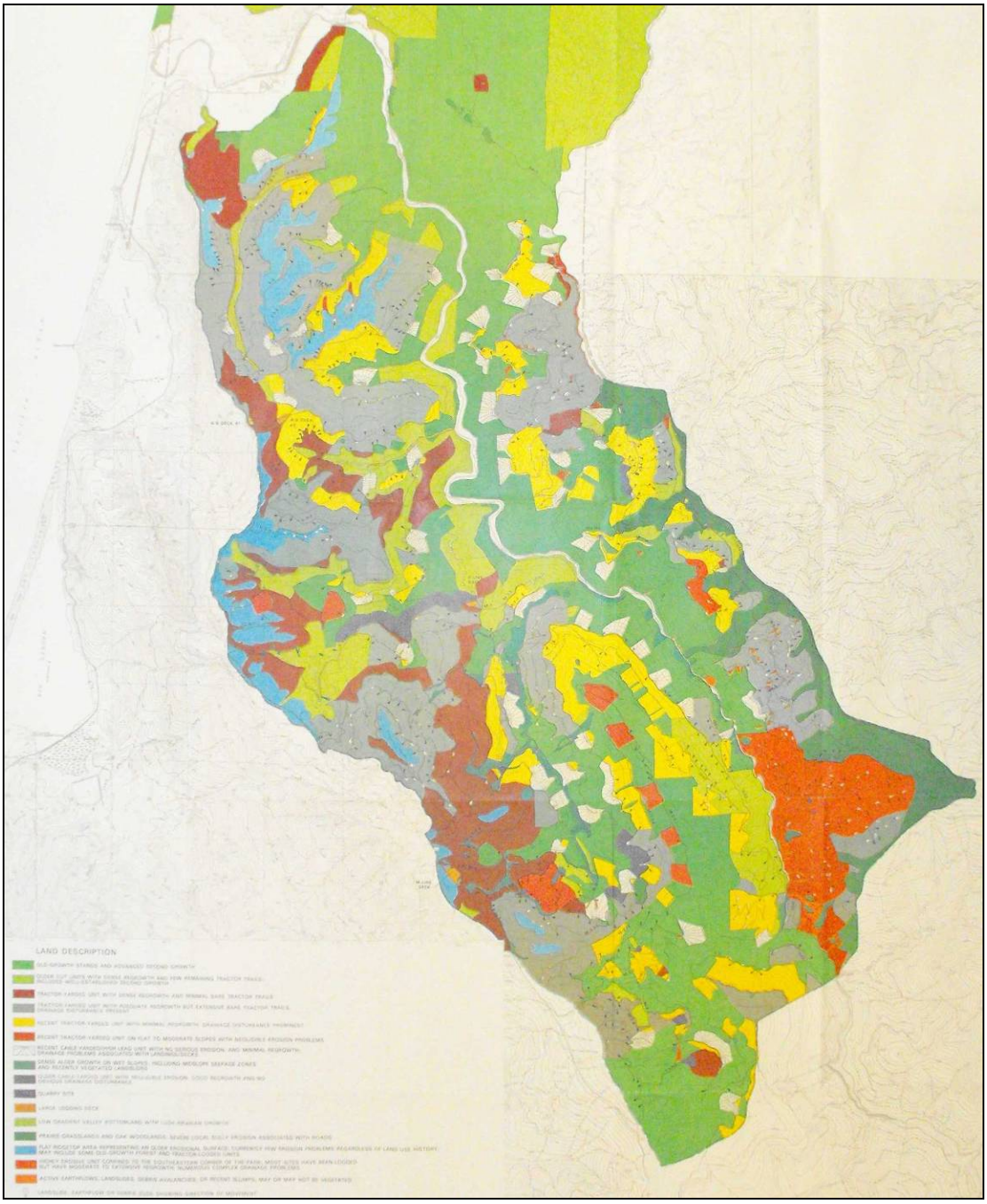


**Figure I.4 Detail of land description map: Redwood Creek Ground Disturbance and Erosional Landforms (May 1980).** The sixteen different patterned color blocks on this map of the lower Redwood Creek basin correspond to a particular environmental condition. These include “Old Growth Stands,” “Older Cut Units with Dense Regrowth,” a number of recently tractor-yarded units on steep or moderate slopes with varying degrees of erosion and regrowth, “Highly Erodible Units,” “Prairie Grasslands,” and “Active Earthflows.” Source: RNSP Library.

## SHIFTING LANDSCAPES

The history of RNSP has also been shaped by its distinct geology. Northwestern California is tectonically active, with a relatively high frequency of earthquakes. Three tectonic plates--the North American, Pacific, and Gorda--converge just 100 miles southwest of and a number of active faults run through the park. While some smaller faults run in an east-west pattern, the shifting forces of the tectonic plates have created deep folds and significant faults in the geologically young Coast Range Mountains that run predominantly north-northwest. These are most clearly seen in the courses of the major waterways, which all cut northwesterly as they follow the fault-lines that run through the region. The geology of the area has also given the coastal rivers of northern Humboldt County, including Redwood Creek, remarkably high natural erosion rates. Composed mostly of material from the Franciscan Assemblage, a combination of sandstones, siltstones, and shales that formed on the ocean floor during the Cretaceous Period (144 to 65 Ma), the underlying soil structure of the region is generally unstable. Weakened and deformed by the uplift and folding processes that created the Coast Range, the soils on the steep sloped mountainsides are highly erodible—especially in an area that averages 70 inches of rainfall per year.[13]

The steep slopes and relatively narrow bottoms of Redwood Creek, along with the area's distance from central lumber markets, largely explains why much of the watershed remained uncut in the decades prior to the creation of Redwood National Park in 1968. The highly erodible nature of the drainage system, which was especially vulnerable to the effects of industrial logging, also provided the basic rationale for expansion in 1978 and the subsequent emphasis on watershed rehabilitation. Further north from Redwood Creek, however, different conditions reflect a different history. The geological underpinnings of the North Coast are essentially the same, but the topography of the three state parks is less steep and thus less erodible than the national park lands. Most of the old-growth forest in the state parks is located on bench lands between the coastal strip and mountains. These conditions proved ideal for the kind of level, park-like groves that conservationists most

treasured when the parks were first established in the 1920s and which tourists have most sought out since. Except for logging in the recently acquired Mill Creek drainage, these areas generally are not subject to the kind of upstream erosion that threatened Redwood National Park—and so, California Department of Parks and Recreation and National Park Service management of these heavily visited areas has largely been focused on preservation, interpretation, and access rather than on restoration and other forms of active resource management.

Although not in the same manner or magnitude as tectonic processes, pronounced social and political changes have also played an important role in the formation and management of RNSP. This is especially true of the decades since the establishment of Redwood National Park in 1968. The national park was created during a high-water period of environmental legislation that largely continued through to the 1978 park expansion. The founding principles of park management, which emphasize resource protection and science-based management over access and recreational use, have largely reflected the environmentalist concerns of that era. Park expansion also came during a high point in congressional outlays for the acquisition of parks and other lands for public use. However, most of the post-expansion era has been marked by a fiscal tightening in Washington that has often been allied to a more general effort to weaken or “roll back” the environmental legislation of the 1960s and 1970s. Recent policies that encourage federal agencies to accomplish more with less by partnering with other public and private entities have also shaped park management and proven an important strategy for effecting the park’s original mandates amid chronic budget restraints.

Of course, RNSP is much more than the sum of a simple equation that includes trees, logging, property, geology, environmentalism, and politics. The establishment of any national park is the result or consequence of preexisting conditions, but it is also fundamentally a creative act that imposes new order on the landscape. Likewise, national park administration may often seem like a long rearguard reaction to external threats and internal bureaucratic structures, but it too is a creative process that shapes the resources it manages. Perhaps

nowhere is this more true than at Redwood, where the need to address such a wide array of underlying and external conditions, and the many conflicting values they have engendered, has often put Redwood at the forefront of new trends in resource and public lands management—from the creation of the first substantial state parks in the United States in the early twentieth century to the formation of a precedent-setting watershed rehabilitation project and, later, to a new model for cooperative management with the formation of Redwood National and State Parks in 1994.

The creative acts and processes that shape RNSP, as well as the contexts and limits within which they occur, provide the necessary focus for this and most any other administrative history. Like all units of the national park system, the administration of RNSP has reflected the internal conditions and external contexts of the park. And like all parks, the history of RNSP has been shaped by the dynamic arrangement and interaction of many different factors, including the timing of the park's creation and subsequent expansion, the political, economic, geographic, and social contexts of its management, the nature of the resource it protects, and the competing concerns of interested or affected agencies, groups, and individuals. The particular constitution and correlation of these subjects largely defines the history of any park, but in the case of Redwood, the combinations have been especially acute and dramatic in the parks' relatively brief existence.

---

[1] United Nations Environmental Programme–World Conservation Monitoring Centre Protected Areas Programme, *Redwood National Park*, August 12,1982, reviewed May 1990 and July 1995, http://www.unep-wcmc.org/sites/wh/redwood.html (accessed April 6, 2007); and "Coastal Redwood National and State Parks" and "Redwood Creek"; both in Save-the-Redwoods League and Bureau of Land Management, *North Coastal California: A Stewardship Report*, November 2001, http://savetheredwoods.org/protecting/pdf/mp_intro.pdf (accessed October 27, 2007). Although not as long as the coastal portion of Olympic National Park, which runs about 73 miles, nor as extensive and undeveloped as the 35-mile stretch of coast in the King Range Wilderness area of southern Humboldt and northern Mendocino counties, the protected shore areas of RNSP remain a critical component of the park complex and represent one of the longest stretches of protected coastline in the lower forty-eight states.

[2] "RNSP Species List," http://www.nps.gov/redw/naturescience/animals.htm; and "Threatened and Endangered Species," http://www.nps.gov/redw/naturescience/animals.htm#CP_JUMP_117773 (both accessed October 19, 2008).

[3] Save-the-Redwoods League, "Memorial Grove List."

[4] Robert R. Page, Cathy A. Gilbert, and Susan A. Dolan, *A Guide to Cultural Landscape Reports: Contents*, *Process*, *and Techniques* (Washington, DC: Department of the Interior, National Park Service, Cultural Resource Stewardship and Partnerships, Cultural Landscapes Program, 1998), 12.
[5] *Redwood National and State Parks*, *Humboldt and Del Norte Counties*, *California: General Management Plan/General Plan* ([Denver]: U.S. Department of the Interior, National Park Service; California Department of Parks and Recreation, 2000), 48 (hereafter *GMP/GP*).
[6] Ecologists and land managers recognize three distinct subregions of redwoods: the Northern Redwoods, which span the length of Humboldt and Del Norte counties, tend to be more extensive and produce the largest and purest groves of old-growth redwoods; the Central Redwoods, which extend from Cape Mendocino southward to San Francisco Bay, produce record-sized trees and extensive groves, but are also characterized by forests of mixed conifer (redwood and Douglas fir), tan oak, and oak woodlands; and the Southern Redwoods, which also contain superlative stands of redwoods in Santa Cruz County, but tend to give way to other forest types throughout most of the southernmost portions of the species range. See John O. Sawyer et al., "Characteristics of Redwood Forests," in *The Redwood Forest: History*, *Ecology*, *and Conservation of the Coast Redwoods*, ed. Reed F. Noss (Washington, DC: Save-the-Redwoods League and Island Press, 2000), 39-79.
[7] John Steinbeck, *Travels with Charley* (New York: Bantam Books, 1963), 189.
[8] The canopies themselves can seem like small woodlands, where reiterated trunks spring up like whole new redwood trees from the massive limbs. Thickets of berries, mats of moss and ferns, and even small saplings of hemlock, tan oak, Douglas fir and Sitka spruce all find purchase in the soils that are deposited in the many crooks and level spaces of the redwood's expansive canopy. Supporting such a variety of plant and associated animal life more than 90 m (300 ft) above the forest floor seems a wonder in itself, but botanists are even more impressed and puzzled by the simple fact that redwood trees are able to lift water from their roots to the uppermost branches and needles at the top of the forest canopy. Like the riddle of bumblebee flight, it seems a physical impossibility—yet it is central to the redwood's ability to grow beyond the limits of all other trees. See Robert Van Pelt, Stephen C. Sillett, and Nalini M. Nadkarn, "Quantifying and Visualizing Canopy Structure in Tall Forests: Methods and a Case Study," in *Forest Canopies*, ed. Margaret D. Lowman and H. Bruce Rinker (Boston: Elsevier Academic Press, 2004), 49-72.
[9] James A. Snyder, "The Ecology of *Sequoia sempervirens*" (master's thesis, San Jose State University, 1992), http://www.askmar.com/Redwoods/Masters_Thesis.html (accessed October 30, 2007).
[10] Walt Whitman quotations are from "Song of the Redwood Tree," *Leaves of Grass* (Philadelphia: David McKay, c. 1900), www.bartleby.com/142/253.html (accessed August 29, 2006). For early conservationist concerns about redwoods, see Samuel Trask Dana and Kenneth B. Pomeroy, "Redwoods and Parks," *American Forests* 71 (May 1965): 4-5; Michael G. Barbour et al., *Coast Redwood: A Natural and Cultural History* (Los Olivos, CA: Cachuma Press, 2001), 122-44; and Susan R. Schrepfer, *The Fight to Save the Redwoods: A History of Environmental Reform*, *1917–1978* (Madison: University of Wisconsin Press, 1983), 55-63.
[11] Similar conflicts over the meaning and use of a particular place or resource abound throughout U.S. history, especially in the twentieth century. One need only think of the battles over dams on the Colorado River, the inundation of Hetch Hetchy Valley, or the allotment of water resources in the Everglades. Redwoods and Niagara Falls certainly represent the most intense, oldest, and longest lasting distillation of this essential debate. On Niagara, see Gail Edith Hallett Evans, "Storm over Niagara: A Study of the Interplay of Cultural Values, Resource Politics and Environmental Policy, in an International Setting, 1670s–1950" (PhD diss., University of California, 1991); and William Irwin, *The New Niagara: Tourism*, *Technology*, *and the Landscape of Niagara Falls*, *1776–1917* (University Park: Pennsylvania State University Press, 1996).
[12] While redwoods logging was important in earlier booms in commercial and residential development, namely the rebuilding of San Francisco following the 1906 earthquake and the state's housing booms of the 1910s and 1920s, most of this cutting centered on areas closer to San Francisco that had good rail or harbor facilities. Consequently, Northern Humboldt and Del Norte counties did not experience the same degree of logging or industrial development. See Lynwood Carranco, *Redwood Lumber Industry* (San Marino, CA: Golden West Books, 1982).

[13] *GMP/GP*, 179-80; and *RNSP: Natural Features and Ecosystems: Geological Setting*, http://www.nps.gov/redw/naturescience/naturalfeaturesandecosystems.htm#CP_JUMP_64243 (accessed May 6, 2007). “Ma” is a common abbreviation for “million years ago.”

## PART ONE

## MAKING CLAIMS AND MAKING PARKS, 1850S–1960S

Redwood National and State Parks (RNSP) is designated by the National Park Service (NPS) as a "natural resource park unit"—an unofficial but often-used term that follows a common agency practice of noting the primary resources of a park as natural, historical, or cultural. Yet the shape of the parks' boundaries and the composition of the forests, prairies, waterways, and beaches also mark RNSP as one of the most culturally and historically defined units in the NPS.[1] This section situates the park landscape within the cultural, commercial, and legislative dynamics that shaped the park area before and during the establishment and enlargement of Redwood National Park (RNP) in 1968 and 1978.

Appreciating the land-use and land-tenure history of the park area is fundamental to understanding the conditions that give RNSP its most basic definition and purpose: namely, the shape of Redwood's boundaries and the nature of the landscapes they protect; the timing of a park unit's establishment and expansion; the siting of the parks within this particular stretch of the California Redwood Belt; the administrative emphasis on scientific study and watershed restoration at RNSP; and the significance of RNSP within the larger environmental and socioeconomic context of the North Coast. Pre-park history is also relevant to the ongoing interests of the various groups that shaped the parks landscape and continue to affect the management of RNSP. These include American Indian tribes, private property and commercial organizations, environmental groups, and other government agencies. All have determined the boundaries and contents of the parks in important ways, which in turn have shaped the goals of park management as well as RNSP's broader relations with surrounding landowners and communities.

---

[1] The phrase *natural resource park* is used in NPS publications and programs with great frequency and little specificity, but it generally applies to parks that devote most of their attention to natural resource management rather than the interpretation or administration of historical or cultural sites and subjects.

# Chapter One

## THE LAND-USE MOSAIC OF REDWOOD NATIONAL AND STATE PARKS

Redwood National and State Parks (RNSP) stands for many of the same iconic wilderness virtues associated with older western parks like Yosemite, Yellowstone, Sequoia and Kings Canyon, and Glacier. Like the waterfalls at Yosemite, or the bison and grizzlies at Yellowstone, RNSP's ancient redwoods present a spectacle of primordial America along with a promise that such a place will remain undiminished for future generations. Yet unlike these and other "crown jewel" parks, the landscapes now within Redwood's boundaries were profoundly and actively shaped by a host of twentieth-century land-use regimes that involved farming, ranching, fishing, road building, recreation, and—most significantly—industrial logging.

All of this makes RNSP a profoundly human landscape that reflects the full, long history of land use along California's North Coast. This is evident in the ongoing effects of anthropogenic fires that accompanied thousands of years of Native American occupation, use, and management, in the many exotic grasses and plants around abandoned farmsteads and rangelands, in the variously rehabilitated roads, stream crossings, and mill decks that cover the lower Redwood Creek drainage, and in the young and densely spaced second-growth forests that grow in areas harvested as recently as 1999. Even the tallest, most ancient trees are marked by human concerns and the legacies of past decisions. One need only consider that more than 480 redwood groves in the parks are named after individuals, families, and organizations, or briefly examine an aerial photograph of the boundaries between one of the original state park areas established in the 1920s and an adjoining tract of land cut in subsequent decades to see how much the preservation of redwoods also reflects very human actions and concerns.[1]

As a cultural landscape, RNSP is a composite of ancient, historical, and contemporary values and land-use regimes. At times, these coincide, as in the management

of the Bald Hills where indigenous, pastoral, and ecological management strategies have maintained a series of upland prairies.[2] More often than not, however, the history of industrial logging, forest preservation, pastoralism, indigenous land management, highway building, tourism, commercial fishing, and river engineering have created a disjointed landscape that continues to challenge and confound efforts to craft an integrated park. These physical disjunctures are compounded further by some of the legal consequences of the current park area's complex history, which has resulted in a set of state, federal, and tribal jurisdictions that overlap each other or cut across critical resources.

In many respects, the essential goal of park management is to craft a park that functions ecologically as if it were part of a large national park that might have been established in the late nineteenth century—before the redwood forests of the North Coast had passed out of the public domain and into private hands. A good deal of RNSP's natural resource management is thus dedicated to two things: erasing or rehabilitating the effects of more than a century of environmental transformation; and mitigating against any deleterious effects from the timber harvesting and other commercial activities that occur outside the relatively narrow confines of the parks complex. To accomplish the first of these twin goals requires a clear understanding of the land-use regimes that predated park establishment and expansion. Accomplishing the latter depends on cooperation with the many private interests and public agencies that surround the parks. It also requires sensitivity to the values and processes that shaped the pre-park landscape, and that still have many advocates who continue to make claims on how RNSP and adjacent private or public lands should be managed.

The essential question of what to protect and restore, and to which conditions or purpose, must necessarily contend with the physical history of the pre-park landscape as well as the communities and interests that shaped it. Toward those ends, this chapter provides an overview of various land-use regimes from the precontact era to the mid-1970s, and correlates them to relevant contemporary concerns. While the beginning and end points

of this chapter mark a long stretch of time, in terms of park administration, they are very closely related. As noted in the 1981 *Watershed Rehabilitation Plan* for Redwood National Park, the guiding vision for the rehabilitation and management of the recently cutover areas acquired in the 1978 park expansion was the "restoration of natural ecosystems to a condition similar to what would have existed without the disturbance of [humans]."[3] Of course, these predisturbed conditions were the result of active manipulation and management by Native American peoples, and this chapter begins with a key discussion of precontact communities and landscapes—with an eye on their current relevance to the park. The chapter then moves chronologically through the series of land-use regimes that displaced Native American peoples and resulted in the century-long "disturbance" the Park Service has subsequently endeavored to undo or mitigate against.

## NATIVE AMERICAN LANDSCAPES

Native American associations with RNSP are the most varied and deeply informed of all historical attachments to the current park area, from the many lessons derived through generations of residence, resource use, trade and travel in the precontact era, to the skills acquired by adaptation and participation in new economies—including commercial fishing, agricultural work, tourist guiding, timber harvesting and processing, and conservation. The Indian presence in and around RNSP is ancient, continuous, and ongoing, and all indications suggest that current Native American associations with the park will only strengthen over time. Given recent emphases within the National Park Service (NPS) to consult with Indian tribes on a government-to-government basis, along with the growing degree of political sovereignty that the Yurok Tribe and several North Coast rancherias have exercised over the past two decades, the oldest history of land use within RNSP has only become more integral to the management, interpretation, and rehabilitation of RNSP landscapes in recent years.[4]

RNSP sits at the northwestern extreme of what anthropologists call the California Cultural Area, a physiographic region that extends south from the Klamath and Smith river

basins, west of the Sierra Nevada, and down into the Baja Peninsula. Characterized by relatively high population density and extraordinary linguistic and cultural diversity, precontact California reflected a remarkable abundance and variety of resources as well as a long record of human habitation and mobility. Over thousands of years, various peoples formed communities that developed intensive management regimes for local resources. Life in precontact California was not necessarily insular or limited to specific territories, however. Active trading networks, intermarriage, and multilingualism connected different communities to each other and further linked them to distant regions and groups. Localism, as a cultural and land-use trait, did not result in territorial exclusivity so much as it fostered among many different peoples a close understanding and careful husbanding of the places they knew best.[5]

All of this was certainly true of the Northern Redwood Belt in the late precontact era. Within the narrow confines of the present national and state park boundaries, three very distinct cultures had effectively utilized and variously managed the prairies, lagoons, creeks, ponds, beaches, forests, and rivers for countless generations. The Tolowa, whose aboriginal resource area encompasses the lower Smith River drainage and the coastal plain of Del Norte County northward into Oregon, were closely related through marriage, trade, and language. The Yurok, who lived in a wide swath of country from Damnation Creek in the north to Little River (McKinleyville) and eastward along the Lower Klamath River, were linguistically and culturally quite distinct from surrounding groups. The Chilula maintained permanent villages along the lower half of the Redwood Creek drainage, to the east and south of Yurok communities along the coastal plain and the Lower Klamath. Along with the Whilkut of the upper Redwood Creek drainage, the Chilula made seasonal use of the prairie uplands and joined their Hupa relatives on the Trinity River during salmon runs and on special ceremonial occasions.[6]

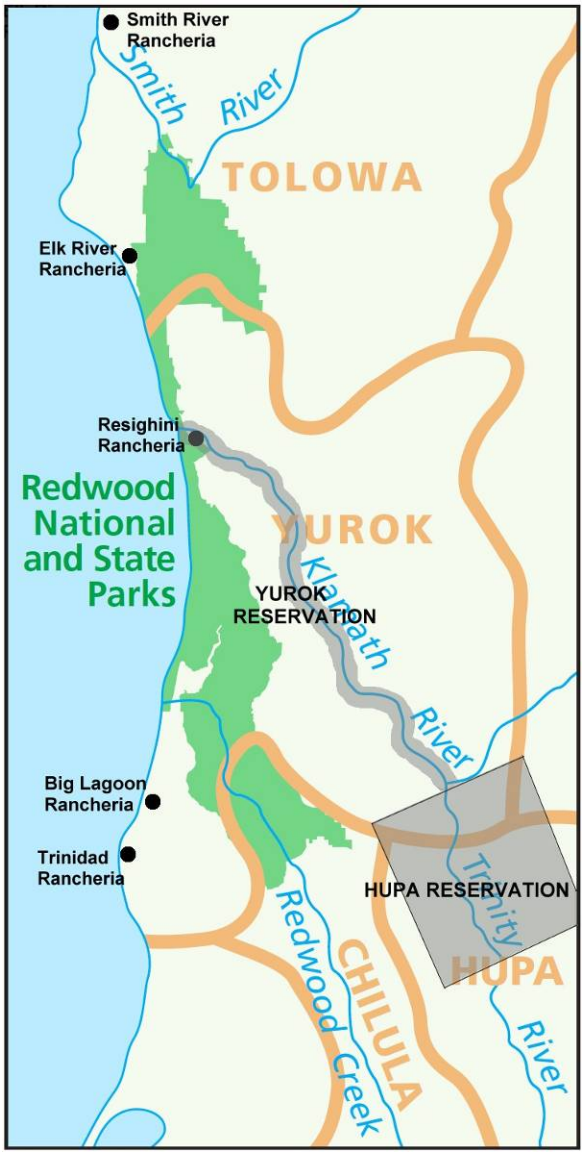


**Figure 1.1 Aboriginal territories, current tribal reservations, and rancherias.** The boundaries of RNSP are encompassed within the aboriginal territories of three groups commonly referred to as Tolowa, Yurok, and Chilula. Most of the descendants of these peoples reside in Humboldt and Del Norte counties, and either live on or are represented by the federally recognized reservations and rancherias located within their ancestral territories. These include the Smith River Rancheria (Tolowa), Elk Valley Rancheria (Tolowa and Yurok), Yurok Reservation (Yurok), Resighini Rancheria (Yurok), Hoopa Valley Indian Reservation (Hupa, and Chilula descendants incorporated with Hupa), Big Lagoon Rancheria (Yurok and Tolowa), and Trinidad Rancheria (Yurok, Tolowa, and Weott). People of Tolowa, Yurok, and Chilula descent who are not affiliated with these tribal groups are also represented by non-federally recognized groups and organizations. Source: Figure adapted from NPS map.

The terms *Tolowa*, *Yurok*, and *Chilula* do not describe cohesive tribal groups or clearly delineated tribal territories. They are not even words from the languages of the people to which they refer. As was common throughout the region, most people identified themselves with the place name of their particular community. The Tolowa, who collectively

numbered about 2,400 and lived in several villages near the coast and along the lower Smith River, might have referred to themselves in an abstract manner as *huss* (people). The inhabitants of a village in the vicinity of the mouth of Smith River, however, would have referred to themselves by the term *Yan'-daa-k'vt*, which described the village site and defined its inhabitants. American miners apparently first learned of the village from the Yurok, who called it *Tol'-o-wah*, and the word was subsequently applied to all nearby Indians when Crescent City was established in 1853. The Chilula, who numbered 500 to 600 and lived in as many as eighteen different village sites, likewise received their name from the Yuroks. *Tsu-lu'-la* is the Yurok word for Bald Hills people, *tsu-lu'* meaning Bald Hills, an area where Yuroks probably most often encountered their neighbors when both were traveling along inland trails or harvesting resources in the upland prairies between the Redwood Creek and Klamath River drainages. Last, the 3,000 or so Yurok, who came to be known by the word that groups along the middle Klamath used meaning "downriver," knew themselves as *Pohlik-lah*, *Petchik-lah*, or *Ner-er-Ner* but would have primarily identified themselves with specific villages like *Rek'woy* (Requa), *Owr-rekw* (Orick), or any of five- or six-dozen locales.[7]

The Tolowa, Yurok, and Chilula all have very specific cultural traditions, and within each broadly defined group, a number of important distinctions were made in regards to kinship, location, and primary resource base. Yet collectively, through trade, seasonal mobility, or the general availability of a common resource, all peoples of the northern redwoods shared a common material culture based on a wealth of abundant resources, including salmon, steelhead, eel, acorns, grass seeds, berries, herbs, elk and other land mammals, waterfowl, kelp, mollusks, seals, redwood, ferns, roots, bulbs, and a host of other plant, mineral, animal, and insect resources.[8]

How long the basic elements of this broadly shared material culture had been in place, or when the specific cultural articulations of different groups first arose is not clear, but countless generations shared in a long tradition of resource use and management that

affected the distribution, abundance, and variety of the flora and fauna in the current park area. Through use of fire and specific harvesting practices, as well as fishing, hunting, community building, trade, and the simple fact of residence, Native American peoples modified and maintained—over thousands of years—the "undisturbed" conditions that visitors expect to see and land managers are working to restore.[9]

This ancient set of land-use regimes underwent a rapid and profound change in the mid-nineteenth century when a rush for gold on the upper Trinity River brought thousands of would-be argonauts into Northwestern California. Besides the gold that some carried away, the miners who poured into the region also took Indian lives and resources, tore up stream banks and hillsides in their search for ore, and generally undermined the vitality of precontact landscapes. Unlike the more famous gold fields of the Sierra Nevada foothills, however, the placers and diggings of the Trinity River Basin were less accessible. To more readily supply the mines and miners, a number of small corporations were formed to set up towns on Humboldt Bay and at Trinidad to establish regular pack trains across the coast range to the mining camps. Following the discovery of gold in the Smith River basin in 1851, similar ventures led to the establishment of Crescent City in 1853.

Spanning the breadth of coastal Yurok territory and planted in the heart of the main Tolowa villages, these new settlements rapidly unsettled the peoples and places of the Northern Redwood Belt. Because the best access to the Trinity River was over the well-traveled trails of the Bald Hills area, the Chilula also suffered the presence of so many new comers. On the coast, non-Indians displaced Native American communities, hunted many of the same animals, used many of the same coastal food sources, and let their livestock graze through well-tended gathering sites. The same occurred on the inland trails as pack trains moved back and forth between the coast and the mining camps, and upriver Yurok villages suffered the incursions of gold seekers looking for another bonanza near the confluence of the Trinity and Klamath Rivers.[10]

People who for centuries had lived outside the currents of imperial contest and global commerce that had already shaped much of the Western Hemisphere were suddenly thrust into the center of what poet Walt Whitman called “the Genius of the Modern, . . . Clearing the ground for broad humanity, the true America.”[11] The powerful blend of territorial expansion and industrial capitalism that Whitman celebrated in his poem “Song of the Redwood-Tree” was especially brutal for the Indian communities of the North Coast—and it involved an extraordinary level of violence and prejudice against indigenous people that was common in northern California and southern Oregon in the 1850s and 1860s rarely seen anywhere else within the present boundaries of the United States. Native American communities in Humboldt and Del Norte counties suffered massacres, destruction of their villages, and plunder, all of which left the survivors weak and vulnerable to disease. The Tolowa fared horribly, losing as much as a third of their population in three massacres between 1853 and 1855. Within a few years, Tolowa numbers dropped from a pre-gold rush estimate of 2,400 to 316. In Crescent City, which stood at the epicenter of this profound transformation, the non-Indian population went from none in 1853 to 1,000 in 1854. Over the same brief span of time, the number of Tolowas living at their village adjacent to this new city declined to just six individuals.[12]

Native American peoples necessarily resisted the displacement of their villages and the destruction of the resources that made their worlds function, and conflicts between Indians and non-Indians occurred intermittently until the 1870s. The destruction of Native American resources continued unabated, however, and eventually overwhelmed any efforts at resistance. The Tolowa would continue to decline through the rest of the century, reaching a nadir of 121 by the 1900s. The Yurok suffered similar population loss, falling from 3,000 to 688 over the same five-decade span. Of the Chilula who survived the nineteenth century, only two or three families remained in Redwood Creek while the rest were displaced to the Hoopa Valley Indian Reservation to the east.[13]

Much of the tragedy that came in the wake of the gold rush was exacerbated by basic failures in U.S. Indian policy that have only recently begun a long process of rectification. In October 1851, the federal government negotiated a hasty “Treaty of Peace and Friendship” with the “Klamath River Indians,” but the U.S. Senate failed to ratify the treaty. In an effort to create some kind of separation between Indians and non-Indians, President Franklin Pierce signed an Executive Order in November 1855 that established the Klamath River Reserve, covering a mile-wide swath on either side of the Klamath River and extended some 20 miles upriver from the coast to Tectah Creek. While the reserve encompassed a number of Yurok village sites, the government also intended to relocate Tolowas, Chilulas, and the coastal Yuroks onto the narrow reservation. This plan proved untenable, since none of the groups involved had agreed to any of these circumstances—either informally or in a treaty with the United States—and none abided the government’s attempts at forced removal.

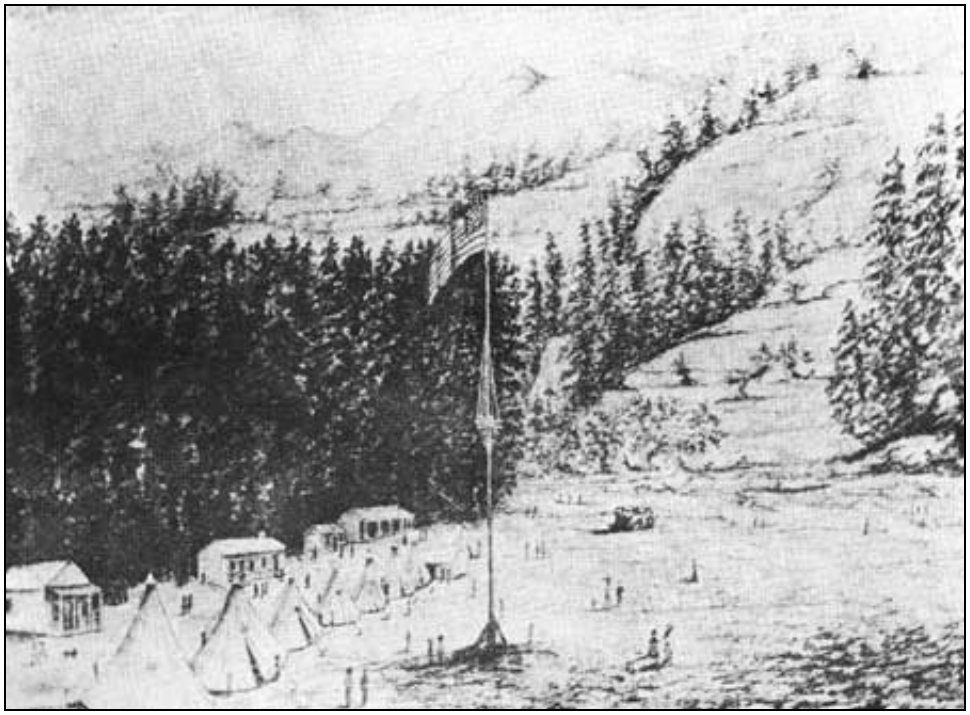

**Figure 1.2 "Sketch of Fort Ter-Waw, Spring of 1862," by G. E. Young.** The military and administrative center of the Klamath Reserve, the fort was located just upriver from the present site of the town of Klamath. Reprinted from Edwin C. Bearss, *History Basic Data: Redwood National Park*, *Del Norte and Humboldt Counties*, *California* (1969; reprint, [Washington, DC?]: U.S. Department of the Interior,

National Park Service, Division of History, Office of Archeology and Historic Preservation, 1982) .

Violence against Native American communities both inside and outside the reserve continued unabated, and federal officials proved unwilling or unable to prevent American citizens from forcing their way into the most habitable areas along the Lower Klamath. By the 1880s, the Klamath River Reserve existed only as lines on a map, and many Yuroks were pushed further upriver toward the Hoopa Valley. To bring administrative order to this unofficial process of dispossession, President Benjamin Harrison and the Fifty-Second Congress acted to place the Yurok under the direction of the Hoopa Valley Indian Reservation in 1892 and officially opened the Klamath River Reserve to American squatters and timber companies.[14] By the early decades of the twentieth century, the Native American communities with connections to the current RNSP area were reduced to a few parcels in the form of family allotments (privately owned but federally administered remnants of former reservation lands) and “rancherias” (tiny reservations that generally encompassed a few family groups).

The crafting and maintenance of indigenous landscapes until the 1850s, as well as the “disturbance” that started the process of their unmaking, are directly relevant to how the Park Service has approached preservation and rehabilitation at Redwood. But the significance of this tragic history is not that it ended a century ago. As was the case in the late nineteenth century, the populations of Humboldt and Del Norte counties still have some of the highest percentages of Native American residents in the United States—and the 5,000-member Yurok Tribe, whose reservation borders and partly overlaps with national park lands, is the largest Indian tribe in California.[15] These figures reflect the extraordinary resilience of the North Coast’s Native American communities and—like the overlap between RNSP and the Yurok reservation—suggest important intersections among the parks and tribes over the past few decades.

In the 1960s and 1970s, as the movement to create and then expand Redwood National Park proved successful, Native American communities along the North Coast were

pushing for greater cultural and political autonomy. By the 1980s, this led to a number of significant achievements, including the exercise of tribal fishing rights on the Klamath River, a legal reversal of the 1958 California Rancheria Act that had unilaterally terminated the U.S. government's obligation to recognize and treat with rancheria communities as distinct tribal entities, and reestablishment of the long moribund Klamath River Reserve as the Yurok Reservation.[16]

As will be discussed in later chapters, all of these gains not only occurred alongside the development of Redwood National Park but also often in conjunction with growing Native American concerns about bringing traditional interests to park management. With the Park Service committed to returning the park landscapes to the conditions of the mid-nineteenth century, the peoples with ancestral ties to RNSP have a powerful interest in the cultural and historical possibilities of this undertaking. Native American peoples see in RNSP an opportunity to reclaim important connections to their homelands and, along with the Park Service, to undo some of the damage caused over the past 150 years. Because RNSP is part of the public domain, and because North Coast tribes have secured federal recognition in the past few decades, their concerns have a legal authority that is different from, and in many cases supersedes, the interests of environmentalists, timber companies, non-Indian residents, and public land agencies. Consequently, their history of land use and dispossession will continue to be a matter of critical importance to the administration of RNSP.[17]

## PROPERTY AND A NEW ENVIRONMENTAL ORDER

As important as Indian history can be for park management, RNSP largely exists because of, and in response to, the environmental transformations that occurred in the wake of Native American dispossession. American interests in the northern redwood region have long been rooted in the simple process of extracting materials of high cash value and transporting them to distant metropolitan centers. The first Euro-Americans to enter the

RNSP area, a group of fur trappers traveling with Jedediah Smith, operated within this basic economic model. Their stay was brief, lasting just a few weeks in spring 1828, as were those of other American and British trapping parties that passed through the region over the next two decades.[18] The exploitive frenzy of gold prospecting and mining that occurred in the late 1840s and early 1850s took this process to a new level, and soon established patterns of land use and ownership that would dramatically change the region over the next century and more.

Within the current boundaries of RNSP, the direct effects of the mining era are negligible. The only mining operations that occurred within or near the current boundaries of the parks were in the Mill Creek, Craigs Creek, and Myrtle Creek drainages. Mostly focused on copper, silver, chromite, and other minerals, these were generally small-scale affairs that occurred intermittently through the late nineteenth and early twentieth centuries whenever market prices made such ventures profitable.[19] Hydraulic mining, as well as the construction of ditches and stream diversions and the terrible sanitation of most mining camps certainly had adverse effects on stream habitat, but the impacts tended to be limited and short term. Just outside the boundaries of RNSP, some evidence of past mining activity is still evident at the Myrtle Creek Botanic Trail, about two miles east of the Hiouchi Visitor Center, where a drainage ditch, some pipes, trestle timbers, and hillside cuts remain from the early twentieth century. Within current park boundaries, the best remembered mining sites were at Gold Bluffs Beach and Ossagon Creek north of Orick. Neither produced much gold, though the allure of auriferous (gold-bearing) sands—where some believed that gold could simply be scooped or dredged from the beach—proved a difficult spell to break. From 1851 until 1880, several joint stock companies formed and folded as dreams broke against reality. The only signs of these efforts, besides a few place names, were washed away by time and tide.[20]

In terms of the landscape history of RNSP, mining is important for two reasons: it undermined the land-use regimes that had shaped the area for thousands of years; and it brought in the people and capital that would reshape the landscape in profound new ways.

The first settlers in the current park area did not come to mine, but to service the mining camps. Arriving in the wake of the 1851 “Treaty of Peace and Friendship” and the 1855 creation of Klamath River Reserve, they claimed Indian lands through a legal process known as preemption. The Preemption Act of 1841 guaranteed the first settler on ceded Indian land the right to purchase 160 acres from the United States at the minimum set price once the federal government had surveyed the section and put it up for sale. Even though official surveys were several years off, and no formal cession of Indian lands had occurred, the designation of the Klamath River Reserve made possible a market in private property—with first claimants selling their preemption rights to subsequent buyers.[21] Within the current boundaries of RNSP, preemption claims were filed near the routes to the interior mines, especially along lower Redwood Creek, Prairie Creek, the Bald Hills and a few other locales. Among the first people to supply the mines and the growing coastal towns was George Gann, who filed his preemption claim in 1854 on the area of the Bald Hills that now bears his name.[22]

For the Native American peoples of the North Coast, agrarian and pastoral settlement was a world-destroying process with profound social and environmental consequences: non-Indian settlements impinged on fishing areas; land clearing eliminated food-producing trees and shrubs; plowing tore up grass, seed, and root harvesting areas; and fencing severely restricted access to harvesting areas for acorns, seeds, berries, roots, and basket-making materials. Not surprisingly, farms and ranches like Gann’s became targets for Indians seeking to protect their interests and homelands. Continued but sporadic resistance from Native American peoples eventually put an end to the packing trade through the Bald Hills, forcing Gann and others to leave the area in the 1860s. Besides the dangers, mining in the Trinity River Basin had also become a more heavily capitalized affair with better land and river connections to communities in the northern Sacramento Valley. Consequently, very little new settlement occurred in the northwestern section of Humboldt County over the next two decades.

In the meantime, a burst of agrarian settlement arose further south in the Mad, Elk, and Eel River valleys to supply the growing communities around Humboldt Bay and the more distant markets in the San Francisco Bay area.[23] In the 1860s, the area became one of the leading agricultural centers in the state with a wide array of exported produce that included grains, hay, peas, beans, potatoes, tobacco, and fruits. By 1880, the value of all agricultural productions in Humboldt County amounted to $1.1 million, some 30 percent more value than the entire output of lumber for the same year.[24] This ratio would soon change, with lumber production increasing 5-fold over the next twenty years. Yet agricultural production doubled over the same period, most of it related to a rapid growth in dairying, cattle ranching and wool production. These newer enterprises proved very well suited to the North Coast environment, and—with Native American resistance no longer a threat—soon became the dominant form of land use in the valleys and upland prairies of northern Humboldt and southern Del Norte counties.

The rise of dairying, stock raising, and sheepherding created something of a minor land rush in and around the current boundaries of RNSP. Some of the more productive areas included the Bald Hills, Orick Valley, Elk Prairie, Elk Valley, and the Little Bald Hills. Traces of this new era remain in the many family names that dot the park, including Lyons, Davison, Counts, Pozzie, Child, Boyes, DeMartin, Murphy, and others. Most of these refer to farms and ranches established in the 1880s, and represent some of the longest-lived enterprises in the area. In the upland districts, sheepherding prevailed while farther east—generally beyond the current park boundaries—cattle ranching and hog raising were more common. The lower valleys were given over to dairying, which along with wool production, proved an especially prized regional export. Sheepherding would fade in the 1940s and be replaced by a few small cattle ranches as glutted wool markets, degraded rangelands, and new logging operations in the Bald Hills all took their toll on the once-thriving enterprise. Dairying persisted into the mid-1960s, however, and in the Orick Valley alone, there were more than twenty dairy farms and a cheese factory.[25]

**Figure 1.3 Dolason barn in the Lyons' Ranches Rural Historic District**. Built in the late nineteenth century, the barn was associated with the sheep-ranching industry in the Bald Hills. Source: RNSP Archives.

Besides a few remaining structures and the occasional fruit orchard, the primary legacy of this era is in the rangeland itself. As is the case throughout California, the native forbs and grasses of the RNSP area evolved in the context of high-frequency fire regimes and light browsing by deer and elk. Fire suppression, livestock foraging in oak groves, and heavy grazing not only undermined native plants but also created new conditions in which exotic species that had evolved within this imported land-use regime could thrive. Recent surveys of the Bald Hills area have noted that "50-75% of the total plants . . . are invasive species"—which has led to concerted and ongoing efforts to eliminate exotics and foster, through land-use measures that mimic aboriginal practices, an increase in native species.[26]

### INDUSTRIAL LOGGING

Although it would have the most profound effect on the pre-park landscape, and was the primary reason for the need to "save the redwoods," the logging of redwood proved a minor affair in northern Humboldt and southern Del Norte counties until well into the twentieth century. A lack of good harbors or roads, along with an ample supply of marketable

trees near Eureka, Arcata, and Crescent City, generally kept industrial logging out of the RNSP area until after World War II. That historical fact, more than any special qualities about the forests, streams, or coastlines within the current boundaries of RNSP, ultimately determined where the parks were located and the timing of their creation. The nature of the park landscape and its management nevertheless is tied to the history of logging on the North Coast from the 1880s, when the timber industry became the dominant economic force in the area.

In the last decades of the nineteenth century, the redwood industry was transformed from an assortment of locally owned or managed enterprises into large, vertically integrated corporations that built enormous mills, controlled their own fleets of ships, employed hundreds of workers, and developed the array of machines that transformed trees along a winding stream bank into lumber neatly stacked in a distant city warehouse. Like other extractive industries of the day, such highly capitalized enterprises operated on vast economies of scale. In the case of the northern redwoods, that meant secure and continuous access to extensive tracts of forest. Passage of the Timber and Stone Act in 1878 went a long way toward making this required condition a reality—and ultimately brought the area that now comprises RNSP into the orbit of industrial logging.

Under the act, any individual could lay claim to 160 acres of timberland in the public domain for just $2.50 an acre. The law was crafted to give small-scale logging enterprises the same opportunities that agricultural settlers had enjoyed under the Preemption and Homestead Acts (1862), and to end the “cut-and-run” schemes that had been perfected in the Upper Great Lakes. Instead of putting in five years of residence and active cultivation as the Homestead Act required, timber harvesters in the Midwest simply filed agricultural claims to forested areas, cut the merchantable timber, then forfeited their claim on the now valueless land without paying the government a dime. The Timber and Stone Act addressed these problems to a degree; a few smallholders did acquire timberland and, unlike the situation under the Homestead Act, the federal government did receive some revenue up

front. Nevertheless, the new law proved open to wholesale fraud. Like the land barons in California's Central Valley who amassed virtual fiefdoms by using proxies to file 160-acre claims under the Homestead Act then buying them out for pennies on the dollar, timber companies used the same technique to acquire vast domains of redwood forest.[27]

The most famous abuse of the new law occurred in the early 1880s when the federal government surveyed and opened up a vast tract of dense redwood forest in northern Humboldt County. In conjunction with a Scottish financial syndicate, the California Redwood Company hired individuals by the hundreds to file dummy claims—gaining title to 100,000 acres of land as quickly as it went on the market. This scheme eventually attracted the attention of federal officials, who cancelled some of the claims and fined the principals, but other less audacious ventures soon brought every acre of the Northern Redwood Belt into a few private hands. Government regulators did not want to push too hard, after all, since the fraudulent acquisition of redwood forest lands did follow the logic of the industrial marketplace. Large operations needed vast reserves of forest for future cutting cycles, and more people were troubled by what a strictly enforced 160-acre limit would do to the booming lumber industry than were offended by the concentrated ownership of so much forest land.[28]

Although most of the land within the current boundaries of RNSP had become the property of a few large corporations by the 1890s, only limited cutting occurred near or in the present park area before 1940. Most of this took place in Del Norte County in the vicinity of Mill Creek and along the Lower Klamath River. For the most part, however, the mills based in and around Crescent City focused on land north and east of the town while the Humboldt County mills were still amply supplied by forests in the Mad, Van Duzen, and Eel river drainages. By the mid-1920s, when the Save-the-Redwoods League (SRL) began acquiring groves along newly completed U.S. Highway 101, the areas that would become Jedediah Smith Redwoods, Del Norte Coast Redwoods, and Prairie Creek Redwoods state parks were still outside the cutting schedules of the corporations that owned them. Land rich and

flush with profits from California's decade-long surge in new home construction, timber companies could afford to sell or donate selected areas to the league or the state of California for preservation in state parks. Conditions changed dramatically during the Great Depression, but the steep downturn in the timber industry and the burden of paying taxes on uncut lands only provided new motives to sell lands for the enlargement of these three parks.[29]

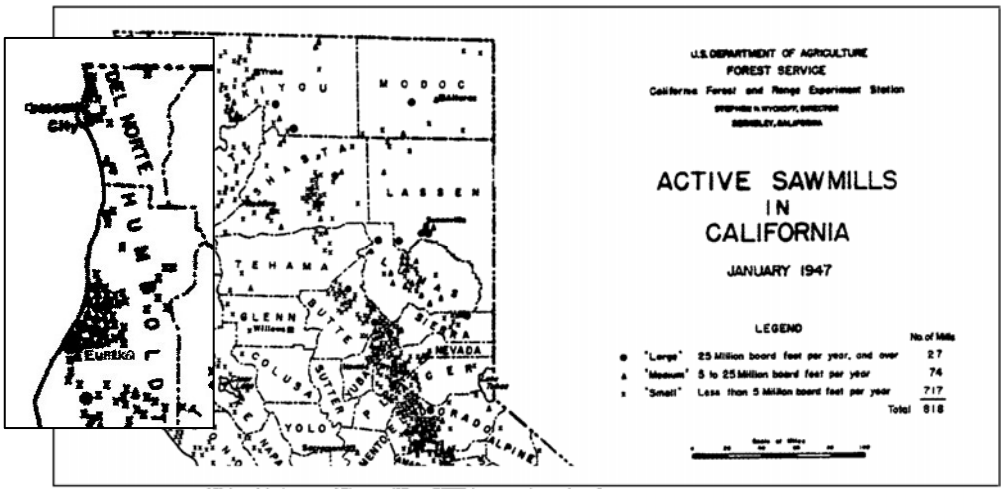


**Figure 1.4 Active sawmills in California, 1947 [detail].** Lying between the mills concentrated around Humboldt Bay to the south and Crescent City to the north, the forests within the current boundaries of RNSP were still not readily accessible to these processing and shipping centers in the years immediately after World War II. Reprinted from Pamela A. Conners, *A History of the Six Rivers National Forest . . . Commemorating the First 50 Years* (Eureka: US Department of Agriculture, Forest Service, Pacific Southwest Region, Six Rivers National Forest, 1998), 41.

The immediate post–WWII era saw another revolution in the timber industry that mirrored but far surpassed the restructuring and expansion of the 1880s and 1890s. A national housing boom created an unprecedented demand for lumber while postwar economic growth required huge quantities of paper products for packaging, communication, and record keeping. New technologies for cutting and processing lumber developed in quick order, and new sources of capital poured into the Northern Redwood Belt to exploit the remaining uncut forests. As in the late nineteenth century, a new era of consolidation occurred as some of the largest companies in Humboldt and Del Norte counties bought out

their smaller rivals and large outside corporations like Georgia-Pacific, Louisiana-Pacific, Stimson, Weyerhaeuser, and Simpson moved in.[30]

In the immediate postwar period, tractors that had been reserved for military contracts once again became more available for civilian use. Building on techniques developed in the late 1930s, when cable-yarding first gave way to tractors, logging operations moved into vast new stretches of forest. Instead of using high cable leads to bring logs up to a ridgeline road as had been common until the late 1930s, tractors moved across slopes and up drainages on newly bulldozed roads to haul giant logs out of the forest. Additional improvements in gasoline saws and diesel engines, the use of large rubber tires instead of tractor treads, and the development of logging trucks capable of handling the massive redwoods brought even more of the forest to the mill and quickly separated the most heavily capitalized enterprises from their smaller competitors. Much of this new logging occurred as the practice of selective harvesting, where as much as 60 percent of the forest was left standing after the first cut, gave way to the large clear-cuts that became standard by the 1960s. The relative ease with which roads could be graded, trees could be cut, and logs could be hauled allowed the redwood industry to meet an almost insatiable market for lumber and wood products. [31]

Such harvesting was unsustainable, however. By the 1950s, some economists were already predicting that all available old-growth redwood would be gone by the year 2000—and there would not yet be enough second-growth redwood available by that time to sustain a large timber industry.[32] How vigorous or commercially viable that second-growth timber would ultimately be was also doubtful. Given the amount of erosion that occurred on large clear-cuts, and the propensity of the old landing sites and logging roads that honeycombed these cutover areas to wash out or create landslides during winter rains, it was clear that it would be a long time—if ever—before subsequent harvests could occur in the same manner or on the same scale. Whether the redwood industry would survive its own practices, runoff and debris from clear-cuts and logging road failures also undermined the North Coast's only

other significant natural resource industry—commercial and sportfishing for salmon.[33] The rapid loss of streamside forest cover and silt-smothered spawning beds had a noticeable effect on salmon populations in Northern California, which dropped precipitously in the late 1940s and through the 1950s.[34] And as the multidecade watershed restoration program at RNSP would demonstrate, restoration of salmon habitat can take even longer than the regrowth of merchantable forestlands.

### POSTWAR CUTTING WITHIN THE CURRENT BOUNDARIES OF RNSP

Within the current boundaries of RNSP, some of this cutting occurred in areas that were subsequently added to the three state parks in 1965 and 2005, but the most significant and dramatic logging occurred in the 1950s and 1960s within the future boundaries of Redwood National Park. Long outside the purview of the large mills in Crescent City and around Humboldt Bay, timber harvesting did not commence in the Redwood Creek Basin until the 1930s, and then on a small scale on the upland slopes closest to a mill near Big Lagoon. After WWII, the entire watershed was suddenly opened to a rapidly growing industry with its chainsaws, bulldozers, tractors, and trucks.

Before the advent of commercial logging, approximately 83 percent or 149,800 acres of the entire 180,480-acre (282 sq. mi.) basin was mature coniferous forest—with the remaining 17 percent being a relatively even mixture of prairie and hardwood forest. In the lower third of the watershed, which includes most of the lands involved in the establishment and expansion of Redwood National Park, all but 3,000 acres or 4 percent of the land was redwood forest or mixed stands of redwood and Douglas fir. The middle watershed was primarily a mixture of both types of conifers with stretches of prairie and oak woodland, while the upper third of the basin was dominated by fir and contained a significant amount of hardwood forest and prairie. Between 1949 and 1962, more than 55,000 acres (37 percent) of the basin's entire coniferous forest was cut—an amount that far exceeds the 39,000 acres of protected old-growth forest in RNSP. Most of this occurred in the middle and upper watersheds, fed in part by the widespread use of Douglas fir in housing construction.

However, timber companies increased their focus on the redwoods in the lower basin in the coming years just as the practice of logging in large blocks of clear-cuts became standard throughout the industry.[35]

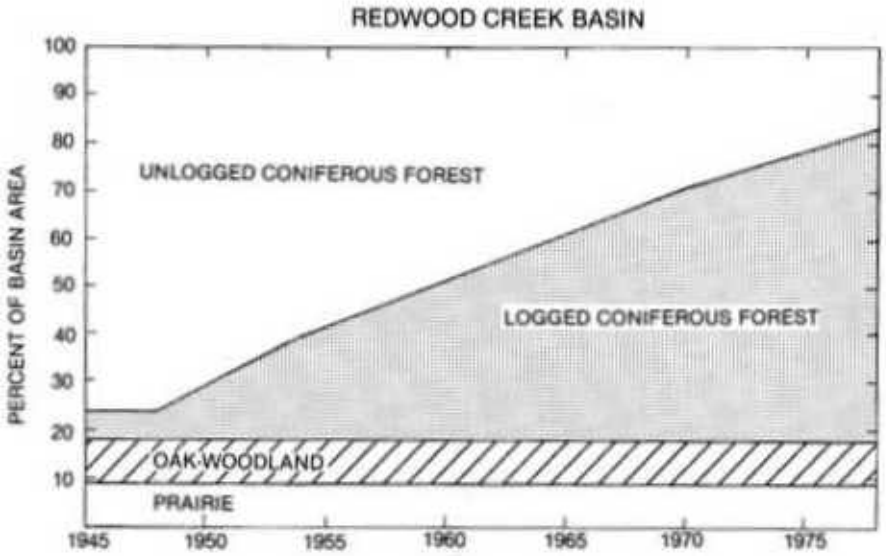


**Figure 1.5 Timber harvest in the Redwood Creek Basin, 1945–1978.** Reprinted from David W. Best, *Land Use of the Redwood Creek Basin* (Arcata: Redwood National Park, Arcata Office, 1984), 9.

By 1970, 37 percent of the lower basin's forest had been logged, mostly in the form of clear-cuts. This did not match the volume or acreage of logging in the middle or upper watersheds, where 83 percent and 71 percent of the forest in those two parts of the basin had been cut by this time. Yet over the next eight years, until the park was expanded in 1978, the timber harvest in the lower basin reached unprecedented levels. Almost 10,000 acres or one-third of the remaining uncut forest in the lower basin was cleared in this brief stretch of time—which is slightly more than half of all of the old-growth redwood acquired in the establishment and expansion of Redwood National Park. In less than three decades, and mostly prior to the establishment of the 1973 California Forest Practice Rules, 84 percent of the original standing forest in the Redwood Creek basin was cut at least once.[36]

The cumulative and immediate effects of the intense logging regimes that occurred in the postwar era had a powerful effect on the environment of the Redwood Creek basin.

Besides removing great swaths of old-growth forest—the parks' primary natural resource—clear-cutting also dramatically increased the already high natural erosion rates of the Redwood Creek area. Bulldozers cut through natural drainage patterns to build roads, landings, stream crossings, and mounds to cushion the falls of giant trees, creating unstable areas and sending tons of loose debris downslope. The steep hillsides were also laced with skid roads, where logs were pulled by tractor down to loading areas or dragged by cable up to ridge top landings. Large areas, including riparian zones, were left bare of any vegetation, and during winter rains, as much as 10-20 inches of valuable topsoil slipped down the unstable chutes created by skid roads and bulldozer tracks. During major storm events, walls of mud and logging debris poured down the slopes, road crossings and landing areas failed and became landslides, and stream channels were torn and clogged with massive amounts of debris. Sedimentation not only destroyed critical salmon habitat but also threatened to bury the shallow roots of prized redwood groves or cause a channel to shift and cut its way through streamside forest.[37] By the late 1960s, much of the area in and around the current boundaries of RNSP could be described more as an environmental disaster than a potential park.

### THE RECREATIONAL LANDSCAPE

Concern over clear-cutting, damaging floods, and the rapid loss of old-growth redwood forest gave urgency to the movement to create Redwood National Park in the 1960s, while scientific study of industrial logging's effects on the Redwood Creek drainage—for areas both inside and upstream from the national park—informed the push for park expansion in 1978. Mitigating the long-term consequences of this relatively brief period of intensive cutting has since become a primary feature of the Park Service's natural resource management program at Redwood. Indeed, the watershed restoration program in Redwood Creek is world renowned, and has long been a central feature of park interpretation. Visitors generally do not come to RNSP to observe restoration projects, however. Many take the time to learn about and appreciate the significance of watershed rehabilitation and the critical

threats to the parks' environments, but nearly everyone who travels to the North Coast comes for the reasons that have attracted visitors since the 1920s: to see old-growth forests and undeveloped coastline.

Most of the areas within RNSP that attract these visitors are within the three state parks, which recently comprised about a third of all acreage in the park complex but held approximately half of all old-growth forest in RNSP. The addition of 25,000 acres of cutover lands in the Mill Creek drainage in 2005, and their attachment to Del Norte Coast Redwoods State Park, skewed the comparative percentages of cutover lands—but did not alter the relative distribution of old-growth forest or protected coastline, which both remain evenly divided between federal and state lands. The state parks' prime features, along with their well-used trails and scenic overlooks, all speak to the long history of recreational use in RNSP. Although less intensive and certainly less lucrative than industrial logging, recreational development is nearly as long-lived as the timber industry and has certainly shaped the physical and administrative environment of RNSP in important ways. The legacy of recreation in the RNSP area is best left to the next chapter, however, since it is so closely tied to the state park movement and the half-century effort to create a Redwood National Park.

---

[1] Save-the-Redwoods League, "Memorial Grove List," http://www.savetheredwoods.org/protecting/pdf/grove_list.pdf (accessed October 12, 2007).
[2] In this respect, the Bald Hills area represents three of the four categories the Park Service uses to classify types of cultural landscapes; namely, *historic sites*, *historic vernacular landscapes*, and *ethnographic landscapes*—but not *historic designed landscapes*, which generally refer to designed gardens and parks of special significance. See Dave Egan, "Defining Cultural and Ethnographic Landscapes," *Ecological Restoration* 21 (December 2003): 258-60. Also see Steven Underwood, Leonel Arguello, and Nelson Siefkin, "Restoring Ethnographic Landscapes and Natural Elements in Redwood National Park," *Ecological Restoration* 21 (December 2003): 278-83; and Joy A. Fritschle, "Reconstructing Historic Ecotones Using the Public Land Survey: The Lost Prairies of Redwood National Park" *Annals of the Association of American Geographers* 98 (March 2008): 24-39.
[3] National Park Service, *Watershed Rehabilitation Plan: Redwood National Park*, *California* (Denver: Denver Service Center, National Park Service, U.S. Departmentof the Interior, 1981), 1.
[4] For brief overviews of these issues, see Thomas Gates, *An Addendum to "An Ethnographic Overview and Evaluation of American Indian Consultations for Redwood National and State Parks--Phase 1 Report: Redwood National and State Parks Ethnographic Overview and Consultation Overview"* and *"An Ethnographic Overview and Evaluation of American Indian Consultations for Redwood National and State Parks--Phase 2 Report: Defining Common*

*Ground*," August 2007, RNSP Library; Yurok Tribe, "Tribal Park Concept Plan [Draft]" (August 2005); and Roland Raymond and Walt Lara, Sr., "The Use of Redwood (Keeth) by the Yurok People," in *Proceedings of the Conference on Coast Redwood Forest Ecology and Management*, *June 18-20*, *1996* (Arcata: Humboldt State University, 1996), 9-10.

[5] M. Kat Anderson, *Tending the Wild: Native American Knowledge and the Management of California's Natural Resources* (Berkeley: University of California Press, 2006), 13-39. Also see Martin A. Baumhoff, "Environmental Background" (16-24) and William F. Shipley, "Native Languages of California" (80-91), both in *Handbook of North American Indians*, vol. 8, *California*, ed. Robert Fleming Heizer (Washington, DC: Smithsonian Institution, 1978). For a general definition of the California Cultural Area, see Heizer, "Introduction," in Heizer, *Handbook of North American Indians*, vol. 8, *California*, 1-6.

[6] Richard A. Gould, "Tolowa" (128-36), Arnold R. Pilling, "Yurok" (137-54), and William J. Wallace, "Hupa, Chilula, Whilkut" (164-79), in Heizer, *Handbook of North American Indians*, vol. 8, *California*. Also see George Richard Mead, "The Indians of the Redwood Belt of California: An Ethnobotanical Approach to Culture Area" (PhD diss., Washington State University, 1971).

[7] Gould, "Tolowa"; Pilling, "Yurok"; and Wallace, "Hupa, Chilula, Whilkut." Also see Thomas T. Waterman, "Yurok Geography," *University of California Publications in American Archaeology and Ethnology*, vol.16 (Berkeley: University of California, 1920), 177-314. Spellings of Yurok place names and terms come from *Yurok Tibal History* (Klamath: Yurok Tribe, 2007).

[8] Mead, "Indians of the Redwood Belt."

[9] For a detailed study of this subject, see Sean L. Swezey and Robert F. Heizer, "Ritual Management of Salmonid Fish Resources in California," in *Before the Wilderness: Environmental Management by Native Californians*, ed. Thomas C. Blackburn and Anderson (Menlo Park, CA: Ballena Press, 1993), 299-327.

[10] Ibid.; and Pilling, "Yurok," 140.

[11] Walt Whitman, "Song of the Redwood Tree," *Leaves of Grass* (Philadelphia: David McKay [c. 1900]), www.bartleby.com/142/253.html, July 1999 (accessed August 29, 2006).

[12] Russell Thornton, "Social Organization and the Demographic Survival of the Tolowa," *Ethnohistory* 31 (Summer 1984): 188-89; and Bearss, *History Basic Data*. For overviews on the tragic and brutal consequences for Native American peoples in Northwestern California, see Jack Norton, *When Our Worlds Cried: Genocide in Northwestern California* (San Francisco: The Indian Historian Press, 1979); Robert F. Heizer *The Destruction of California Indians* (Lincoln: University of Nebraska Press, 1993); and Clifford E. Trafzer and Joel R. Hyer, *Exterminate Them: Written Accounts of the Murder*, *Rape*, *and Slavery of Native Americans during the California Gold Rush*, *1848–1868* (East Lansing: Michigan State University Press,1999).

[13] Pliny E. Goddard, "Notes on the Chilula Indians of Northwestern California," *University of California Publications in American Archaeology and Ethnology*, vol.10 (Berkeley: University of California, 1914), 265-88; Wallace, "Hupa, Chilula, Whilkut," 170, 177-79; Alfred E. Holland, "William E. Dougherty and Salmon Fishing on the Klamath River, 1886-1898" (master's thesis, California State University, Sacramento, 1996); Thomas Buckley, *Standing Ground: Yurok Spirituality*, *1850–1990* (Berkeley: University of California Press, 2002); and Bearss, *History Basic Data*.

[14] Susan Berry, "Taking Back the Land: Problems in Yurok Tribal Sovereignty" (master's thesis, Brown University, 1979), 27-36; Gary Morris, "A Land Divided: Yurok Land Allotment," in *California Indians and the Environment*, ed. M. Margolin and J. Gendar, *News from Native California Special Reports*, no. 1. (Berkeley: Heyday Books, 1992), 24-27; and Janet P. Eidsness with Ann King Smith, *A Summary of Cultural Resources Projects: Redwood National Park* (Arcata: Redwood National Park, 1988), 28-32; and Bearss, *History Basic Data*.

[15] Alejandra Lopez, *The Largest American Indian Populations in California: Household and Family Data from the Census 2000*, CCSRE Race and Ethnicity in California: Demographics Report Series (Stanford, CA: Center for Comparative Studies in Race and Ethnicity, 2002); and Yurok Tribe, "Background Information," <http://www.yuroktribe.org/culture/history/history.htm (accessed December 13, 2007).

[16] Gates, "Addendum [Draft] to "An Ethnographic Overview."

[17] Ibid.; Yurok Tribe, *Tribal Park Concept Plan* [Draft] (August 2005); and Raymond and Lara, "Use of Redwood (Keeth) by the Yurok People," 9-10.
[18] Bearss, *History Basic Data*.
[19] Thomas Keter, "Environmental and Cultural History of the Smith River Basin," in *Smith River Ecosystem Analysis: Basin and Subbasin Analyses and Late Successional Reserve Assessment*, ed. Michael McCain, Brenda Devlin-Craig, and Corrine Black (Eureka: U.S. Department of Agriculture, Six Rivers National Forest, 1995), 17-19.
[20] Bearss, *History Basic Data*.
[21] Paul W. Gates, *History of Public Land Law Development* (Washington, DC: Public Land Law Review Commission, 1968), 152-63; and Norris Hundley, *The Great Thirst: Californians and Water*, *1770s–1990s* (Berkeley: University of California Press, 1992), 69.
[22] Susie Van Kirk, *A Cultural Look at Gann's Prairie*, *Redwood National and State Parks* (Arcata: Redwood National and State Parks, 1980), 11.
[23] Andrew C. Isenberg, *Mining California: An Ecological History* (New York: Hill and Wang, 2005), 81.
[24] Tamara Whited, "Myth and Reality of the Humboldt Forests," in *Green versus Gold: Sources in California's Environmental History*, ed. Carolyn Merchant (Washington, DC: Island Press, 1998), 155-72; and census records from Daniel A. Cornford, "Lumber, Labor, and Community in Humboldt County, California, 1850-1920" (PhD diss., University of California, Santa Barbara, 1983), 51-54.
[25] Bearss, *History Basic Data*; Polly Bickel, *A Study of Cultural Resources in Redwood National Park* (Denver: U.S. Department of the Interior, National Park Service, Denver Service Center, 1979); Linda W. Greene, *Historic Overview of the Redwood Creek Basin and Bald Hills Region of Redwood National Park*, *California* (Arcata:Arcata: Redwood National Park, 1980; Eidsness and Smith, *Summary of Cultural Resources Projects*; Van Kirk, *A Cultural Look at Gann's Prairie*; Smith, Stanton, and Van Kirk, *Home Place: An Historic Study of the Coyote Creek Lands*, *Redwood National Park*, *Humboldt County*, *California* (Arcata: Redwood National Park, 1992); L. E. Soulliere, *Architectural Survey and Evaluation*, *Redwood National Park* (Crescent City: Redwood National Park, 1983); Smith, Stanton, and Van Kirk, *Annie's Story: An Ethnohistoric Study of the Frey/White Property* (Arcata: Redwood National and State Parks, 1995); Van Kirk, *Davison Property: History of the Davison Ranch*, *Evaluation of National Register Eligibility* (Arcata: Redwood National Park, 1992); and George Ringwald, "The Mayor of Orick," *North Coast Journal*, September 10, 1998, 1.
[26] Quotation is from Thomas Dodsworth, Hillary Leland, Denise Robertson, and Melissa Tokle, *Recreation Site Plan for the Bald Hills Area of Redwood National and State Parks* (Arcata: Humboldt State University, 1998). Also see U.S. Department of the Interior, National Park Service, *Bald Hills Vegetation Management Plan* (Arcata: Redwood National Park, 1992).
[27] Gates, "Public Land Disposal in California," in *Agricultural in the Development of the Far West*, ed. James H. Shideler (Washington, DC: Agricultural History Society, 1975), 158-78, and "California Land Policy and Its Historical Context: The Henry George Era," in Paul W. Gates, Ronald B. Robie, John T. Knox, and Norman Y. Mineta, *Four Persistent Issues: Essays on California's Land Ownership Concentration*, *Water Deficits*, *Sub-State Regionalism*, *and Congressional Leadership* (Berkeley: University of California; Institute of Governmental Studies, 1978), 1-24.
[28] H. Brett Melendy, "One Hundred Years of the Redwood Lumber Industry, 1850–1950" (PhD dissertation, Stanford University, 1952), 72-89; S. A. D. Puter, *Looters of the Public Domain; Embracing a Complete Exposure of the Fraudulent Systems of Acquiring Titles to the Public Lands of the United States* (Portland, OR: Portland Printing House, 1908), 17-20; and Daniel A. Cornford, *Workers and Dissent in the Redwood Empire* (Philadelphia: Temple University Press, 1987), 64-68.
[29] Stephen R. Mark, *Preserving the Living Past: John C. Merriam's Legacy in the State and National Parks* (Berkeley: University of California Press, 2005), 87-98; Susan R. Schrepfer, *The Fight to Save the Redwoods: A History of Environmental Reform*, *1917–1978* (Madison: University of Wisconsin Press, 1983), 18-37; and Save-the-Redwoods League, "Memorial Grove List."

[30] David W. Best, *Land Use of the Redwood Creek Basin* (Arcata: Arcata Office, Redwood National Park, 1984), 6-12, 16-18; Robert Spector, *Family Trees: Simpson's Centennial History* (Bellevue, WA: Documentary Book Publishers Corporation, 1990), 81-87; and Gerald L. Partain, "Future of Wood Products Industry in the Redwood Empire," paper presented for Seminar in Local Government, Ukiah, CA, March 10-11, 1967, typescript on file at Humboldt State University Library, Special Collections (hereafter cited as HSU Library).
[31] Best, *Land Use of the Redwood Creek Basin*, 6-12; Dudley J. Burton, "The Decline of California's North Coast Redwood Region," *Policy Studies Journal* 10 (May 1981), 272-84; Spector, *Family Trees*, 81-87; and Partain, "Future of Wood Products Industry in the Redwood Empire."
[32] John G. Miles, *The Effect of Commercial Operations on the Future of the Coast Redwood Forest: A Study Prepared for the U.S. National Park Service* (Eureka: distributed by Greater Eureka Chamber of Commerce, 1963); Arnold Wallen, *Forest Resources: California's North Coast Forest Region* (Oakland: Hammon, Jensen, and Wallen, 1954), and Arnold Wallen, *Forest Resources of the Redwood Region* (Oakland, CA: Hammon, Jensen, and Wallen, 1951).
[33] Daniel D. Oswald, *California's Forest Industries: Prospects for the Future* (Portland, OR: Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station, 1970), 22-34; Oswald, *Prospects for Sawtimber Output in California's North Coast*, *1975-2000* (Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station, 1978); and Robert R. Ziemer and Richard L. Hubbard, "Forestry and Anadromous Fish," in *California's Salmon and Steelhead: The Struggle to Restore an Imperiled Resource*, ed. Alan Lufkin (Berkeley: University of California Press, 1991), 88-96.
[34] Jafet Andersson, "Life History, Status, and Distribution of Klamath River Chinook Salmon," on-line essay for *Ecology and Geomorphology of Streams: The Scott River Study* (Department of Geology, University of California, Davis, 2003), 14-15, watershed.ucdavis.edu/scott_river/docs/reports/Jafet_Andersson.pdf (accessed June 16, 2009).
[35] Best, *Land Use of the Redwood Creek Basin*.
[36] Ibid.; and California Coastal Watershed Planning and Assessment Program and North Coast Watershed Assessment Program, "Redwood Creek Basin Assessment," *Coastal Watershed Program*, August 20, 2007, http://coastalwatersheds.ca.gov/Watersheds/NorthCoast/RedwoodCreek/RedwoodCreekBasin/RedwoodCreekAssessmentReport/tabid/195/Default.aspx (accessed October 31, 2007).
[37] James K. Agee, "Issues and Impacts of Redwood National Park Expansion," *Environmental Management* 4 (September 1980), 407-23; and Richard J. Janda, "Recent Man-Induced Modifications of the Physical Resources of the Redwood Creek Unit of Redwood National Park, California, and the Processes Responsible for Those Modifications," *U.S. Geological Survey Open File Report* (Menlo Park: U.S. Geological Survey, 1975).

# Chapter Two

## SAVE THE REDWOODS!

## THE MOVEMENT FOR A REDWOOD NATIONAL PARK

For as long as they have been measured in terms of board feet and market prices, ancient coast redwoods have also been valued for their inspirational and symbolic qualities. Little wonder, then, that the first real suggestion for redwood preservation dates back to the beginnings of commercial logging.[1] Fearing that coast redwoods would "entirely disappear unless some measure be taken to preserve a portion of them," U.S. Secretary of the Interior Carl Schurz proposed in 1879, "that the President be authorized to withdraw from sale or other disposition an area at least equal to two townships [46,080 acres] in the coast range in the northern, and an equal area in the southern portion of the state."[2] While nothing immediately came from this suggestion, it did reflect a growing concern about some of the more destructive consequences of private landownership and western extractive industries—and Schurz's belief that forest conservation and scenic preservation were matters of national significance would find abundant expression in the next few years.[3]

In 1886, President Grover Cleveland exercised the very authority that Schurz advocated, issuing an executive order withdrawing from settlement ten townships (230,400 acres) around Crater Lake, Oregon.[4] In 1890, Congress established Sequoia, Yosemite, and General Grant national parks, which protected nearly all of the extant giant sequoia (*Sequoia gigantea*) groves in the Sierra Nevada along with extensive tracts of scenic alpine landscapes. A year later, President Benjamin Harrison signed the Forest Reserve Act into law and subsequently authorized setting aside thirteen million acres of the public domain for national forest reserves. One of the largest was the Sierra Forest Reserve, which contained most of the forests and associated watersheds in the central and southern Sierra Nevada.

Given this sudden burst of federal activity, and the particular emphasis on forests in California and the Pacific Northwest, it would have seemed an auspicious time for advocates of a redwood national park. Indeed, three small but significant developments indicate that such a park would have enjoyed strong federal, state, and public support: the establishment of the 3,800 acre California Redwood State Park in Santa Cruz County in 1901; the subsequent addition of 4,000 acres of federal public lands to that state park in 1908; and President Theodore Roosevelt's proclamation creating the 295-acre Muir Woods National Monument in Marin County earlier that same year. Despite these promising circumstances, the small national monument—which came to the United States as a gift from the wealthy philanthropist William Kent—would remain the only national park unit dedicated to redwoods for six decades.[5]

No national park movement has ever been as long lived or widely advocated as Redwood. By the same token, no other park movement was so long thwarted. There is a riddle here, and its answer largely explains the nature of the park that was ultimately established in 1968 and enlarged a decade later. At base, the issues that inspired and thwarted the creation of Redwood National Park (RNP) stem from the ever-shifting debate about private rights and the public good that has always defined America. This is true of many other national park histories, but at Redwood—where the protected resource is a national and global icon as well as a highly valued commodity—the debates and conflicts these different valuations engendered were especially intense. The clash of ideals associated with the park were made even more intractable by the simple fact that nearly all of the redwood belt was already in private hands by the 1890s, when the federal government began establishing large national forests and parks in California. Although both forms of public land management were proposed for the redwoods at the time, and would be again over the next several decades, the necessity of acquiring private lands to do so long proved an insurmountable legal and financial obstacle.[6]

Given these conditions and the fundamental challenges they presented to park advocates, it is little wonder that the establishment of RNP involved a great deal of controversy, dissatisfaction, and compromise—all of which shaped the resulting park in profound ways. From its particular location on the North Coast and its vulnerability to outside land uses to the peculiar shape of its boundaries and its relation to three existing state parks, RNP is the product of a long and mighty tug-of-war between the interests that advocated and opposed the park's establishment.

Many of the basic issues that prevented or prolonged the creation of a national park remained constant from the late nineteenth century to the 1960s, but it is important to realize that the establishment of RNP was not the culmination of some long, continuous fight to save the redwoods. Indeed, the park that came to be in 1968 reflected very different concerns and conditions from those of the late nineteenth century, as did the various park movements of the intervening decades. For instance, the forests that became part of RNP in 1968 were not considered "park worthy" by earlier generations of preservationists—who emphasized the need to protect "superior groves" that could inspire and enlighten visitors. Later park advocates dismissed these concerns as both sentimental and narrow minded, and pushed for the protection of old-growth ecosystems—regardless of the aesthetics or inspirational qualities that might be attributed to particular groves. In terms of visitor expectations, park infrastructure, and resource management strategies, Redwood National and State Parks (RNSP) continues to reflect both of these ideas about redwood preservation—with the earlier approach finding its clearest expression in the three state parks and the latter in the old-growth and second-growth forests acquired by the National Park Service (NPS) in 1968 and 1978.

Although significant in itself, the consequences of changing preservationist agendas was just one of a number of important subtexts that shaped park debates and their final outcomes. These included the variable nature of congressional actions, the shifting priorities of the NPS, the concerns of state authorities, the cyclical nature of the national economy, the

popularity of outdoor recreation, the rise of environmentalism in the post–World War II era, the pace and scale of logging operations, the quality, quantity, and location of remaining old-growth redwoods, the dynamic ecology of redwood forests and North Coast river basins, and the relative interests of a larger public. To understand how and why this complicated array of interests and issues finally resulted in the Redwood National Park Act of 1968, and to properly gauge the limitations and consequences of that legislative accomplishment, it will be helpful briefly place them in the context of earlier—and often more ambitious—efforts to establish a park in the early 1920s and late 1930s.[7]

## FIRST PARK EFFORTS

In the years after World War I, national park advocates hoped to create what might be called a "classic" park somewhere along the North Coast of California. The key elements of their vision included sublime scenery, a rustic lodge, and abundant opportunities for fishing, hiking, horseback riding, and automobile camping. The forests they sought to protect were the kinds that grew along extensive valley bottoms and alluvial flats where redwoods attained their greatest heights and few if any other types of trees grew in the open understory; "museum stands," as then NPS director Horace Albright later noted, with "groves so outstanding in beauty, setting, size and age that they should be preserved and protected for posterity."[8]

The timing of this park movement reflected the convergence of two key developments along the North Coast. First, logging accelerated dramatically in the late 1910s, as improved shipping links along with greater efficiencies in the harvesting and processing of lumber created new and distant markets for redwood logs—just as the last stands of old-growth trees in and around the market centers of San Francisco Bay were being cut down. Second, California passed a series of state highway bonds that included construction of a highway from San Diego to the Oregon border. The highway presented a host of new issues that would shape concerns about redwoods for many decades to come.

On the one hand, improved roads promised significant economic growth, which meant more logging and timber processing. On the other hand, roads and automobiles meant tourism, a new kind of commerce for the North Coast that many communities wanted to promote and exploit. And, of course, tourists came in search of scenery that could be seen from and reached by automobile. [9]

Everyone wanted roads and most everyone wanted to ensure that visitors would have something to see after traveling so far. To create a worthy tourist destination as well as to prevent the spectacle of logging tracts along especially scenic portions of the motorway, a broad association of academics, politicians, industrialists, and women's groups, working in conjunction with the NPS, wildlife and conservation organizations, automobile associations, and chambers of commerce, prevailed on Congress to authorize formation of a small party to investigate "the suitability, location, cost, if any, and advisability of securing a tract or tracts of land . . . containing a typical stand of redwood trees . . . [to] be set apart and dedicated as a national park for the benefit and enjoyment of the people of the United States and for the purpose of preserving such trees from destruction."[10]

A three-member committee was soon tasked with reporting back to Congress on the best locale for a national park. Comprising R. F. Hammett, an assistant district forester for the U.S. Forest Service in California; M. B. Pratt, a deputy state forester for California; and Donald Bruce, associate professor of Forestry at the University of California in Berkeley, the committee examined sites along the Klamath River, the South Fork Eel River, Prairie Creek, Redwood Creek, and Big Lagoon in summer 1920. In their estimation, the best site was on the Lower Klamath, where they recommended the establishment of a 64,000-acre park.. The area possessed "superior" stands of redwoods, encompassed a scenic and navigable river with world-class sportfishing, had ready sites for developing scenic accommodations and recreational opportunities (especially around Ah Pah and Blue creeks), and government control of remaining Indian properties along the river promised to make land acquisition cheaper and less complicated than elsewhere. The committee also recommended

establishment of an 1,800-acre “administrative unit of a redwoods national park on the South Fork of the Eel River” to protect the spectacular groves along the proposed highway that would later become known as the Avenue of the Giants.[11]

While Prairie Creek and Big Lagoon were impressive, they did not possess the same qualities as these other sites.[12] The Redwood Creek area, with its “forty thousand acres or more of typical redwood timber, of satisfactory quality,” was dismissed altogether by the committee: “It includes, it is true, a good stand of redwood timber, untouched by the lumberman, but there its virtues cease.” As the committee noted, there were “other bodies as good [as Redwood Creek] and other acres which embody, within their proposed boundaries additional features which make them, in the opinion of the investigators, far more attractive for Park purposes.”[13]

The Redwood National Park report gained a favorable reception in Washington, but the Senate balked at the idea of spending public funds to buy private property. It was one thing to reserve a portion of the public domain from sale or settlement, or for the president to accept the gift of a small parcel of land (as occurred with Muir Woods), but it was another matter altogether to purchase economically productive lands simply to return them to the public domain. There was no precedent for such action and there was no desire on Capitol Hill to create one for the purposes of park establishment—especially just before a national election.[14]

**Figure 2.1 Photograph by Charles Willis Ward of proposed national park area along Lower Klamath River, ca. 1910s.** Ward was an early advocate for a Redwood National Park along the Lower Klamath where he had an estate on Ah Pah Creek. Along with the majestic redwood groves, superlative scenery, and recreational opportunities on the river, for Ward an important virtue of the Klamath park site was the fact that it included 8,600 acres of Yurok lands still under the control of the Department of the Interior. While these could be acquired at "an extremely low price per M[arket]," the presence of Indians would also "offer exceptionally rich ground for those interested in Indian myths and customs." With his estate serving as the site of a grand hotel, Ward envisioned a national park that might rival the amenities and popular Indian entertainments at Glacier National Park.[15] Reprinted from Madison Grant, "Saving the Redwoods," *National Geographic Magazine* 37, no. 6 (June 1920): 522. .

Such reticence on the part of Congress disappointed but did not surprise NPS director Stephen Mather or his friends in the Save-the-Redwoods League (SRL), which had formed a few years earlier to advocate for the establishment of a national park. However, it did clarify their respective missions. The league remained supportive of Mather's interest in a national park, but turned its energies toward raising private funds to purchase from willing sellers the "finest" available stands of redwoods in Humboldt and Del Norte counties. Focusing on "museum stands" that provided the most powerful manifestations of what league president John C. Merriam called the ancient "creative forces which were in operation before man was placed on earth," the SRL purchased lands in the Mill Creek drainage near the Oregon border; on the coastal strip of Del Norte County, where towering old-growth trees came closest to the rugged Pacific coastline; in Prairie Creek, where a large herd of

Roosevelt elk spent a good part of the year; and along the South Fork Eel River where groves of ancient trees reached enormous sizes.[16]

Initially, the SRL intended to "purchase these forests as fast as we can, . . . [then] present them to Uncle Sam."[17] Congressional inaction altered this plan, but the league remained committed to its mission to save the redwoods through the purchase of private property. Many of the lands acquired in the early years came in the form of Memorial Groves and Honor Groves; stands of trees that wealthy individuals or groups could purchase on behalf of the SRL then name for themselves, their families, another person or family, or an organization. While this charitable gambit proved successful, the league could not acquire enough land—and convert it into parks—without support from the public sector. Thanks to excellent political connections in Sacramento, the SRL soon formed a lasting partnership with state political leaders that ultimately formed the basis for California's much vaunted park system.

In the early 1920s—through the lobbying of the SRL and with the support of state representatives from Humboldt and Del Norte counties—a series of bills passed the state legislature that authorized the California Board of Forestry to accept gifts of land and money for park creation, transferred the exercise of eminent domain over highway rights-of-way from North Coast counties to the state, and recognized the state's authority to condemn private lands for the purposes of park creation. To effectively fund these new state powers, the SRL played a leading role in the successful campaign for a state park bond initiative that matched $6 million of public funds with private donations for land acquisition. By the time the bond measure passed in 1928, the league operated like a private adjunct of the newly established State Park Commission and would thence forward work strenuously to enlarge and improve California's redwood parks through fund-raising, land donation, and sponsorship of a park system master plan by Frederick Law Olmsted, Jr.[18]

While the SRL became closely associated with Sacramento, and league leaders cultivated the support of philanthropists and lumber company executives for the enlargement

of North Coast parks, federal officials never lost their interest in redwood preservation. By the mid-1930s, this erupted in a new round of national park and national forest proposals that far exceeded anything contemplated before or since. During the Great Depression, Congress sought to dramatically increase the application of earlier laws that authorized purchase of private lands for the creation or expansion of national forest areas.[19] At the same time, large timber holdings became more of a liability than an asset for their owners—who now looked to the government to relieve them of the tax burden on lands that had suddenly lost their market value. In an effort to stabilize the redwood industry, and with the support of labor leaders and regional economic interests, Congress authorized two vast Redwood National Forest Purchase Units in 1935. Comprising a 130,000-acre Northern Unit in Del Norte and Humboldt counties and a 600,000-acre Southern Unit in Mendocino and Sonoma counties, the act intended to bring a significant portion of the redwood belt back into the public domain.[20] The NPS was also in a buying mood. With Congress having recently shed its reluctance to purchase private lands for park acquisition, the NPS was experiencing a remarkable period of growth and soon developed a proposal to acquire 18,000 acres in the Mill Creek drainage for a national park.[21]

Neither the national forest nor the national park came to be, however. A rebounding economy and budgetary constraints limited national forest acquisitions to just 14,500 acres—all of it in a section known as the Northern Redwood Purchase Unit along the Lower Klamath River drainage.[22] Park Service efforts to acquire redwood lands never got off the ground, in part because of strong opposition from the Save-the-Redwoods League and other national conservation groups like the National Parks Association and the newly formed Wilderness Society. Alarmed by the recent development of a winter sports park and ski resort at Yosemite National Park, and plans for extensive tourist facilities in the proposed Kings Canyon National Park, many prominent conservationists worried that the Park Service had turned away from its primary commitment to protect spectacular natural areas and “leave them unimpaired.”[23] League officials believed the NPS had become too large and too

committed to fostering and developing “purely recreational value[s], in the sense of exercise and outdoor life,” to sufficiently appreciate that such matters were “subordinate to the idea that the Redwoods are objects of exceptional beauty and grandeur.” State park managers and the SRL officials were best poised to protect and promote “the uses which satisfy the soul of man rather than those which concern merely his health of body.”[24]

It is not clear what sort of developments the NPS might have proposed that would have undercut the soul-inspiring qualities of redwoods, but opposition from the SRL and state officials prevented the Park Service from submitting a final park proposal to Congress in 1938. Similar resistance later helped undermine Congresswoman Helen G. Douglas’s proposals in 1946 and 1947 to create a 2.4-million-acre Franklin Delano Roosevelt Memorial Forest that would have also included 180,000 acres for four national park units between Mendocino and Del Norte counties. Committed to private philanthropy and attuned to the concerns of the timber corporations that sold or donated lands for the state parks, the SRL believed that Douglas’s proposal would involve the acquisition of too much redwood forestland. Besides taking over lands that the league already planned to acquire for the state park system, the large national parks would have included a good deal of uninspiring forests—ones that had more social value as lumber than as scenery or mere recreation.[25]

The Douglas bills had other critics, of course. Chief among these were the timber companies and their allies in local and state government who feared a federal “takeover” that would stifle profits and productivity, reduce the tax base, and kill jobs. Douglas countered that her plan would correct the unfair legacy of the nineteenth-century land frauds and bring long-term economic stability to the North Coast. Unfortunately for Douglas, this argument did not garner the support of the U.S. Forest Service (USFS)—which opposed her bills for two reasons. First, the USFS already had plans of its own that involved creating the Six Rivers National Forest out of parts of the Siskiyou, Klamath, and Trinity national forests and the Northern Redwood Purchase Unit. The Forest Service also feared that Douglas’s proposals would actually lead to too much cutting in the redwoods; as the government started

condemnation proceedings, USFS officials believed that timber operators would accelerate their cutting schedules to pull as much capital out of the forest before they had to sell their lands to the government. The Park Service also failed to support Douglas, largely because NPS director Newton B. Drury believed "the best and most representative of [the redwood] forest" were already in the California State Park System where they were "being carefully and intelligently protected."[26] Drury's sentiments betrayed a close relationship with the SRL (he was a board member and former executive secretary of the league, as well as the first acquisitions officer for the California State Parks Commission), but he also recognized that wartime budgets had so depleted the Park Service that the agency was in no position to administer and develop new parks.[27]

Without NPS and USFS support, and in the face of opposition from the SRL and other national conservation groups, her proposals were easily put down by the protests of local and state politicians, a resurgent timber industry, and a growing conservative backlash against anything that looked like "big government." Even more than the park efforts of the early 1920s and late 1930s, the Douglas bills foundered in the face of powerful concerns about the rights and interests of private property, the growth of federal authority, and the necessity or purpose of a redwood national park. These three concerns would again shape the park movement in the coming decades—but changing ideas and circumstances would lead to new interpretations and different results.

### THE SUCCESSFUL NATIONAL PARK MOVEMENT BEGINS

Although no one knew it at the time, the mid-1940s represented the last chance to protect a large area of uncut redwood forest and establish a substantial national park. A postwar housing boom led to a five-fold increase in the cutting of Humboldt County forests between 1946 and 1952, from 271 to 1,350 million board feet (MMBF), with similar but somewhat less spectacular increases occurring in Del Norte County.[28] Timber harvest rates

scaled back some in the mid-1950s, but like the national and state economies as a whole, the North Coast timber industry continued to grow steadily over the next few decades. Rapid and sustained growth soon cut through areas that had previously been considered for a national park.[29] Even in places where significant stands of forest could still be found, the increased value of redwood made acquisition of standing timber prohibitively expensive—a fact that sharply curtailed the efforts of the SRL to add acreage to the northernmost redwood state parks.

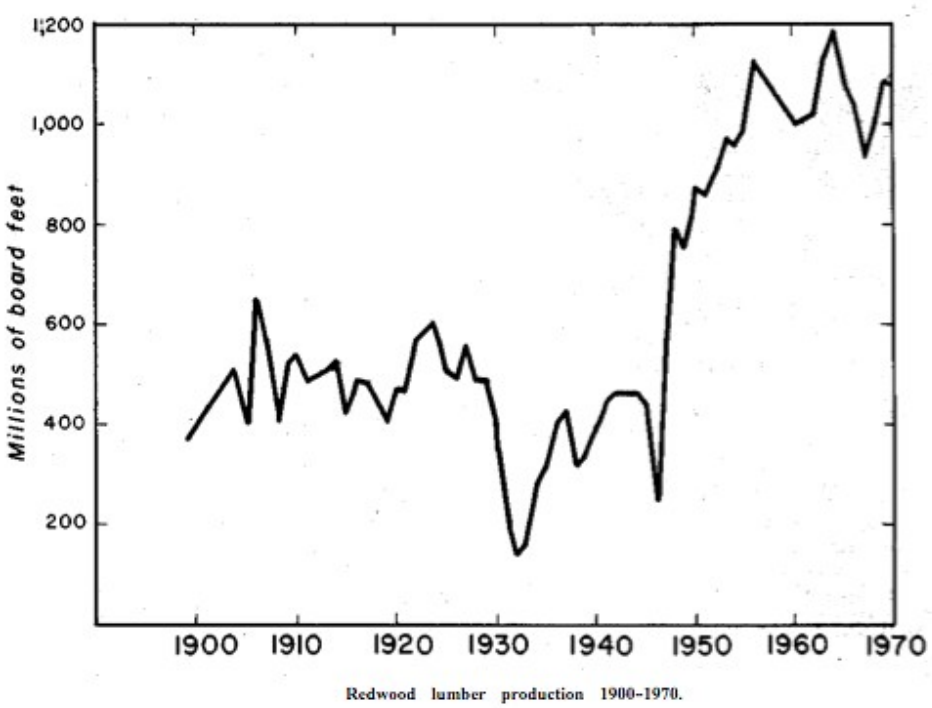


**Figure 2.2 Redwood lumber production, 1900–1970**. Reprinted from James L. Lindquist, *Redwood, an American Wood* (Washington, DC: U.S. Department of Agriculture, Forest Service, 1974), 6..

Rather than doom efforts to create a national park, however, these developments quickly swept away the obstacles that had thwarted earlier proposals. A series of dramatic events in the 1950s and early 1960s galvanized national park advocates and captured the attention of the whole country. The first occurred in 1955, when heavy rains dramatically revealed the environmental consequences of record timber harvests. In the Bull Creek watershed, where some of the most intense logging in Humboldt County had occurred over

the previous few years, denuded soils and unstable road cuts in the upper basin gave way and washed down the steep slopes along with piles of slash and stacks of huge logs awaiting transport to the mills. The small creek became a raging river of mud, gravel, logging debris, and giant timber that tore through the famous Rockefeller Forest in Humboldt Redwoods State Park. In a matter of hours, 50 acres of the forest floor had washed away, 525 ancient trees fell, and another 100 were damaged so badly they had to be cut down.[30]

The 1955 flood crystallized and transformed public concern for the northern redwoods. Pictures of the aftermath made it clear that the boundaries of Humboldt Redwoods State Park were inadequate for the protection of the state's largest, most famous, and most prized park. The slow, incremental purchase of redwood forest no longer seemed viable—nor did the old emphasis on protecting spectacular groves of trees while leaving the surrounding forest in private hands.[31] The state parks also proved too small to handle the rising demands of outdoor recreationalists, whose numbers at the North Coast parks more than tripled in the 1950s—and simply overwhelmed the limited number of available parking lots, roadways, trails, campgrounds, picnic sites, and backcountry areas. In short, there was a growing interest among park advocates, policy makers, and the general public that something larger and more comprehensive than any of the existing state parks would be necessary.[32] Unfortunately, it could not be centered on Humboldt Redwoods State Park—where the SRL and national park advocates had once envisioned a larger and more comprehensive park—since too much of the surrounding area had been logged off.

While the flood of 1955 revealed the inadequacies of the state parks and the incremental acquisition of redwood lands, the devastation on Bull Creek shone an even harsher light on timber corporations. Almost overnight, the logging industry lost much of its romantic, Paul Bunyan mystique and instead became a diesel-snorting agent of destruction. Any claims about the imperatives of economic development and the rights of private property were sorely weakened when they meant the destruction of the public's most celebrated forest—as well as the homes and businesses in the small hamlets of Bull Creek and Weott.

The state government, which was charged with regulating the timber industry and protecting Humboldt Redwoods State Park, soon acquired similarly negative attributes in the public eye. The California Department of Highways received a good deal of negative attention when, just a few months after the Bull Creek, massive tractors started cutting a wide new swath of U.S. Highway 101 through Humboldt Redwoods State Park. The bad press only increased a few years later when the SRL made it widely known that the state also planned to widen and reroute U.S. Highway 101 through the middle of Prairie Creek Redwoods State Park or along Gold Bluffs Beach and across Fern Canyon. Along with similar plans for Del Norte and Jedediah Smith Redwoods state parks, the freeway would have provided the shortest, fastest, and most cost-effective route for logging trucks, but in doing so, it would have required the cutting of hundreds of giant trees and turned the parks into little more than a flash of high-speed scenery.[33]

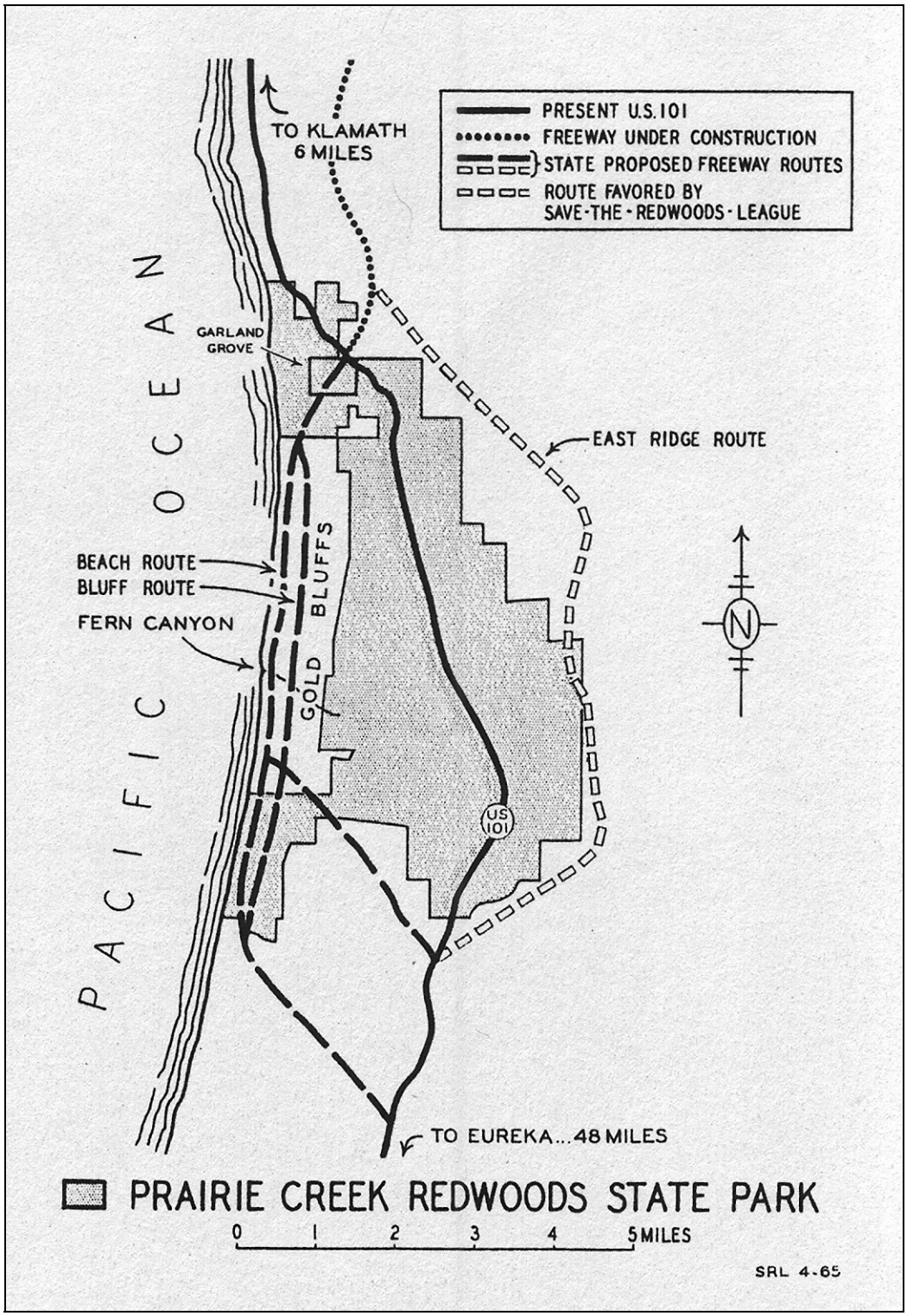


**Figure 2.3: Three proposed freeway routes through Prairie Creek Redwoods State Park**. Reprinted from *Save-the-Redwoods League Bulletin* (Spring 1965), 3.

Freeways, floods, and industrial clear-cuts—all juxtaposed with threatened stands of ancient redwoods —became powerful symbols of a modern world gone terribly awry. Henry Thoreau's statement that "in wildness is the preservation of the world" suddenly had new currency—and new urgency. Such preservation would require the protection of large areas, whole watersheds, if places like the Rockefeller Forest were to survive. The SRL had long recognized the importance of watershed protection, but the issue was now too urgent to rely on the cultivation of private donors or the discretion of state bureaucrats who clearly favored freeways over parks. When the Arcata Redwood Company cut a large stand of trees near the entrance to Prairie Creek in 1962— thus presenting visitors with a stark contrast between a protected redwood forest and industrial clear-cuts—the angry public response made little distinction among timber corporations, freeways, or state agencies. All were part of what Wallace Stegner had recently disparaged as "a headlong drive into our technological termite-life, the Brave New World of a completely man controlled environment."[34] By the time Arcata posted an information sign on the highway stating "Overmature Timber Harvested Here in Full Compliance with California Forest Practice Laws and Regulations," a growing number of writers, publishers, outdoor enthusiasts, and suburban arm-chair pundits were convinced that redwoods were under siege by a broad conspiracy that included state officials, logging corporations, freeway builders, and an overconsuming public.[35]

As early as 1960, the SRL and the Sierra Club had already reached these conclusions and made creation of a redwood national park a top priority for their organizations. The urgency of the situation and the high price of redwood, which made private acquisition of large forest tracts a near impossibility, far superseded any lingering concerns that league members may have had about the NPS from a generation before. The Sierra Club had long deferred to and supported the league in matters related to redwoods, but following the Bull Creek floods of 1955, the Sierra Club made redwood preservation one its own causes as well. Coming off a successful campaign to prevent the Bureau of Reclamation from building two dams in Dinosaur National Monument, the Sierra Club

acquired a well-received reputation for being brash and confrontational in its promotion of environmental issues. The organization brought the same approach to the redwoods, and soon made the campaign for a national park along the North Coast its defining issue.[36]

The dual efforts of the SRL and the Sierra Club soon received the blessing of Secretary of the Interior Steward Udall and the NPS. In 1961, Udall authorized a multiyear study for the establishment of a redwood national park and two years later, he wrote the preface for the Sierra Club's coffee-table book: *The Last Redwoods*, *and the Parkland of Redwood Creek*. The NPS finished its preliminary study in 1964, and issued its own highly polished, fifty-two-page publication entitled *The Redwoods: A National Opportunity for Conservation and Alternatives for Action*.[37] In the interim, President Lyndon B. Johnson publicly announced his support for a redwood national park and Congress moved toward passage of the Land and Water Conservation Act (1965), which formally committed the federal government to the acquisition of private lands for parks and recreation areas.[38]

With broad public support and strong backing from the NPS, President Johnson, the Secretary of Interior, Congress, and major environmental and conservation groups, the establishment of a redwood national park had finally—almost—become a reality. By then, it was not a question of if or even when, but a matter of where, how large, and how expensive. These were not easy questions, however, and it would take four years of sharp political contest and difficult compromise before the park became a reality. At issue were a host of concerns, including the financial interests of the powerful timber industry, the anxieties of timber workers and local business owners, the machinations of congressional committees, the size and limited number of sites with substantial old-growth forest, the competing visions of environmental groups, the expected costs of land acquisition, and the question of jurisdiction over state park lands. Such a crowded arena would produce multiple claims, counterclaims, and necessary compromises, all of which failed to satisfy any of the principals and eventually became part and parcel of the park itself.[39]

## A New Park for a New Age

Because so many interests were at stake and because the resource in question had so much symbolic and commercial significance, the so-called Battle for the Redwoods or Redwood Controversy was one of the most complex and compelling public policy issues of the twentieth century.[40] No other national park proposal has ever generated as much public interest, and perhaps none has so keenly reflected the commercial, social, and political issues of its day. The redwood park debates even became the subject of graduate theses before the park was established in 1968, and remained a matter of considerable public and scholarly interest for many years after.[41] No matter where one stood on the issue, few would have disagreed with Republican Senator Thomas Kuchel of California, who described the process as "a long fight . . . sometimes, acrimonious and bitter . . . [that produced] an imposing milestone in American conservation."[42]

Although complex, and in many respects unprecedented, the effort to establish the park from 1963 forward can still be neatly summarized as a three-part process. The first might be described as a time of testing and promotion, as various parties shaped their public positions regarding the necessity, location, and nature of a national park. The second was a period of political and popular confrontation, in which park proponents divided and fought each other while industry concerns advocated a series of small alternative proposals. Finally, came an intense period of legislative activity in which a number of competing ideas were cobbled together and compromised into a final park bill.

The period of testing and promotion more or less began in 1963 when the National Geographic Society—in a survey of potential national park sites—identified what may have been the world's tallest tree beside a bend in Redwood Creek. Located on Arcata Lumber Company land and subject to pending harvest, "The Mt. Everest of all Living Things"—as the tree was described in the society's popular magazine—became the first great icon of the park crusade.[43] Of course, the National Geographic team did not simply stumble on the tree by accident, nor were they unaware of its symbolic importance for the national park cause.

They had been directed to the area by Sierra Club members who believed that the best place for a redwood national park was in the Redwood Creek basin, which still contained 33,000 acres of contiguous old-growth forest.[44]

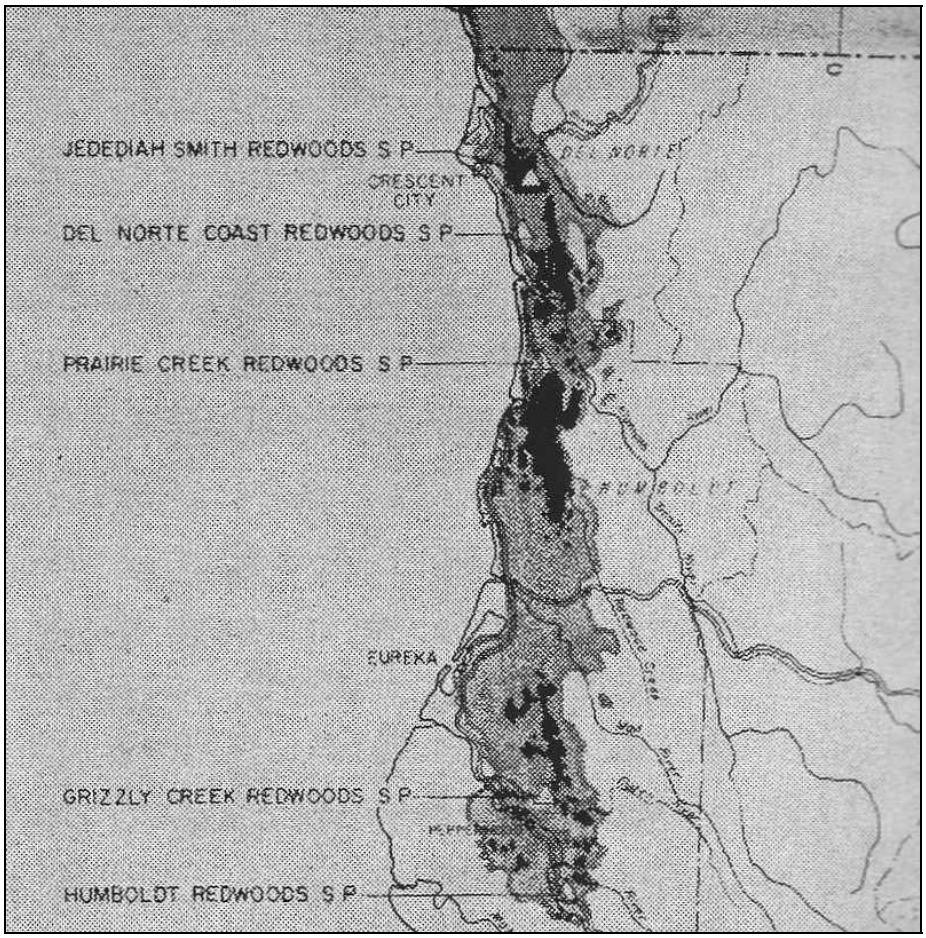


**Figure 2.4 Detail of map showing remaining old-growth forests [in black] and protected redwood parks on the North Coast, 1965.** Redwood Creek is the largest black area in the center. Reprinted from Samuel Trask Dana and Kenneth B. Pomeroy, "Redwoods and Parks," *American Forests Magazine* 71 (May 1965): 2.

As a park site, Redwood creek came with two important problems. First, every square mile of the basin was privately owned—to acquire it would not only be expensive but also disruptive to the regional economy and bitterly opposed by a powerful consortium of industry, labor, and property-rights advocates as well as county and state officials worried about lost tax revenue. Second, except for the hard-to-access Tall Trees Grove, it did not possess many of the kinds of superlative redwood groves that had so long enthralled visitors

and preservationists alike. In a marked shift from earlier park proposals, Sierra Club leaders saw this as a particular strength of their proposal. As then president of the Sierra Club Edgar Wayburn later noted, it would "permit visitors to escape the blare of carhorns and the rush of freeway traffic" near the popular state parks and allow "the redwoods to be experienced in their ecological context—a park that would include trees of varying ages with other types of flora composing the northern California coastal biome."[45] Sierra Club members were not averse to the protection of "museum stands," as Albright termed them, and they believed combining Prairie Creek Redwoods State Park with the lower Redwood Creek basin would create a national park that addressed a full range of environmental concerns, appealed to a new generation of wilderness enthusiasts, and satisfied the expectations of more traditional park users. That may have been true, but the proposed 90,000-acre park—with an expected price tag of $160 million—was deemed excessive by many and was challenged almost immediately.[46]

Industry groups opposed the acquisition of substantial acreage for a national park, arguing repeatedly that the "the best trees have already been saved" in the state parks. At most, they were willing to see the current state parks "rounded out," as Sacramento was then considering, and turned over to the NPS. Some conservation and forestry organizations echoed these concerns, but most advocated the creation of a national park that enlarged and combined existing state parks. The latter position was most vigorously promoted by the SRL, which sought to realize its long held desire to incorporate 24,000 acres of the Mill Creek watershed with Jedediah Smith and Del Norte Redwoods state parks into a 41,000-acre national park. At an estimated $60 million, the park would be considerably cheaper than the Redwood Creek proposal. And though it would only add 9,000 acres of old-growth forest to the lands already protected within the state parks, the league argued that this smaller park was better than the one the Sierra Club was proposing because it would provide watershed protection to superior and more accessible stands of redwoods.[47]

When the NPS presented the results of its “alternatives for action” study in 1964, it proposed three plans that incorporated some elements from the Club’s and the league’s proposals. Each involved a two-part park, with a north unit centered on Del Norte and Jedediah Smith and a south unit focused on Prairie Creek and some portion of the lower Redwood Creek drainage. In each case, most of the new park would have comprised existing state park lands—with acquisition of private property limited to connecting corridors between the northern parks or between Prairie Creek Redwoods State Park and various portions of the lower Redwood Creek drainage. None of these proposals directly addressed the issue of watershed protection, and both the Sierra Club and the league—while publicly stating support for any park—continued to push for their respective ideals.

A year later, the Park Service presented a revised plan for a two-unit park that incorporated the Mill Creek watershed and kept the most extensive of the original three NPS plans for the lower Redwood Creek basin. Both the league and Sierra Club were willing to support this proposal, which would have totaled 93,000 acres, but the Johnson administration balked at the estimated price tag of $120 million for the acquisition of 68,000 acres of private forestland. Hoping to avoid political controversy and protracted land negotiations, the White House instead followed the counsel of Laurance Rockefeller, who advised “that a national park might be created at this time with a minimum of opposition and perhaps even with considerable local support if a reasonable plan is put forward [that avoids the two extremes] of the Sierra Club and the Industry.”[48] In a direct nod to the Rockefeller family’s long standing relationship with the SRL, the Johnson administration proposed a 39,000-acre park that was a slightly smaller version of the league’s original proposal for a national park centered on Mill Creek with the addition of a 1,600-acre “Tall Trees Unit” on Redwood Creek.

The White House proposal, which promised “minimum disruption of the lumber industry and of the local politico-economic situation,” had the added benefit of pitting the lumber industry against itself.[49] Unlike the Park Service or Sierra Club proposals, which

required land acquisitions from four timber corporations, the Mill Creek area could be acquired from a single company, Miller-Rellim. Considerably smaller than the other three companies in the area (Arcata Lumber, Simpson, and Georgia-Pacific), Miller-Rellim would be forced to shut down with the loss of so much timber. One less competitor in a highly consolidated industry was no tragedy to the other three corporations, who would not actively oppose a park that indirectly benefited their long-term interests. Nevertheless, the Johnson administration badly miscalculated. Threatened with economic destruction, Miller-Rellim retaliated by clear-cutting lands immediately adjacent to Jedediah Smith Redwoods State Park in summer 1966—thus undermining the proposed national park. The Sierra Club also stymied the administration's proposal in a series of public relations attacks on the White House. By 1967, the administration was in retreat and the Sierra Club was recruiting new members with an open challenge to President Johnson: "There is one great forest of redwoods on earth," the Sierra Club proclaimed in a full-page advertisement in the nation's leading newspapers, "and the one you are trying to save isn't it. . . . Meanwhile they are cutting down both of them."[50]

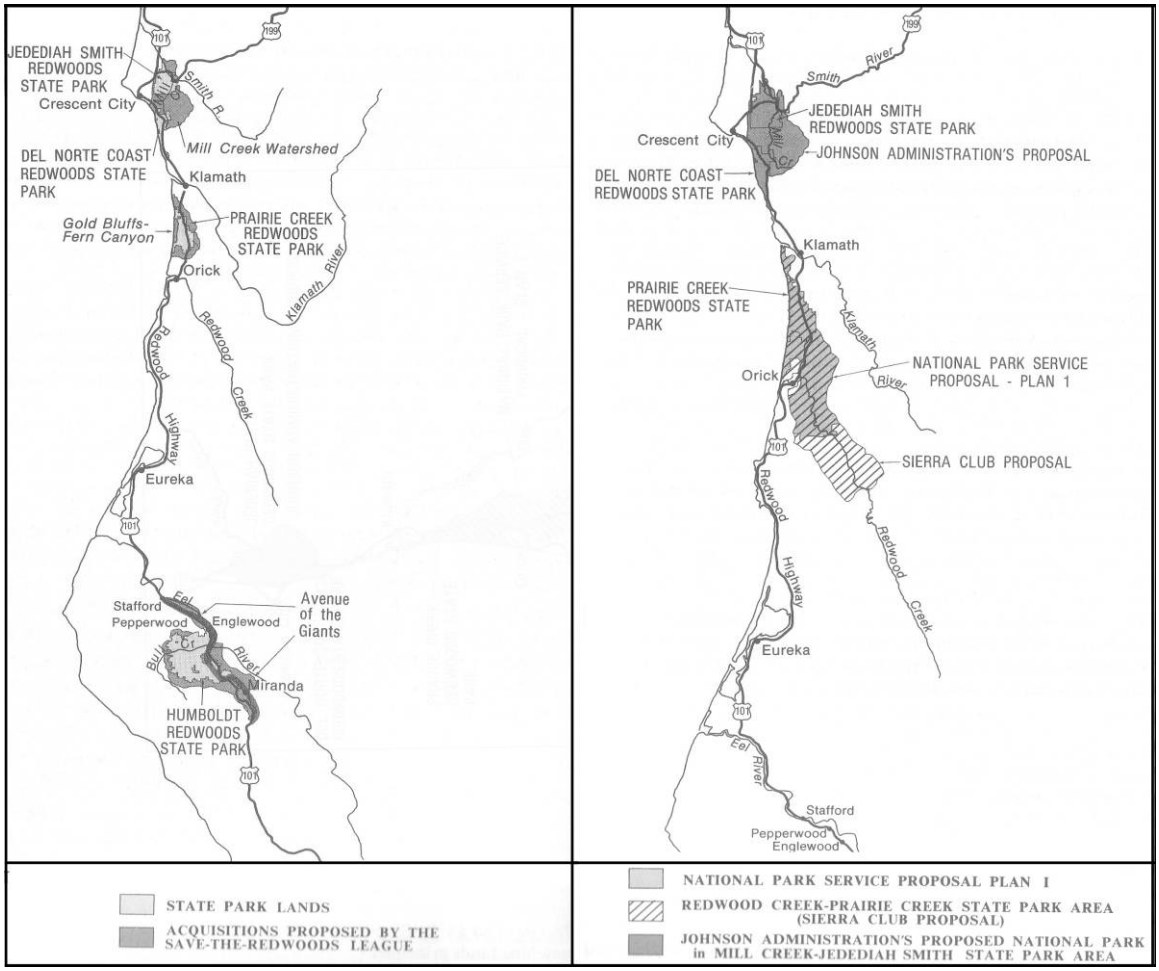


**Figure 2.5 Main Competing Proposals for Redwood National Park.** Reprinted from Susan R. Schrepfer, *The Fight to Save the Redwoods: A History of Environmental Reform*, *1917–1978* (Madison: University of Wisconsin Press, 1983), 114-15.

In the midst of so much tug-of-war, other park proposals quickly piled on as the timber industry, congressional representatives, state officials, and other conservation groups made their own unsolicited proposals.[51] All of these involved competing economic projections about timber harvests, employment rates, and tourist developments, and led to a host of public meetings and letter-writing campaigns that variously supported and undermined different approaches to redwood preservation. By 1967, however, it was increasingly clear that any national park would have to include portions of the Redwood Creek drainage. In part, this reflected local concerns. In Del Norte County, where opposition to a park was most intense, Miller-Rellim was the only major employer. More significantly,

federal public lands already constituted 70 percent of the county and many feared that a national park would further diminish local tax rolls. In contrast, Humboldt County had several large timber operators but only 21 percent of the county was in the public domain; thus making the prospect of a national park in Redwood Creek somewhat less threatening to local government officials. The case for preserving Redwood Creek was also supported nationally, where few in the general public equated saving redwoods with a park proposal that left the "world's tallest tree" and the last sizeable chunk of old-growth forest to the sole benefit of three lumber companies. As historian Susan Schrepfer notes, 94 percent of all pro-park testimony at public hearings in Washington, DC, and California favored protection of Redwood Creek.[52]

Throughout the contest and interplay among the various interested parties, members of Congress and the Senate put forward a number of compromise proposals that pleased some, offended others, and went nowhere. When the second session of the 90th Congress opened in January 1968, and President Johnson made another appeal "to save the redwoods" in his final State of the Union Address, park supporters in Congress and the Senate made a commitment to finally resolve the matter before the fall elections.[53] In doing so, however, they would have to work within firm parameters that had been set in the preceding years. First, the Bureau of the Budget had established a limit of $60 million on the use of public funds for land acquisition. Private contributions from organizations like the Rockefeller and Ford foundations would be welcome, but were of course dependent on the discretion of their boards and directors. Second, any national park that incorporated state park lands required active support and cooperation from Sacramento.[54]

The issue of state park transfers was especially tricky and had already played a role in determining key debates about the size and location of a national park. For instance, Governor Edmund "Pat" Brown's preference for a small national park that combined Humboldt Redwoods State Park with Bureau of Management lands in the King Range severely undermined the Johnson administration's efforts to move its plan through Congress.

So long as Brown insisted on his preferred plan, and refused to part with Prairie Creek and Del Norte state parks, no bill could be written that called for their outright cession to the federal government.[55] When Ronald Reagan assumed the governorship in January 1967, the disposition of state parks became an even more open question. During the 1966 gubernatorial campaign, Reagan had supported the timber industry's opposition to a national park and echoed their sentiments that more than enough tall trees had already been saved in the state parks. As Reagan put it, "We've got to recognize that where the preservation of a natural resource like the redwoods is concerned, that there is a common sense limit. I mean, if you've looked at a hundred thousand acres or so of trees — you know, a tree is a tree, how many more do you need to look at?"[56] Once in office, however, the new governor accepted the inevitability of a national park and agreed to relinquish the state parks in Del Norte County to the federal government—but at a cost. He expected the federal government to transfer some Department of Defense lands around Monterey Bay and along the southern California coast to the state park system and, in a nod to his supporters in the timber industry, insisted that the Northern Redwood Purchase Unit be granted to private timber owners in exchange for lands lost to the national park.[57]

These matters and other potential federal-state land swaps had already been discussed in other contexts, but Reagan's insistence helped make the Purchase Unit a centerpiece of the final park bill. Although it drew considerable protest from the USFS, which resented becoming a bargaining chip for an NPS venture, Congress needed to appease the governor and welcomed the favorable response his ideas garnered from the timber industry. Moreover, the Bureau of the Budget estimated that using the Purchase Unit as part of a land swap was equivalent to having another $40 million for land acquisition—and would thus allow for a larger national park.[58]

Compromise and grandstanding continued to shape park legislation through summer 1968, but the fast approaching end of a one-year moratorium on logging in proposed national park areas and the coming November elections motivated Congress and the Senate to

hammer out an agreement shortly after Labor Day. The vote in the Congress was almost unanimous, 389 in favor and 15 against, with the Senate voting by a similar margin of 77 to 6.[59] Such unanimity is remarkable given the long, contentious process that led to the final vote, but the difficulty and controversy surrounding the Park Act was always more than a simple matter of garnering popular and political support. When Secretary of Interior Stewart Udall first entertained the idea of a redwood national park, he quipped that the issues involved would make the resistance of mining corporations, federal dam builders, irrigators, and state officials to the recent creation of Canyonlands National Park in Utah "look like a picnic."[60] Four years later, Senator Kuchel remarked that "surely the redwood issue has focused the conflict of conservation in the 1960s most clearly. Never before has Congress preserved in a national park an asset of such great commercial value, and never before has a national park been created when the competing demands of exploitative use have been so vigorously and persuasively advocated."[61]

### SHORTCUTS AND SHORTCOMINGS

To overcome controversy and complete work on a popular issue with voters before the national election required two key legislative shortcuts. The first was a legal innovation termed "legislative taking," which stipulated that all private lands covered in the Redwood Park Act would become part of the federal park the instant the president signed it into law—even before the value of the lands in question had been assessed, let alone purchased. Although it raised serious constitutional questions about the "just compensation" clause in the Fifth Amendment, legislative taking made the park bill even more amenable to lawmakers. First, it prevented any further cutting of timber between the time the park was officially established and the land was purchased—thus removing any incentive for the timber companies to stall the land acquisition process—and it stopped land speculators from inflating the price of the lands in question. Backed by the Department of the Interior's Office of the Solicitor, the Senate adopted legislative taking as an official emergency measure: "The

overriding reason for this course of action was the existence of an emergency . . . known throughout . . . the land," the legendary Henry "Scoop" Jackson proclaimed to his colleagues in the Senate, that was "related to the cutting of these precious trees which could take place even after we had passed a regular park authorization bill."[62]

Such legislative innovation allowed passage of the bill before Congress recessed for the last month of the campaign season, and made the park the final and most noted feature of the much-celebrated "conservation grand-slam." This suite of four NPS-related acts established North Cascades National Park, the National Trails System, the National Wild and Scenic Rivers System, and Redwood National Park on the same day (October 2, 1968)—and sealed the reputation of the 90th Congress "as one of the greatest in conservation history."[63] The special White House signing ceremony for the four bills provided a nice respite from the growing costs of the Vietnam War and the domestic turmoil that had forced the president to forego a reelection bid, and Johnson apparently took special comfort in the signing ceremony. Singling out the creation of Redwood National Park as "the crowning achievement of . . . an era of conservation," he proclaimed that the new park—in spite of tumultuous foreign and domestic issues—would "stand for all time as a monument to the wisdom of our generation."[64]

The product of conflict, compromise, and legislative innovation, Redwood National Park was a park like no other. At an expected cost of $92 million, Redwood was the most expensive park acquisition ever. Yet at 58,000 acres, it was a small national park—by far the smallest of all the parks associated with such an iconic feature of the national landscape. Nearly half of the land within the new national park's boundaries comprised three preexisting state parks and the narrow strips of coastal lands that now linked them together. The bulk of the 28,101 acres of private land acquired for the creation of Redwood National Park were in the southern portion of the park, including an 18,000-acre block of land within the Lost Man Creek, Little Lost Man Creek, and lower Redwood Creek drainages. South of this area, a 4,200-acre, half-mile-wide extension ran 15 miles up Redwood Creek to include the Tall

Trees grove and the Emerald Mile. Surrounded by active logging operations and known disparagingly as the “Worm” or “Appendix,” this odd appendage at the southern end of the new national park was the result of last minute, behind-the-scenes maneuvering by Congressman Wayne Aspinall, the powerful chair of the Committee on Interior and Insular Affairs and a vociferous opponent of the national park.

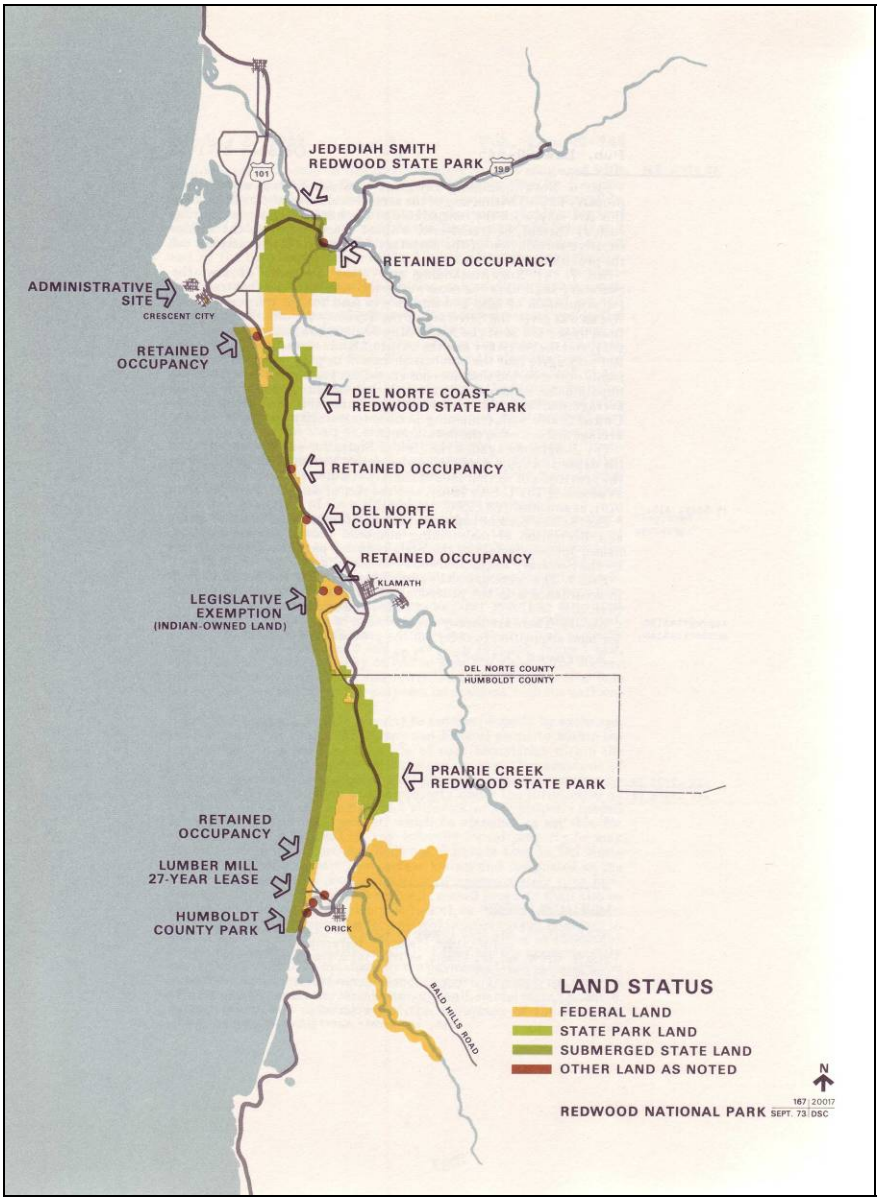


**Figure 2.6 Redwood National Park, 1968.** Reprinted from *Master Plan: Redwood National Park*, *California* (Denver: U.S. Department of the Interior, National Park Service, 1973), 38.

From the narrow appendage along Redwood Creek north to the junction of U.S. Highways 101 and 199 in Jedediah Smith Redwoods State Park, the map of the new national park defied easy comprehension or description. Its contents also defied easy acquisition. Putting off the actual purchase of redwood lands to a later date certainly helped make possible the establishment of the park, but it also saddled the government with years of expensive, uncertain, and difficult negotiations, which ultimately totaled $198 million—well more than twice the original authorized cost. Another expediency of the park bill also proved especially burdensome. Because the final disposition of state park lands remained an open question, the Redwood National Park Act made no mention of how, when, or even if the three state parks would ultimately be incorporated into the national park. Comprising nearly half the entire area within the statutory boundaries of the national park, and possessing the most accessible and scenic redwood groves, these areas were expected to provide the centerpiece of the visitor experience. They instead became a source of great consternation for state and federal park administrators, and irresolution on this matter greatly undermined planning and development of the national park.

In fall 1968, many park advocates generally took solace in the fact of the park itself. Redwood's odd dimensions and contents simply reflected the unprecedented nature of its creation—they were to be expected more than troubled over. Such a view is understandable. As one historian has noted, "The sheer complexity of the Redwood National Park process staggers the mind": more than fifty park bills were introduced between 1967 and 1968, and all of these were fought over by a variety of adversaries, including the Sierra Club, the SRL, timber industries, unions, the Whites House, the Secretary of the Interior, the USFS, the Bureau of the Budget, the California Highway Commission, the California Department of Parks and Beaches, the Governor's Office, and a host of federal and state legislators. In the end, it was "nothing short of a legislative miracle that all concerned parties agreed" on *any* kind of compromise.[65]

## THE ENVIRONMENTALIST PARK

Reflecting on the complex and difficult struggle to create Redwood National Park, Daniel Ogden concluded that "the general public was the real victor in the redwood park act, for it gained a natural asset to use and enjoy for generations to come. The competitive victor, however, was the Sierra Club." As assistant director for Planning and Research in the Bureau of Outdoor Recreation from 1964–1967, and the person most responsible for the preparation of the Johnson administration's proposal for a redwood national park, Ogden may not have agreed with the Sierra Club. He nevertheless admired the organization's achievement. Writing from the perspective of a private citizen three years after the passage of the Redwood National Park Act, Ogden noted that "the Sierra Club not only overcame the opposition of the timber companies and their allies in local government and local business, but persuaded Congress to overrule Secretary of the Interior Stewart L. Udall, one of the nation's greatest champions of parks and preservation, and the administration itself. It successfully argued that the administration proposal was too small and inadequate. Rarely has any group prevailed in such a situation."[66]

For the leaders of the Sierra Club, such a victory was more bitter than sweet. The "Worm" was especially galling, and was the subject of organized protests near the park dedication ceremony on November 25, 1968. In the parking area where Lady Bird Johnson, NPS Director George Hartzog, Representative Don Clausen, other dignitaries, reporters, and hundreds of observers disembarked for the official ceremony, demonstrators carried signs stating "Save More Redwoods We Have Enough Stumps," "For a Real Park Fatten the Worm," "Lady Bird—Help Us Finish the Job," and a variety of other statements calling for a more substantial park.[67] At the dedication ceremony itself, Sierra Club leaders were already telling the press about planning a new movement to enlarge the park into areas upstream and upslope from the "Worm."[68]

On the one hand, Ogden was right to note the Sierra Club's remarkable success in shaping the terms of the debate over Redwood National Park, and he could also have

applied his assessment to the sense of defeat and renewed purpose the Sierra Club felt once the park was established. On the other hand, Ogden was wrong to imply that the organization's victory—such as it was—occurred in a wide-open contest of ideas. The Sierra Club did not have better or newer ideas about redwood preservation; rather, it had ideas that better fit a new context—one so new and potent that a group like the Sierra Club could achieve a rare thing and "prevail" over other entrenched interests.

The concern for watershed protection, the righteous critique of timber corporations, and the conviction that only the federal government could effectively acquire, protect, and manage a significant park—none of these by themselves were entirely new ideas. In the context of 1920, they were no match for the claims of private property and the market value of redwood lumber. In the 1930s and 1940s, such ideas could not overcome concerns about overreaching federal authority or the conviction that redwood preservation should focus on superlative and accessible groves. All of these older notions were still at play in the 1960s, but the rate and scale of timber cutting in the post–WWII era devalued a good deal of their currency. With only 10 percent of the precontact forest still standing—and all of the private old-growth timber expected to be cut in the next few decades—the concerns of the past became mere excuses.

The new conditions that made the creation of Redwood National Park possible were symptomatic of broader shifts in consumption and resource use in the United States, which in turn raised difficult questions about how best to utilize or enjoy areas that remained undeveloped or unexploited. The so-called Battle for the Redwoods presented the clearest and most dramatic expression of a simple but profound conundrum: ancient trees were cut to satisfy the material desires of an increasingly affluent society; as Americans became more affluent they gave more attention to leisure time and quality of life issues—which increasingly found expression in concerns about outdoor recreation, scenic preservation, and environmental protection. In other words, the same basic conditions that created a housing boom also produced the automobiles, highways, and leisure time that allowed huge numbers

of people to visit, cherish, and then work to protect the ancient forests that were providing the lumber for their houses, decks, and backyard furniture.[69]

Such irony and contradiction continues to underlie the ways Americans contend with environmental issues. In the 1960s, however, widespread concern about pollution, chemical poisons, suburban sprawl, dead rivers, and a host of other issues was new, urgent, and at times, even seemed revolutionary. The environmental consequences of post–WWII development were too vast and too unprecedented to ignore, and Congress responded to growing public concern with a series of landmark pieces of legislation, including the Clean Air Act (1963), the Wilderness Act (1964), the Water Quality Act (1965), and later, the National Environmental Policy Act (1969). These laws sought to ameliorate the consequences of industrialization and rising consumerism, and directly addressed the fear that America the Beautiful was under siege. Yet many believed that the "headlong drive into our technological termite-life" that Stegner wrote about needed to be stopped—even reversed—and not simply regulated or reformed by new federal laws. This sentiment characterized the more radical potential of the early environmental movement, and it is what inspired the Sierra Club to take up the cause of redwood preservation.

Like the SRL, which it predated by twenty-six years, the Sierra Club was based in San Francisco and had long reflected the concerns of its mostly patrician leadership. Yet because it had a larger and more national membership, and had always been associated with national park issues and outdoor recreation, the Sierra Club was better positioned than the league or any other conservation group to engage the environmental concerns of the 1950s and 1960s. As it did so, the Sierra Club changed from a staid organization of academics and wealthy philanthropists with a shared passion for the outdoors and became more actively political. Seeking to emulate the so-called movement politics of the era, a new generation of Sierra Club leaders successfully mobilized their members and the larger public to agitate on environmental issues.[70]

Redwood National Park became one of the Sierra Club's first high-profile ventures into environmental activism, and effectively made the park an important symbol of the new environmental movement. The cry "Save the Redwoods!" no longer belonged to the SRL and its conservative approach to land acquisition and park creation. It instead became one of the most recognized expressions of growing distress about the consequences of postwar development and consumption, and represented the rallying cry of a no-holds barred approach to environmental advocacy.

Unlike conservationism, the older and more established approach to natural resource stewardship that deferred to the authority of government professionals, environmentalism was marked by citizen action and popular advocacy that reconfigured the terms by which natural resources were valued. Whereas conservationism used economic and productive matrices to calculate the most efficient and beneficial use of natural resources, environmentalism placed a new emphasis on ecology and quality of life issues. In forestry, for instance, this meant a shift from sustained yield management to the protection of both ecological diversity and recreational areas. While concerns about ecology were best argued by a new generation of natural resource experts, quality of life issues relating to scenery, pollution, and outdoor recreation were public concerns that required public advocacy. Indeed, given the sense of imminent catastrophe that informed many environmental concerns, such advocacy was a cornerstone of the new movement.[71]

The Sierra Club and the movement to create a redwood national park epitomized this new activist approach. Purchasing full-page advertisements in the *New York Times* and other leading newspapers, with open letters to the president condemning the administration's national park plan, went far beyond the genteel politics of previous generations. Likewise, the use of four-color depictions of clear-cuts and catastrophic floods juxtaposed against transcendent images of old-growth redwoods served as a primer for other environmental causes, and perfectly caught the sense of urgency that characterized the most popular and pressing environmental causes of the late 1960s.[72] While the older concerns that inspired

earlier efforts to protect redwoods along the North Coast remained relevant, the energy and drive of the new environmental movement are what finally made the national park a reality.

Both a product and a hallmark of environmentalism, Redwood National Park would remain a touchstone for the movement over the coming decade. The campaign to establish the park and the hard lessons learned during the legislative process became a model for other environmental efforts while the condition of the park itself provided a constant goad to the Sierra Club and others that more still needed to be done before the redwoods were effectively "saved." Along with the ongoing conditions and processes that had so profoundly shaped the park area over the past few decades, environmentalism would become a critical new factor in the Park Service's approach to the development and management of the new park.

---

[1] Writers often cite Assemblyman Henry A. Crabb as the first proponent for governmental protection of redwoods. In 1852, Crabb proposed that the state legislature ask Congress to enact "a law whereby the settlement and occupation of all public lands upon which the Red Wood is growing shall be prohibited." It is not clear if his proposal applied to giant sequoias (*Sequoia gigantea*), coast redwoods, or both. Given his district—the San Joaquin Valley—and his familiarity with the central Sierra Mountains, it is most likely that his proposal was limited to the giant sequoias. Why the forests deserved such protection is also not clear. Perhaps Crabb saw limits on settlement as an opportunity to prevent claimants from controlling the Sierra Nevada headwaters of the streams and rivers that fed the Central Valley. At any rate, Crabb's proposal had no real chance for success, even in the tumultuous early days of California politics when little was known but much was claimed about the state's lands and resources. Indeed, it received even less attention than his efforts to legalize slavery in the Golden State. For reference to Crabb's proposal, see Samuel Trask Dana and Kenneth B. Pomeroy, "Redwoods and Parks," *American Forests Magazine* 71 (May 1965): 1-32, esp. 5.

[2] Schurz quoted in ibid., 5. Also see Joel Ray Dickinson, "The Creation of Redwood National Park: A Case Study in the Politics of Conservation" (PhD diss., University of Missouri, 1974), 68-71.

[3] The clearest and most influential statement on a federal responsibility to conserve forests and protect scenic areas came more than a decade earlier with the publication of George Perkins Marsh, *Man and Nature; or*, *Physical Geography as Modified by Human Action* (New York: Charles Scribner, 1864). Taliesin Evans, a young writer from San Francisco, drew on Marsh's ideas in an 1871 essay that called for the conservation and sustainable harvesting of redwood forests; see Taliesin Evans, "Western Woodlands," *Overland Monthly and Out West Magazine* 6, no. 3 (March 1871): 224-29. At the federal level, concerns about scenic preservation had already led Congress to set aside Yosemite Valley and Mariposa Grove in 1864 as a public park under the administration of the state of California, and to the establishment of Yellowstone National Park in 1872. Forest conservation became a federal concern in 1876 when Congress created an office of Special Agent within the Department of Agriculture to study the conditions of western forests. The appointment went to Franklin B. Hough, subsequently named head of a newly established Division of Forestry in 1881, which was the precursor to the U.S. Forest Service.

[4] Steve Mark, "Crater Lake: The Campaign to Establish a National Park in Oregon," *Southern Oregon Heritage Today* 3 (January 2001), *Crater Lake National Park* web archives, http://www.nps.gov/archive/crla/mark3.htm (accessed October 18, 2007).

[5] The state park was later renamed Big Basin Redwoods State Park and now totals 18,000 acres—most of it cutover or non-redwood lands. Muir Woods National Monument now comprises 554 acres and is part of the Golden Gate National Recreation Area. See Lary M. Dilsaver, "Preservation Choices at Muir Woods," *Geographical Review* 84 (July 1994): 290-305; and William Sheppard Yaryan, "Saving the Redwoods: The Ideology and Political Economy of Nature Preservation" (PhD diss., University of California, Santa Cruz, 2002), 9-13.
[6] Besides forest preservation and regulation, it is important to note that national forests and parks in the Sierra Nevada were also intended to protect the vast watersheds that fed the agricultural development of the Central Valley. The watersheds of the Northern Redwood Belt did not have comparable significance. See Robert L. Kelley, *Gold vs. Grain: The Hydraulic Mining Controversy in California's Sacramento Valley; A Chapter in the Decline of the Concept of Laissez Faire* (Glendale, CA: Arthur H. Clark Company, 1959), 280-301; and Lary M. Dilsaver and William C. Tweed, *Challenge of the Big Trees: A Resource History of Sequoia and Kings Canyon National Parks* (Three Rivers, CA: Sequoia Natural History Association, Inc., 1990), http://www.nps.gov/history/history/online_books/dilsaver-tweed/chap4.htm (accessed October 16, 2007).
[7] Quotation is from Republican Senator Thomas Kuchel of California, U.S. Congress, Senate, *Congressional Record* 114 (September 19, 1968), S 11047.
[8] Horace M. Albright and Frank A. Taylor, "How We Saved the Big Trees," *Saturday Evening Post* 225 (February 1953): 31.
[9] Sara Amy Leach, "Redwood National and State Parks Roads, California Coast from Crescent City to Trinidad, Crescent City Vicinity, Del Norte County, Ca [Draft]," Historic American Engineering Record (HAER) No. Ca-269," n.d., 22-29, digital copy on file at the Redwood National and State Parks Archives, Orick, California (RNSP Archives). The highway was designated U.S. Highway 101 in 1925.
[10] Quotation is from H.R. 159-1920, as reprinted in D. Bruce, M. Pratt, and R. Hammatt, "Report on Investigation for Proposed Redwood National Park, California" (U.S. Forest Service, 1920), 1, document enclosed in memorandum from acting NPS director E. T. Scoyen to Regional Director, Region Four, July 18, 1960, RG 79, Western Region, Central Alphanumeric Files (CF) 1953–1967, L-58—Areas Proposed, Accn. 92-001, Box 6, Folder 13, National Archives–Pacific Region (NAPR). Also see Susan R. Schrepfer, *The Fight to Save the Redwoods: A History of Environmental Reform*, *1917–1978* (Madison: University of Wisconsin Press, 1983), 18-20.
[11] Bruce, Pratt, and Hammatt, "Report," 8, 14
[12] Ibid., 45, 53.
[13] Ibid., 35.
[14] Ibid., 15, 18; and Dana and Pomeroy, "Redwoods and Parks," 13-14. For an overview of popular calls for a redwood national park in the 1920s and 1930s, see Dickinson, "Creation of Redwood National Park," 81-86, 91-100.
[15] Bruce, Pratt, and Hammatt, "Report," 15-18. For the Ah Pah Ranch resort, see Charles Willis Ward, *Humboldt County*, *California: The Land of Unrivaled Undeveloped Natural Resources on the Westernmost Rim of the American Continent* ([San Francisco]: H.S. Crocker Company, 1915), 23-24, 29-31, 55. The image is reproduced on the National Geographic website, http://environment.nationalgeographic.com/environment/enlarge/redwood-forest-1920.html (accessed October 3, 2008). Ward also provided photographs for Madison Grant, *Saving the Redwoods: An Account of the Movement during 1919 to Preserve the Redwoods of California* (New York: New York Zoological Society, 1919).
[16] John C. Merriam quoted in Stephen R. Mark, *Preserving the Living Past: John C. Merriam's Legacy in the State and National Parks* (Berkeley: University of California Press, 2005), 20.
[17] Henry Fairfield Osborn quoted in Schrepfer, *Fight to Save the Redwoods*, 21.
[18] Ibid., 25-37; and Mark, *Preserving the Living Past*, 94-101, 138-41.
[19] The Weeks Act (1911) authorized the Secretary of Agriculture to purchase forest lands for the protection of stream flow, primarily around the headwaters of navigable rivers in the southern and eastern United States. The Clarke-McNary Act (1924) expanded on the Weeks Act, and authorized the purchase of lands for forest conservation and management. As had occurred over the previous decade, acquisitions remained focused on the eastern and southern states—especially in areas that would be designated, just two years later, as Shenandoah and Great Smoky Mountains national parks. During the New Deal, however, land purchases increased significantly and were extended to the West

and Upper Midwest. Harold K. Steen, *The U.S. Forest Service: A History*, *Centennial Edition* (Durham, NC: Forest History Society, in association with the University of Washington Press, 2004), 173-221.

[20] The initial study and recommendation by the National Forest Reservation Commission provides an important analytical and photographic assessment of conditions in the northern redwood belt in the 1930s, and makes special note of the old-growth forests in the Redwood Creek and Lower Klamath watersheds. See John R. Berry, Hubert L. Parson, and M. R. Brundage, *Report on Examination of the California Redwood Region for the Location of Possible National Forest Purchase Units* (San Francisco: U.S. Forest Service, Region 5, 1934), Redwood National and State Parks Library, Orick, California (RNSP Library). Also see Kenneth N. Boe, "Yurok Redwood Experimental Forest," 3-4, unpublished historical sketch, www.fs.fed.us/psw/publications/4351/boe.pdf (accessed October 18, 2007); and U.S. Forest Service, *History of the Northern Redwood National Forest Purchase Unit and Intended Purpose of Its Establishment* (San Francisco: U.S. Forest Service, 1967), 1-6.

[21] Pamela A. Conners, *A History of the Six Rivers National Forest: Commemorating the First 50 Years* (Eureka: U.S. Department of Agriculture, Forest Service, Pacific Southwest Region, 1998), 1-5, 24-26; and Schrepfer, *Fight to Save the Redwoods*, 63, 71-72. The purchase of private lands for the establishment of a national park—that could then be developed under New Deal programs like the Civilian Conservation Corps and the Works Progress Administration—became a distinct possibility with the 1936 passage of the Park, Parkway, and Recreational Study Area Act. For NPS land acquisitions and institutional growth, see Lary M. Dilsaver, ed., *America's National Park System: The Critical Documents* (Lanham, Md.: Rowman and Littlefield Publishers, 1994), http://www.nps.gov/history/history/online_books/anps/anps_3.htm (accessed October 18, 2007).

[22] Originally incorporated into the Trinity National Forest, the Northern Redwood Purchase Unit (NRPU) became part of the newly established Six Rivers National Forest (SRNF) in 1947. Some 940 acres were subsequently designated the Yurok Redwood Experimental Forest (YREF) in 1956, which still remained part of the SRNF but also became a substation of the USFS's California Forest and Range Experiment Station. Except for the YREF, nearly all of the NRPU acreage was converted to private ownership in exchange for lands acquired for the creation of Redwood National Park in 1968.

[23] "An Act to Establish a National Park Service, and for Other Purposes," approved August 25, 1916 (39 Stat. 535), in Dilsaver, *America's National Park System*.

[24] Quotation is from John C. Merriam, a founding member of the SRL and the Wilderness Society, quoted in Dana and Pomeroy, "Redwoods and Parks," 8. Also see Schrepfer, *Fight to Save the Redwoods*, 65-75; and Mark, *Preserving the Living Past*, 161-62. The opposition of SRL was especially potent because, under the requirements of the Park, Parkway, and Recreational Study Area Act, any effort to establish a national park needed to involve "State officials, boards, or departments." At the time, SRL executive director Newton B. Drury was also the Acquisitions Officer for the California State Park Commission and would become, in 1940, the fourth director of the NPS. For an overview of criticism of the NPS during the 1920s and 1930s and its relation to the founding of the Wilderness Society, see Paul S. Sutter, *Driven Wild: How the Fight against Automobiles Launched the Modern Wilderness Movement* (Seattle: University of Washington Press, 2002).

[25] Then director of the National Park Service Newton Drury had a peculiar and contradictory involvement with the Douglas Bill. He claimed responsibility for convincing Douglas to include the creation of park units in the second iteration of her bill. Yet he privately opposed the bill and its author. As he recalled late in life, Drury actually believed the bill had a good chance of passing if Douglas could have won election to the U.S. Senate in 1950 and further built support for the Memorial Forest. However, she lost the election to Richard M. Nixon—whom she famously nicknamed "Tricky Dick." In a pithy summation of his feelings about the FDR Memorial Forest proposal in general and Douglas in particular, Drury recalled, "I voted for Nixon." See Newton Bishop Drury, "Parks and Redwoods, 1919–1971," two-volume typed mss. of an interview conducted by Amelia Roberts Fry and Susan Schrepfer, 1972, Bancroft Library, University of California, Berkeley, 583-85, 588.

[26] Drury quoted in Dana and Pomeroy, "Redwoods and Parks," 7. At the time, Drury also shared John C. Merriam's belief that the proposed national park lands, which centered on and included Jedediah Smith, Del Norte, Prairie Creek, and Humboldt Redwoods state parks, were legally impractical. Because the "Redwood parks were established mainly under the State Park Bond Act of 1928, which was adopted by the Legislature and ratified by a popular vote as a constitutional amendment," it would require another vote of the people to transfer park lands to the federal government. Whether or not he was technically correct, this was not Drury's overriding concern. When Douglas amended her bill to

limit federal authority over park lands to the areas surrounding the existing state parks, the director did not relax his opposition.

[27] For a thorough description of the FDR National Forest proposals, see "An Appraisal of the Economic and Social Effects of the Creation of Proposed Roosevelt National Forest, 1946," RG 95, Selected Historical Files (Proposed Franklin D. Roosevelt Memorial Park), NRHS Accn. 095-085-049, folder "Shasta," NAPR. Also see Dana and Pomeroy, "Redwoods and Parks," 6-8; Dickinson, "Creation of Redwood National Park," 108-14; and Schrepfer, *Fight to Save the Redwoods*, 76-77. For USFS concerns, see Conners, *History of the Six Rivers National Fores*t, 78-84. The Douglas proposal was taken up a few years later by the Public Affairs Institute of Washington, DC. See H. Dewey Anderson, *An Action Program for the Redwood Forest of California*, Report no. 5 (Washington, DC: Public Affairs Institute, 1949); and Anderson, "A Program for the Redwoods," *The Annals* 281 (May 1952): 105-9.

[28] Henry James Vaux, *Timber in Humboldt County* (Berkeley: California Agricultural Experiment Station, 1955). Much of the new harvesting focused on Douglas fir, but the logging of old-growth redwood also quadrupled over the same time period and soon increased relative to fir and other species. For statistics on the redwood industry, in particular, see James L. Lindquist, *Redwood*, *an American Wood* (Washington, DC: U.S. Department of Agriculture, Forest Service, 1974); Arnold Wallen, *Forest Resources: California's North Coast Forest Region* (Oakland: Hammon, Jensen, and Wallen, 1954); Wallen, *Forest Resources of the Redwood Region* (Oakland, CA: Hammon, Jensen, and Wallen, 1951); Daniel D. Oswald, *California's Forest Industries: Prospects for the Future* (Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station, 1970), 22-34; and Kass Green, "The Old Growth Redwood Resource: An Historical Review of Harvesting and Preservation"; report prepared for the U.S. Department of Justice, April 1, 1985 (Oakland, CA: Hammon, Jensen, Wallen, and Associates, 1985), 16-20, National Park Service-Pacific West Regional Office Library (PWRO Library), Oakland, CA.

[29] Conners, *History of the Six Rivers National Forest*, 85-93; Green, "Old Growth Redwood Resource," 18-24; and David W. Best, *Land Use of the Redwood Creek Basin* (Arcata: Arcata Office, Redwood National Park, 1984), 8-17.

[30] Peter E. Black, "Tall Timber and High Water," 1966, rev. 2005, unpublished manuscript on file in RNSP Library; Peggy Wayburn, "The Tragedy of Bull Creek," *Sierra Club Bulletin* 45 (January 1960): 10-11; and Schrepfer, *Fight to Save the Redwoods*, 108-9.

[31] *Proceedings from a Symposium on Management for Park Preservation: A Case Study at Bull Creek*, *Humboldt Redwoods State Park* (Scotia, CA, May 13–14, 1966), 50-62.

[32] John Kenneth Decker, *An Appraisal of the Economic Potential of the North Coast Redwoods Counties of California*, *1960-1980—Prepared for U.S. Department Of the Interior*, *National Park Service*, *Coast Redwoods Study* (Berkeley, CA, 1964), 47-53, RNSP Crescent Beach Education Center Library; Linda L. Rodgers, "A History of the Prairie Creek Redwoods State Park Area" (undergraduate thesis, Humboldt State University Special Collections, 1965),31-34; and Joseph H. Engbeck, Jr., *State Parks of California: From 1864 to the Present* (Portland, OR: Graphic Arts Center Publishing Co., 1980), 67-72.

[33] For a full accounting of these issues, see Dickinson, "Creation of Redwood National Park," 120-43. Although it drew a great deal of public attention in the 1950s, the routing of highways through the North Coast state parks had been a concern of the SRL since the 1930s; see Dana and Pomeroy, "Redwoods and Parks," 4.

[34] Quotation is from Wallace Stegner to David E. Pesonen, December 3, 1960; subsequently published as Stegner, "Coda: A Wilderness Letter," in *The Sound of Mountain Water* (New York: Doubleday, 1969), 146-47.

[35] Thomas Randolph Vale, "The Redwood National Park: A Conservation Controversy" (Master's thesis, University of California, Berkeley, 1968), .38-44 An image of the Arcata Redwood Company sign quotation is reproduced in François Leydet and James Rose, *The Last Redwoods*, *and the Parkland of Redwood Creek* ([San Francisco]: Sierra Club, 1963), 76.

[36] On the shift within the Save-the-Redwoods League, see Schrepfer, *Fight to Save the Redwoods*, 112-13, 116. On the Sierra Club and Dinosaur National Monument, see Mark T. Harvey, *A Symbol of Wilderness: Echo Park and the American Conservation Movement* (Albuquerque: University of New Mexico Press, 1994), 261-83. The Sierra Club's budding interest in a redwood national park campaign is described in Edgar Wayburn with Allison Alsup, *Your Land and Mine: Evolution of a Conservationist* (San Francisco: Sierra Club Books, distributed by University of California Press, 2004), 132-35.

[37] Leydet and Rose, *Last Redwoods*; National Park Service, *The Redwoods: A National Opportunity for Conservation and Alternatives for Action* (Washington, DC: National Park Service, 1964).
[38] The Land and Water Conservation Fund (LWCF) essentially institutionalized the recent process that led to federal land acquisitions for the Cape Cod and Point Reyes national seashores. For a brief historical overview of the LWCF, see National Park Service: Conservation and Outdoor Recreation, "A Quick History of the Land and Water Conservation Fund Program: 1964 and All That," August 25, 2005, http://www.nps.gov/ncrc/programs/lwcf/history.html,(accessed October 24, 2007).
[39] James Michael Bailey, "The Politics of Dunes, Redwoods, and Dams: Arizona's 'Brothers Udall' and America's National Parklands, 1961–1969" (PhD diss., Arizona State University, 1999), 149-85; Grady Shannon McMurtry, "The Redwood National Park: A Case Study of Legislative Compromise" (master's thesis, State University College of Forestry at Syracuse University, 1972), 28-37; and Vale, "Redwood National Park," 42-51; and Schrepfer, *Fight to Save the Redwoods*, 130-62.
[40] Republican Senator Thomas Kuchel of California called passage of the park bill "an imposing milestone in American conservation" and "the climax of conservation's greatest year" (U.S. Senate, *Congressional Record* 114 [September 19, 1968], S 11047).
[41] Some of the master's and PhD theses produced before and shortly after the creation of Redwood National Park include John Raymond Delong, "The Ravaged Remnant: A History of the Logging and Preservation of the California Coast Redwood" (master's thesis, San Francisco State College, 1968); Dickinson, "Creation of Redwood National Park"; Robert G. Genello, "Public Information for Public Consciousness: An Historical Analysis of the Sierra Club's Public Information Campaign to Achieve Protection of the Redwoods through Legislation, 1964 to 1968" (PhD diss., University of California, 1970); Cary William Hull, "The Struggle of Trees and Men" (master's thesis, University of Montana, 1975); Kathryn Jane Mathewson, "Planning around National Parks Case Study: The Redwood National Park" (master's thesis, University of California, Berkeley, 1972); McMurtry, "Redwood National Park; Tara O'Toole, "On the Social Benefits and Costs of a Redwood National Park" (Portland, OR: Reed College, Division of History and Social Sciences, Economics Department, 1967); and Vale, "Redwood National Park."
[42] U.S. Congress, Senate, *Congressional Record* 114 (September 19, 1968), S 11047. Kuchel's pronouncement is even more compelling when considered in light of his own contributions to conservation "milestones" and his experience with other difficult and controversial pieces of legislation. Among his many actions in the Senate, Kuchel—a Republican who was not adverse to crossing party lines, proved essential to the ratification of the first Atomic Test Ban Treaty and passage of the Civil Rights Act (1964), Voting Rights Act (1965), and Medicare Act (1965). He was also the chief sponsor of the Wildlife Management, Klamath Project Act, Pub. L. No. 88-567 (September 2, 1964) (Kuchel Act), 78 Stat. 850, which closed federal wildlife refuge lands in the upper Klamath River basin to further homesteading, and declared the sole purpose of the refuges to be "dedicated to wildlife conservation." For a brief accounting of his legislative accomplishments, see "Honoring a True Public Servant: Senator Thomas Kuchel." *Congressional Record* 142:107 (October 10, 2002): E1856-1859, http://thomas.loc.gov/cgi-bin/query/R?r107:FLD001:E51857.
[43] Paul A. Zahl, "Finding the Mt. Everest of All Living Things," *National Geographic* 126 (July 1964): 10-45.
[44] Schrepfer, *Fight to Save the Redwoods*, 117, 119-20; and Edgar Wayburn, with Allison Alsup, *Your Land and Mine: Evolution of a Conservationist* (San Francisco: Sierra Club Books, distributed by University of California Press, 2004), 137-38. The National Geographic Society actively supported the creation of a redwood national park and its survey of Redwood Creek occurred as part of a Society funded study to help the NPS select viable park sites. The discovery of the tallest tree was not the purpose of the survey, and its identification came more through happenstance than scientific curiosity. The tree's measured height of 367 feet did make it the tallest tree ever recorded at that time, which is only 10 feet less than the currently listed tallest tree—the so-called Hyperion, which grows in an area acquired during the 1978 expansion of RNP.
[45] Wayburn, *Your Land and Mine*, 145.
[46] Vale, "Redwood National Park," 42-54; Dana and Pomeroy, "Redwoods and Parks," 14-24; and John G. Miles, "The Redwood Park Question," *Forest History* 11 (April 1967): 7-11, 31.
[47] Schrepfer, *Fight to Save the Redwoods*, 117-18, 121-22; and Vale, "Redwood National Park," 54-59.
[48] Rockefeller quoted in Wayburn, *Your Land and Mine*, 148.
[49] Quotation from Schrepfer, *Fight to Save the Redwoods*, 140.

[50] Advertisement quoted in Michael McCloskey, *In the Thick of It: My Life in the Sierra Club* (Washington, DC: Island Press, 2005), 75. Also see Michael P. Cohen, *The History of the Sierra Club, 1892–1970* (San Francisco: Sierra Club Books, 1988), 352-57.
[51] The best overview of these competing proposals is Dickinson, "Creation of Redwood National Park," 144-96.
[52] Ibid.; and Schrepfer, *Fight to Save the Redwoods*, 143, 149.
[53] President Johnson quoted in Schrepfer, *Fight to Save the Redwoods*, 151.
[54] Dickinson, "Creation of Redwood National Park," 351-96; and Bailey, "The Politics of Dunes, Redwoods, and Dams," 179-86.
[55] The King Range is a spectacular area along the California coast that remains one of the least developed areas in the entire state. While it had much to recommend it as a potential park area, it does not support much redwood growth and lies 10-20 miles southwest of Humboldt Redwoods State Park. The primary appeal of the area for Governor Brown, besides its wild and scenic qualities, was the fact that it was already federal land—and thus would not require the purchase of private timberlands. Some two years after the establishment of Redwood National Park, these Bureau of Land Management lands would receive their own special designation as the King Range National Conservation Area in 1970.
[56] Quotation is from comments he made during a speach at the Western Wood Products Association meeting in San Francisco on March 12, 1966. In comments to the press, a campaign aide to Governor Pat Brown summarized Reagan's speech as, "If you've seen one redwood, you've seen them all." This pithier version of Reagan's sentiments then became widely quoted in regional and national papers. See Lou Cannon, *Governor Reagan: His Rise to Power* (New York: Public Affairs, 2003), 177.
[57] Dickinson, "Creation of Redwood National Park," 394-400; Schrepfer, *Fight to Save the Redwoods*, 146-47; and Wayburn, *Your Land and Mine*, 154-55. Norman B. Livermore, Jr., a former member of the Sierra Club, an executive of the Pacific Lumber Company, and Governor Reagan's Secretary for Resources, proved instrumental in these many negotiations. William Penn Mott, Jr., who served as director of the California Department of Parks and Recreation under Reagan, also played a small part in these negotiations. See Norman B. Livermore, Jr., "Man in the Middle: High Sierra Packer, Timberman, Conservationist, and California Resources Secretary," typed mss. of an interview conducted by Anne Lage and Gabrielle Morris, 1981–1982, Bancroft Library.
[58] Dickinson, "Creation of Redwood National Park," 400-403; and Schrepfer, *Fight to Save the Redwoods*, 147-50.
[59] Schrepfer, *Fight to Save the Redwoods*,155; and Bailey, "The Politics of Dunes, Redwoods, and Dams," 174.
[60] Udall quoted in Wayburn, *Your Land and Mine*, 142.
[61] Kuchel quoted in Dickinson, "Creation of Redwood National Park," 535.
[62] Jackson quoted in ibid., 534-35.
[63] David Louter, *Contested Terrain: North Cascades National Park Service Complex: An Administrative History* (Seattle: National Park Service [Columbia Cascades Support Office], 1998), 57.
[64] Lyndon B. Johnson, "Remarks Upon Signing Four Bills Relating to Conservation and Outdoor Recreation, *October 2nd*, *1968*," John T. Woolley and Gerhard Peters, *The American Presidency Project*, http://www.presidency.ucsb.edu/ws/?pid=29150 (accessed October 29, 2007).
[65] Bailey, "Politics of Dunes, Redwoods, and Dams," 182-83. The Department of Parks and Beaches is now known as the Department of Parks and Recreation.
[66] Daniel M. Ogden, Jr., "The Politics of Conservation: Establishing the Redwood National Park," in *Public Choice and Public Policy: Seven Cases in American Government*, ed. Robert S. Ross (Chicago: Markham Publishing Company, 1971), 81-83.
[67] Placard quotations from a series of photographs taken by Martin Litton, on temporary loan to the RNSP Archives.
[68] Dickinson, "Creation of Redwood National Park," 536-42; Wayburn, *Your Land and Mine*, 164; Litton, "Letter: Redwood Park Bill Criticized," *New York Times*, November 30, 1968, 38; "Sierra Club to Press Expansion of Parks," *New York Times*, December 24, 1968, 14; and Don Carleton, "The Crowning Moment," *Del Norte Triplicate*, November 26, 1968, 1. The following summer, the original park dedication site would host an even grander ceremony when it was designated the Lady Bird Johnson Grove. Besides Mrs. Johnson, other public figures in attendance included President Richard

Nixon, ex-President Lyndon Johnson, Governor (and future President) Ronald Reagan, and Reverend Billy Graham.

[69] The conundrum was neatly stated by California Secretary of Natural Resources Norman B. Livermore, Jr., in his comments at the Redwood National Park Dedication Ceremony on November 25, 1968: "We need to preserve our parks, but we also need to sustain the economy that produces the standard of living in our society which enables the enjoyment of these parks." Quoted in William M. Blair, "Mrs. Johnson Dedicates Redwood National Park," *New York Times*, November 26, 1968, 29.

[70] Cohen, *History of the Sierra Club*, 395-434.

[71] This brief discussion of the post–World War II environmental movement is broadly informed by the following works: Samuel P. Hays, *Beauty*, *Health*, *and Permanence: Environmental Politics in the United States*, *1955–1985* (Cambridge; New York: Cambridge University Press, 1987); Robert Gottlieb, *Forcing the Spring: The Transformation of the American Environmental Movement*, rev. and updated ed. (Washington, DC: Island Press, 2005); Adam Rome, *The Bulldozer in the Countryside: Suburban Sprawl and the Rise of American Environmentalism* (Cambridge; New York: Cambridge University Press, 2001); Hal K. Rothman, *The Greening of a Nation?: Environmentalism in the United States since 1945* (Fort Worth: Harcourt Brace College Publishers, 1998); and Philip Shabecoff, *A Fierce Green Fire: The American Environmental Movement*, rev. ed. (Washington, DC: Island Press, 2003).

[72] Such juxtaposed images had also been part of the SRL's earliest campaigns. See, especially, Grant, *Saving the Redwoods*. However, they were not integral to later campaigns—which primarily emphasized the sublime beauty of redwood forest groves.

# Part Two

*Conceived in controversy*, *born of compromise*.

*Redwood National Park Master Plan* [1]

At best, the creation of Redwood National Park was a mitigated success. On the one hand, the federal government had made an unequivocal commitment to preserve "significant examples of the primeval coastal redwood . . . forests and the streams and seashores with which they are associated."[2] Yet the controversy and compromise that surrounded the park's creation did not abate, nor did it make for an easily manageable unit of the national park system. Cobbled from an assortment of state, federal, county, municipal, and private lands that followed no particular ecological boundaries, the park landscape thwarted efforts to develop coherent management plans amid impassioned public interest and controversy. This untenable situation gave way to a major park expansion in 1978, but the park's first ten years nevertheless set important management precedents for the 1980s and beyond. In an effort to make the oddly structured park function amid competing interests and external environmental threats, park superintendents embraced the need for cooperative agreements with private landowners and other public agencies, and fostered an emphasis on science-based resource management—two strategies that would become hallmarks of Redwood's history. By 1980, many of the challenges of the pre-expansion period had been addressed and the groundwork laid for a new era of active resource management.

---

[1] Quotation is from "Prologue," *Master Plan: Redwood National Park*, *California* (Denver: U.S. Department of the Interior, National Park Service, Denver Service Center, 1973).
[2] An Act to Establish a Redwood National Park in the State of California, and for Other Purposes, Pub. L. No. 90-545, 90th Cong., S. 1321 (October 2, 1968).

# Chapter Three

## FALSE STARTS AND TRUE PRECEDENTS, 1968–1976

When the first wave of summer tourists arrived at Redwood National Park (RNP) in 1969, they came as pioneers and pilgrims. Informed by years of headlines, feature stories, editorials, and television news reports on the redwood park issue, they were well aware of their status as first visitors to a new national park and witnesses at the site of an important and recent national event.[1] Unfortunately, Redwood failed most of their expectations. It did not look, feel, or even sound like a national park. Jack Hope, a writer for *Audubon Magazine*, neatly captured the dismay of many when he realized "that this park has little in common with Yellowstone or with any of the other natural areas run by the National Park Service (NPS). It is not large. It is not unbroken. . . . Although the north-south length of this park is 46 miles, its drivable roadways total only about 25 miles, and this is split up among the half-dozen blocks and strips of park land. At its greatest width, the park takes only about 10 minutes to drive through—slim pickings for the auto tourist."[2]

For those who chose to leave their cars and hike to one of "the fine spots," the experience was even more disconcerting. The park as a whole was too small to offer much solitude and, as Hope noted, there were few places "out of earshot of the chain saws operating in the private lands surrounding park boundaries—a distinct disappointment for wilderness enthusiasts."[3] Visitors who made the trek through the narrow "worm" section of the park to see the world's tallest known trees often felt as if they were on a walking tour of a modern logging operation. As a reporter noted in *Newsweek*, the private lands adjoining the Tall Trees Trail made the park seem "like a partially sacked museum that still lets the vandals loiter in the courtyard."[4]

## "UNDER FIRE FROM EVERY DIRECTION"[5]

The complaints of upset and confused tourists were an unfortunate reality at Redwood, but they were only part of a much louder chorus of disaffected voices representing a variety of interests. Local criticism of the park was bitter and constant, and would occasionally find expression in what might be termed ecological vandalism—such as occurred in spring 1975 with the cutting and disfiguring of trees in the Lady Bird Johnson Grove.[6] The Natural Resource Defense Council, the Sierra Club, and other environmental groups passionately attacked the park from a different perspective; angered by the smallness of Redwood and its vulnerability to the effects of nearby logging, they filed lawsuits against the Department of the Interior (DOI) and the NPS in the mid-1970s for not doing enough to protect park resources. Large timber corporations also used the legal system to gain higher cash settlements for the disposition of their property and to protest restrictions on logging near the park's boundaries.[7]

Displeasure and discord were the rule more than the exception at Redwood through the mid-1970s, where the political battles and begrudging concessions of the previous decade continued unabated. John H. "Jack" Davis, who served as park superintendent from 1970 through 1974, recalled that Redwood was something of "a punching bag"—an instrument through which opposing groups expressed their passionate disagreements about each other and the park itself. No matter what they tried or which way they turned, park officials knew they would be hit from some direction: a proposal to develop more visitor amenities would satisfy local commercial interests but offend environmental groups; the designation of a wilderness area might please environmentalists but draw the ire of locals who feared being shut out from areas they knew and used; efforts to curb logging near the park caught everyone's attention, but depending on the perspective, the proposals either went too far or not far enough. Understandably, any policy or development decision had to take into account who could be appeased and who would be offended, and who, under the particular circumstances, would hit back the hardest.[8]

While trying to operate amid so many countervailing interests, park administrators also had to contend with important shifts in federal and state policies. President Nixon's signing of the National Environmental Policy Act (NEPA) on January 1, 1970, with its stipulation that federal agencies incorporate public comment in their planning processes, only made the competing claims of interested parties more constant and pressing. At the state level, the California Environmental Quality Act of 1970 and the Z'berg-Nejedly Forest Practices Act of 1973 allowed for tighter restrictions on logging in the Redwood Creek drainage—a welcome development from the NPS perspective—but these new state laws also made it harder for the Park Service to push for even greater limitations on timber cutting near the park.[9]

The policy preferences of Governor Ronald Reagan's administration also took a toll on park management, from a relatively lax application of forestry regulations on private lands surrounding the new national park to the governor's stated preference for routing the U.S. Highway 101 freeway expansion through Prairie Creek Redwoods State Park. Irresolution of the state parks issue also proved a constant headache for park managers. California Department of Parks and Recreation (CDPR) director William Penn Mott, Jr., was loathe to part with three of the oldest, most famous, and best run units in the state's vaunted park system. These views were echoed and amplified by Governor Reagan's Redwood Parks Commission, which concluded in 1972 that the new national park lands should simply be protective adjuncts to the state parks—even going so far as to "recommend that the administration of the Redwood National Park be turned over to the state."[10] Those in Sacramento who did not care either way about the future disposition of the state parks nevertheless hoped to obtain the most favorable concessions possible from the federal government before cutting a deal with Washington. Because delay both favored and appeased the interests of CDPR, there was simply no reason for state parks officials to seek any kind of resolution.[11]

The NPS, conversely, was severely handicapped by these matters. The park's boundaries had been drawn with the clear expectation that the state parks would be part of the national park. Without the state parks, the national park made no sense. Its administrative boundaries resembled a kind of incomplete jigsaw puzzle with different pieces fitted among adjacent parcels of private holdings, state park lands, municipalities, county parks, highway rights-of-way, the Six Rivers National Forest, and the Pacific Ocean. Odd shaped and discontiguous, it was a gerrymandered landscape possessing no ecological, historical, or bureaucratic rationale. In sum, Redwood was a patchwork park where the political battles and begrudging concessions of the past several years continued unabated. In 1968, Secretary of the Interior Stewart Udall described the passage of the Redwood Park Bill as "the art of the politically possible," but just a few years later many would conclude that politics had simply created "an impossible park."[12]

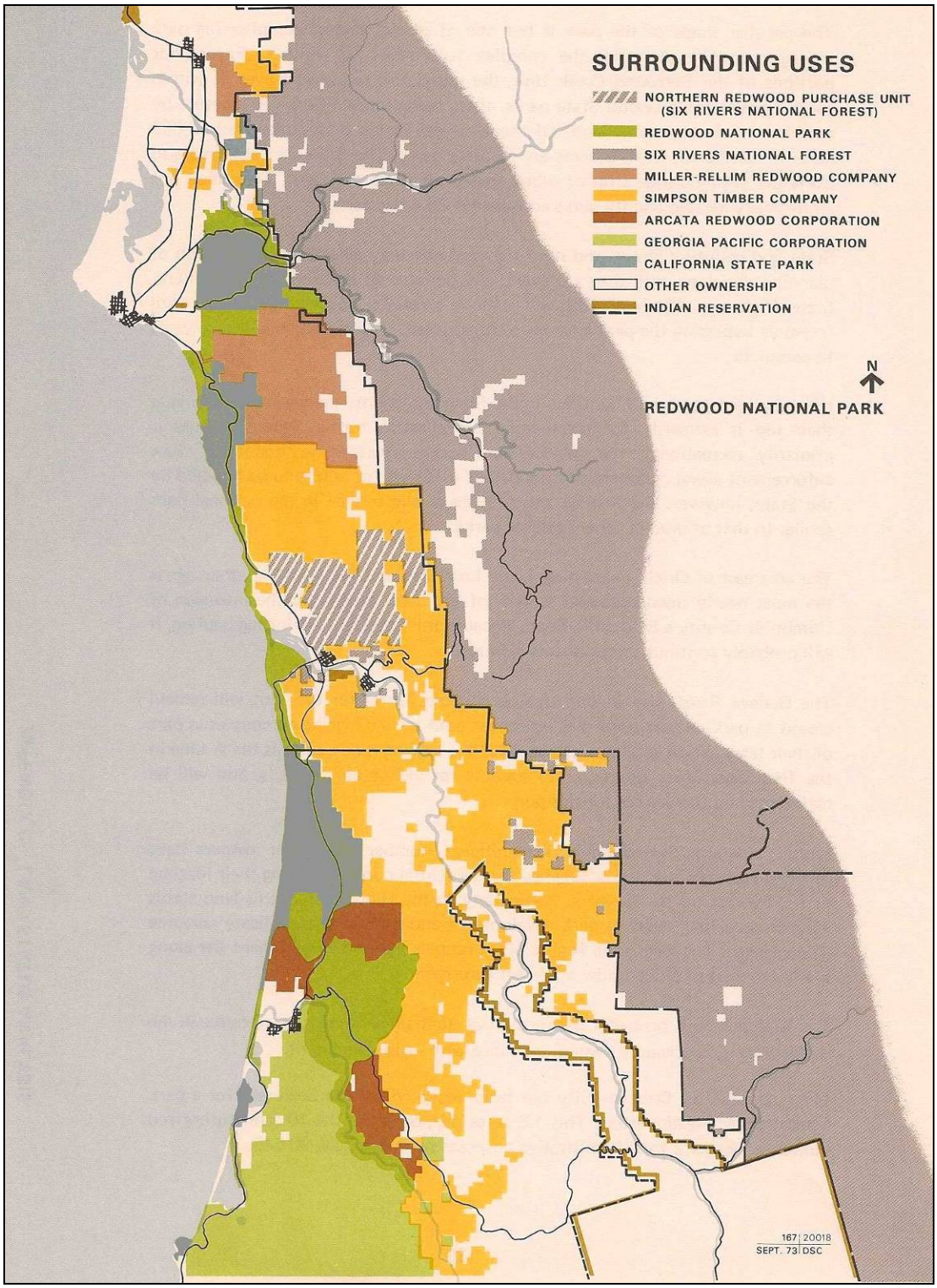


**Figure 3.1 Surrounding uses: Redwood National Park administrative boundaries, 1968–1978.** National Park lands are in dark green. Reprinted from *Master Plan: Redwood National Park*, *California* (Denver: U.S. Department of the Interior, National Park Service, Denver Service Center, 1973), 40 .

## EARLY PARK PLANNING, 1968–1973

The struggle to craft a Master Plan for RNP neatly demonstrates the full range of challenges that faced park managers through the mid-1970s—and largely confirms the assessment that conditions were indeed "impossible." Besides the conflicting agendas of outside groups (which became part of the planning process in the wake of NEPA), and the host of new state policies and conditions noted above, park administrators also had to contend with a number of regulatory and organizational changes within the NPS and the Department of the Interior. Together these proved insurmountable, and forced park planners to scrap all of their planning work in 1974. This long and mostly fruitless endeavor hampered effective administration of Redwood, but matters were even further compounded by a unique congressional restriction on the park's development budget. In the conference committee report that ironed out the final details of the 1968 Redwood National Park Act, Congress stipulated that "no appropriation will be requested or made for [the] purpose [of development], except for such work as is required for immediate administration of the park, until a master development plan has been submitted to the two Committees on Interior and Insular Affairs."[13]

Despite the many problems that would undermine the park planning process, initial efforts actually seemed quite promising. In April 1967, while various bills were still being debated in Congress, NPS director George Hartzog appointed Donald Spalding the superintendent at Crater Lake and charged him with developing a preliminary management plan for the expected redwood national park. Having just completed a Master Plan and implemented basic operations at the recently established Arbuckle National Recreation Area (now part of Chickasaw NRA), Hartzog wanted Spalding to continue a similar process that outgoing Crater Lake superintendent J. Leonard Volz had just initiated for Redwood. The position at Crater Lake also involved oversight of an updated Master Plan for that national park as well as the supervision of operations at Oregon Caves and Lava Beds national monuments, but Spalding spent most of his time directing a small planning team at

Redwood—assessing probable park boundaries, setting initial budgets and personnel needs, establishing relations with the local communities, and hosting visits from federal officials and politicians. Sometimes referred to as "Park Genesis," the process that Spalding supervised also produced a preliminary Master Plan that located basic administrative facilities and determined the park's initial staffing by the time Nelson Murdock arrived as Redwood's first superintendent in 1968.[14]

Spalding's quick work was followed by the prompt action of Deputy NPS Director Harthon L. "Spud" Bill, who authorized a special study team from the Western Region to visit the park for a few weeks in mid-November 1968 and develop a set of "Activation Actions for Redwood National Park." Their task was twofold: assess the new park's vulnerability to outside logging and offer recommendations on how best to fulfill the Park Act's requirement "that the consequences of forestry management, timbering, [and] land use . . . practices" adjacent to or upstream from Redwood's boundaries "not adversely affect the timber, soil, and streams within the park."[15] Overwhelmed by the complex set of issues this involved and troubled by an agency-wide lack of "expertise in redwood ecology, logging extraction, and soils," they concluded that the Park Service should let out the assignment to an academic researcher.[16] This recommendation also produced quick results, and by year's end, the NPS contracted with Edward C. Stone at the University of California's School of Forestry in Berkeley to craft a "management prescription for lands surrounding the Park that would minimize any deleterious effects they might have on park resources."[17] Drawing on work he recently conducted for CDPR, Stone completed his report in April 1969 and it immediately became the basis for subsequent planning discussions.[18]

Unfortunately, the prompt completion of the Stone Report, as it came to be known, was not a harbinger of things to come. A good part of the problem stemmed from the report itself, which greatly exceeded its initial charge to analyze "the buffers and the watershed management required to preserve the redwood forest and associated streams in the Redwood National Park."[19] Stone held a particular disdain for what he called "preservation

and the wilderness syndrome"—a cutting reference to the Sierra Club and other environmental groups. What these preservationists failed to appreciate, Stone argued, was that "modern man's activities" produced constant "inputs" into so-called wilderness ecosystems while preservation excluded certain natural inputs.[20]

The trick, as Stone saw it, was to mitigate against the first and compensate for the absence of the latter. This was especially true at Redwood, where park boundaries contained only partial watersheds that lay downstream from active clear-cutting operations. Within the old-growth groves of Redwood National Park, this might mean controlled burning, weeding, coppicing, and removal of excessive soil deposition, as well as cutting or girdling some mature trees in order to mimic the ongoing processes of forest succession. Along with establishing an 800-foot protective buffer zone that restricted certain logging practices near the park, Stone believed these resource management strategies would maintain a fully representative "mosaic" of young and old forests within the small and oddly shaped park.

While the buffer zone proposal directly addressed the original concerns of the Park Service, and fit within the Section 3(e) of the Park Act's authorization "to acquire interests in land from . . . owners . . . on the periphery of the park" in order ensure better protection of Redwood's resources, it was secondary to Stone's larger agenda—which might be described as a kind of regional planning initiative.[21] Instead of separating parks from logging operations, Stone advocated concerted use and manipulation of both public and private lands to create a managerial and philosophical continuum between RNP and the timberlands of its corporate neighbors. Stone believed Redwood should become a model for the management of whole forest ecosystems—with small, carefully manipulated park landscapes amid large commercial forest operations. The former would contribute to the ecological health of the surrounding private lands while the latter would be managed in a way that mimicked some of the natural "inputs" excluded by strict preservation.[22]

The NPS Planning Team, which consisted of Superintendent Murdock as well as David Turello and Bruce Black of the Western Service Center, wholeheartedly embraced

Stone's recommendations. "If Dr. Stone was seeking to master and tame the 'emergency tension' [between preservationists and industry]," they proclaimed in the initial "Concept Paper for Proposed 'Buffer & Watershed Management,'" we intend "nothing less than to pioneer the route!"[23] The Planning Team viewed the Stone Report as more than a tool for resource management; they saw it as a manifesto for the entire Master Plan—which would "explode the myth that argues that 'laissez-faire' preservation is the only route to perpetuation of the natural resources, and possibly establish the fact that, in reality, active manipulation responsive to scientific research is the only option left. Collectively, we can also help eliminate the nation's conservation schizophrenia which establishes parks out of guilt for historic debauchery, dedicates screens to hide utilization, and condemns industry for supplying the very needs it demands."[24]

The Sierra Club and other environmental groups recoiled in horror at such pronouncements. As Sierra Club forester Gordon Robinson made clear in a detailed rebuttal to the Stone Report, the Park Service was placing too much emphasis on forestry practices outside the park and not enough on protecting the park itself. Instead of actively manipulating Redwood's ancient forests to compensate for the effects of outside logging, the Park Service should seek greater restrictions on logging near the park—and advocate for further expansion of Redwood's boundaries—so that the centuries-old forests could thrive in the same conditions that existed before the advent of commercial logging. As Sierra Club president Edgar Wayburn noted, experimenting with old-growth redwoods to "possibly establish the fact" that they should be actively manipulated seemed against the will of Congress and scientifically inappropriate, and at the very least required a great deal more study and planning. For trees as old as the ancient redwoods, it was best to "safely wait another century or two before making definite commitments to any particular plan for assuring perpetuation."[25]

Park Service officials ignored these concerns, and even dismissed Robinson's report as little more than an effort to "increase the tension" with the timber industry and the Park

Service in order to advance the Sierra Club's own agenda for "an expanded park."[26] The primary purpose of park management, as early planners saw it, was to resolve the tensions that had surrounded Redwood's establishment. While this approach represented a sincere conviction, it also reflected a fundamental political reality. With the actual costs of land acquisition expected to rise well beyond the $92 million approved by Congress, and with the new administration of President Richard Nixon committed to reducing budgets throughout the Department of the Interior, NPS director George Hartzog learned in spring 1969 that RNP would receive little if any financial support for programs that extended beyond the acquisition of lands within the statutorily defined boundaries of the new park. At best, NPS officials hoped to gain some additional funding to purchase or lease narrow buffer areas and conservation easements around the southern edges of the park—but any success in these matters would depend on a time consuming and relatively insecure supplemental budget request process. In the meantime, and as a hedge against the possibility of not receiving any additional funding, park officials needed to be amenable to the powerful timber industry—which had no legal obligation, and no fiscal incentive, to curb logging near or upstream from park lands. To "increase the tension" with this powerful group was simply out of the question.[27]

Besides these hard realities, park officials were generally distrustful of the Sierra Club and the growing environmental movement. As historian Richard Sellars has noted, this partly reflected an older ethic in the Park Service that did not distinguish between tourism, park development, and the dynamics of park ecosystems. Consequently, "the Service had to be awakened to ecological management by outside critics"—who lambasted the NPS for some of the large building projects associated with the Mission 66 era and sharply criticized the agency for its slow compliance with the 1964 Wilderness Act.[28] This antagonistic relationship certainly played out dramatically in the creation of RNP when the Sierra Club made direct attacks on the government's park proposals. And it remained a very live issue

through the 1970s, as park officials complained of “interference” from the Sierra Club in what was already a very difficult management situation.[29]

Acutely aware that funding for park development—which included permanent facilities for visitation, administration, resource management, and interpretation—was contingent on a completed Master Plan, the Planning Team had little patience for what they perceived to be delaying tactics on the part of the Sierra Club. The Plan could not be all things to all people; and besides, not all interests were equal. The concerns of environmentalists, whether valid or not, paled in comparison to the political and economic clout of the timber industry. Without some level of buy-in from Redwood’s corporate neighbors, the planning process—and park development—would come to nothing.[30]

Park planners had some success on this last score, but their hopes to complete the Plan in a timely manner were thwarted by a remarkable spate of bureaucratic and administrative instability in the NPS. Within three years of Redwood’s establishment, longtime NPS director George Hartzog was forced to retire, three regional directors passed through the Western Regional Office, the Western Service Center in San Francisco was consolidated with the Eastern Service Center and moved to Denver—leading to a wholesale reshuffling and redesignation of staff who were familiar with the RNP planning process—and the park itself was managed by three different superintendents. Murdock resigned for health reasons after just fifteen months at Redwood, and the park’s second superintendent, Wayne B. Cone, spent only five months in Crescent City before transferring to Yosemite in summer 1970 to deal with the aftermath of the so-called Fourth of July Riots that occurred in the Valley.[31]

The brevity of Cone’s tenure at Redwood slowed efforts on the Master Plan while his departure to Yosemite dovetailed with an additional complication for park planning at Redwood. Cone’s transfer also involved supervising the Master Plan process for Yosemite—which had already generated an extraordinary amount of controversy and public comment. Park Service efforts to engage these concerns placed an “extended drain on manpower and

funds" at both the Western Regional Office and the Denver Service Center. Consequently, Redwood's own Master Plan fell into limbo for the better part of a year as a succession of three Planning Team leaders were reassigned to other projects in the region and individual members were pulled away to work on the Yosemite plan.[32]

Delays and frequent turnover among planning personnel allowed opposing views within the group of Master Plan advisors to harden into uncompromising positions. Made up of representatives from private landowners, regional economic groups, CDPR, Humboldt and Del Norte counties, and environmentalists who served as a kind of sounding board for the park Planning Team, the advisors represented the spectrum of interests that fought for, fought against, and then variously disparaged the resulting park legislation. In their formal comments on a draft plan in 1971, representatives from the Sierra Club and the timber industry made special note of the intransigence of their old adversaries. According to Sierra Club president Edgar Wayburn, the draft Master Plan did not sufficiently address the "level of cutting activity on adjoining private lands . . . [and] displays a weak grasp of the need for land-use controls on surrounding lands and in tributary watersheds."[33] Commenting on behalf of local commercial interests, C. Robert Barnum lashed back that park development was being undermined "by the refusal of some conservation groups to accept any facts contrary to their own philosophies."[34]

Hemmed in by the adversarial interests of outside groups, undermined by shifts within the NPS, and limited by new budget restraints, park planners eventually sought to transcend rather than directly confront—let alone resolve—these many difficult conditions. In doing so, they came to believe that Redwood could be a new model for conservation. As they noted in the draft Master Plan, the problems inherent to the management of RNP were best seen as an unprecedented "opportunity for all those affected—Federal, State, and local government agencies; timber and other regional industries; conservation organizations; and the people of Del Norte and Humboldt Counties—to work together to develop courses of action for their mutual benefit."[35] Redwood would serve as a model for "a new and radical

approach to park preservation and a precedent for cooperation [between] industry and the Government . . . [that would] change the course and values of the nation with respect to its approach to natural resources." "For those who dream," they added, "the opportunities were never greater."[36]

The draft Master Plan was finished with high hopes in summer 1971 and released for public comment in early December at meetings held in Crescent City and Eureka. Public reaction was somewhat mixed, with a number of local interests encouraging development of more visitor facilities within and adjacent to the park. Conservationists made it clear that they favored an active effort to acquire more lands for the park. For the most part, however, timber corporations, commercial interests, and local groups agreed with the plan. A few minor changes were made to the first draft, but the original philosophy of the Planning Team remained unchanged. The second draft was released for more comment in 1972, and then submitted to the Secretary of the Interior's office in early 1973.[37]

### A Conceptual Plan

Well produced and nicely illustrated with dramatic images and multicolored maps, the final version of the Master Plan offered up a three-part conceptual framework for park development that utilized what the authors called the Resource Management Concept, Development Concept, and Visitor-Use Concept. The first was based on an ambitious vision of "a new ethic [that united] all the divergent and varied interests within the region in a common long-range viewpoint . . . : the park will be managed to insure that future generations will have the same opportunity for a fulfilling redwood experience that we have, and that the use of commercial forests will be shared with unborn generations."[38] In short, the park would foster both preservation and sustainable forestry.

The Development Concept sought to limit visitor services and facilities to areas outside the park. As noted in the Master Plan's environmental impact statement (EIS), this

strategy would ensure that resources within the relatively small park would not be further reduced by parking lots, buildings, roadways, and recreational sites. Instead, Park Service officials would cooperate with surrounding communities and support the development of visitor centers, campgrounds, and other overnight accommodations outside the park. Besides protecting in-park resources, this strategy would also try to make good on local expectations that tourism to RNP would directly benefit the North Coast economy.[39]

Keeping facilities outside the park also fit within the Visitor-Use Concept, which sought to cultivate "a feeling of oneness with nature and an intensity of environmental awareness" that could only occur in undeveloped areas. Reflecting the general boundaries of the park itself, this concept would find expression in "three major areas of visitor experiences." The first of these was defined as "Redwood Moods," where the visitor experience would focus on "a purely sensory, intimate, personal involvement [with] the primeval redwoods" in the forests of Del Norte and Jedediah Smith Redwood state parks. The southern area of the park would be interpreted under a "Redwood Mosaic" theme that featured Stone's ideas about active management of the park landscape as well as interpretation of surrounding forestry practices. Last, the narrow middle stretches of the park, or "Seacoast," would serve as a "contrast and complement" to the redwood experiences and offer visitors an opportunity to appreciate the significance of marine and shore ecosystems, estuaries, and North Coast maritime history.[40]

To initiate this three-part conceptual approach and lay the foundation for its later "application through the remainder of the region," the planners went well beyond the expectations of a typical Master Plan and proposed the establishment of five regional management zones: Preservation Park Zone, consisting of lands within the boundaries of Redwood National Park; Cooperative Management Zone, which would incorporate certain unspecified zoning controls on non-timber producing lands adjacent to the park as well as include "an appropriate buffer strip" that limited timber harvesting in areas adjacent to park lands; Redwood Forest Utilization Zone, in which the timber industry would be encouraged to

develop sustainable harvesting methods and support recreational opportunities on their lands; Forest Utilization Zone, where sustainable forestry and recreation would be promoted on non-redwood forest lands in the Six Rivers National Forest, the Hoopa Indian reservation, and adjoining parcels of private land; and Development Zone, which would encourage the development of commercial visitor facilities and services outside park boundaries.[41]

Given the long struggle for a Redwood National Park, the great national significance of its establishment and the unique conditions under which the park had to be managed, it is hardly surprising that park planners associated special importance to their efforts. Yet their advocacy for "a new park," crafted in accordance with "a new ethic" that sought to remake an entire region, did little to create the kind of conditions that park planners envisioned. Since it made no specific demands on the timber industry, the Master Plan received little resistance from that quarter. Not surprisingly, the park's original advocatesbitterly opposed the basic philosophy of the plan. Instead of making forays into regional planning and assuming that the park's boundaries were final, the Sierra Club and its allies argued that the NPS should stipulate how much land was necessary to maintain a functioning ecosystem and then establish a plan on that basis.[42]

Such disagreements certainly undermined the Master Plan, but they were largely unavoidable. They also could not be transcended, and therein lay the real problem with the planning effort. As critics both inside and outside the NPS would note, the Master Plan was too general and conceptual in its focus, too broad in its geographical application, did not offer a clear framework for the subsequent development of specific programs and projects, and failed to clarify the management challenges associated with the irresolution of the state parks issue.[43] These were not failings so much as reflections of the circumstances in which the plan was composed. There simply was no way to conceptually, and thus administratively, integrate the disparate and disconnected landscapes of the park—and appease powerful outside interests—except through vague and hopeful efforts to communicate "intentions and aspirations."[44]

The Master Plan's emphasis on a conceptual approach proved its ultimate downfall. In 1969, just as the park planning effort got underway, Congress passed NEPA, which required all federal agencies to prepare detailed statements on the environmental impacts of major proposed actions or plans and to provide alternative actions and their impacts.[45] Of course, no one in the Park Service or any other federal agency had developed a formula for NEPA compliance in the years immediately following passage of this landmark piece of legislation, and so it is understandable that its requirements were not easily incorporated into the first draft Master Plan for Redwood National Park or its two subsequent iterations. Turnover within the Planning Team, as well as in the Western Region and the Park Service as a whole, may also have fostered a reliance on vision over detail as the planners sought to craft a finished document. Whatever the case, the law was unyielding and the effort to develop an EIS for Redwood proved unwieldy, and eventually resulted in a 226-page document that was ten times longer than the Master Plan itself. The Secretary of the Interior rejected the Redwood Master Plan because it was simply too conceptual and vague to fit the demands of NEPA—a pointed verdict on the plan as well as the ill-defined and ambiguous qualities of the park itself.[46]

The rejection of the Redwood Master Plan became a matter of "particular importance," as a Management Consultation Team from the Western Regional Office noted during its visit to the park in summer 1974. A few months earlier, Regional Director Howard H. Chapman regarded the need to develop a new, acceptable plan for Redwood as one of "the highest priority planning projects in this region."[47] The extended drain on manpower and funds created by the Yosemite Master Plan process forced a deferral of the Redwood project to fiscal year 1976, when a special Park Planning Committee was finally formed. By the time that effort got underway, however, the growing likelihood of a park expansion bill sent the planning process in a whole new direction—away from the original plans and goals of the early 1970s but still encumbered by the need to create a basic infrastructure for park management.

## WORKING WITHOUT A PLAN, 1969–1976

The effort, and failure, to craft a Master Plan for RNP was a significant and frustrating administrative endeavor, and in many respects, it defines the park's early years. Yet this period of Redwood's history also saw a number of important and lasting accomplishments as park officials used their limited development budgets to complete what Congress deemed "such work as is required for immediate administration of the park." This included construction or improvement of some basic infrastructure (namely, roads, trails, and the park headquarters building in Crescent City); acquisition or leasing of facilities for maintenance, housing, resource management, and visitor services; development of interpretive programs; crafting of cooperative agreements and memorandums of understanding with private landowners as well as state and federal land agencies' survey and posting of park boundaries; and compiling basic historical, archeological, and natural resource inventories.[48]

These early accomplishments are all the more noteworthy when considered in light of the park's original staffing and budget levels. When the first summer visitors started to arrive in 1969, RNP had only six permanent employees: a superintendent, chief ranger, two district rangers, an administrative officer, and a secretary. The budget for operating programs in the first fiscal year was just $82,000. Not surprisingly, facilities in the new park reflected these initial figures. Headquarters and the main visitor center were housed in rented office space in the Del Norte Title Building in downtown Crescent City, a portable trailer was set up in Orick to help orient visitors coming from the south, and the old Yurok Redwood Experimental Forest Administration building in Klamath provided space for seasonal rangers and maintenance staff. Most equipment for roads and building maintenance was rented from private companies or borrowed from county departments.[49]

For the new staff working in this arrangement of makeshift conditions, the quick turnover of two superintendents in less than two years only added to the unsettled nature of

the park. By summer 1970, however, Redwood started to gain some of the accoutrements of a more established unit of the NPS. The programs budget increased to $414,500 that year and staffing grew by a similar magnitude. Just four years later, the annual programs budget reached $726,400 and staffing levels had grown to include twenty-six full-time and fifteen temporary or part-time or seasonal positions.[50] Besides this growth in staffing and budgets, RNP also benefited from a period of administrative stability marked by the relatively long tenures of Superintendent Davis, who came to Redwood in July 1970, and Chief Ranger Homer Leach, who arrived the following February.

Progress at RNP was also apparent in the steady growth and improvement of the visitor experience at Redwood. Between 1970 and 1974, visitation increased by 20 to 30 percent each year—and by 1975, the number of visitors surpassed 328,000. Some 2,000 people used the newly established backpacker campground at the end of the Tall Trees Trail, but most of the visitor count occurred at a newly constructed visitor facility in Orick or at the main information area of the new park headquarters building (opened in September 1973). Ranger guided walks along newly established segments of the coastal trail, as well as demonstrations at the Klamath facility on the flora, fauna, and Native American cultures of the park area, were well received by the growing number of summer travelers along the North Coast. Construction of the Crescent City Overlook, with picnic areas and access down to Enderts Beach, also attracted significant numbers of local day users.[51]

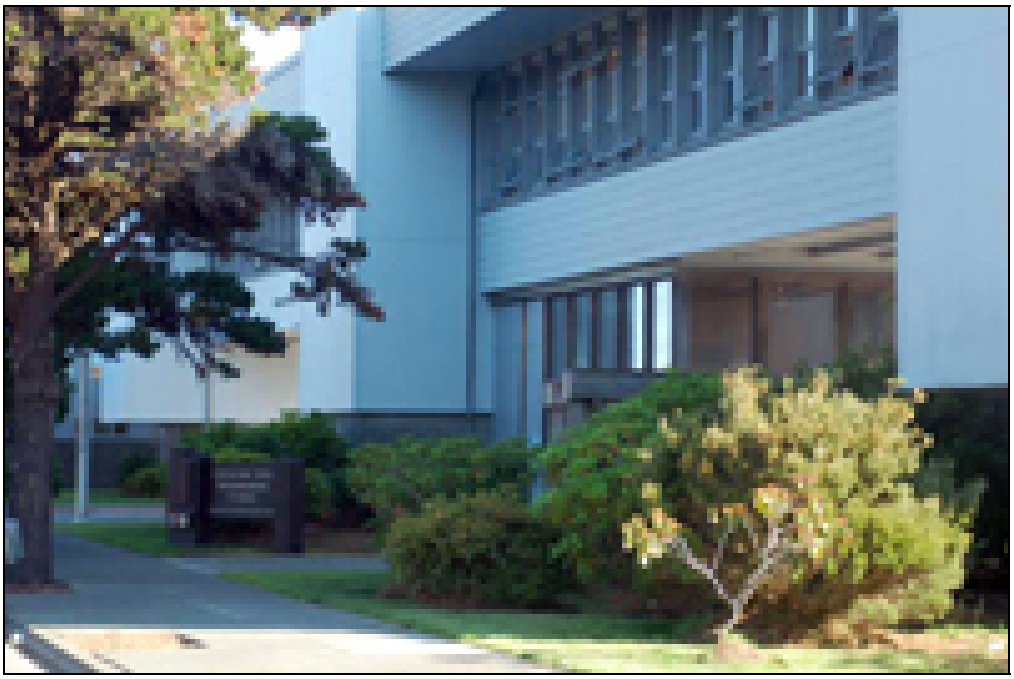

**Figure 3.2 Crescent City Headquarters, constructed 1973.**

The opening of the headquarters building was probably the most significant physical achievement in establishing a solid administrative structure for Redwood National Park. Yet its location and construction also illustrates the basic challenges and goals that would define the park's management for decades to come. As authorized in the 1968 Redwood National Park Act and discussed in the original master planning meetings, the headquarters building needed to be located outside the park's boundaries to preserve in-park resources. The Crescent City location, though it would prove less than ideal for administering such a long park, also addressed another important concern that stemmed from the conflict and compromises that shaped the 1968 legislation; it demonstrated a commitment on the part of the NPS to directly participate in and contribute to the social and commercial relations of the North Coast. In the case of Crescent City, this commitment could be exercised in the county seat of and only sizeable community in Del Norte County—where most of the national and state park lands were located. In particular, the headquarters building would contribute to the rebuilding efforts still underway in the wake of the devastating tsunami of March 27, 1964.

Crescent City also had a few other, less tangible virtues. During the legislative battles that preceded the park's establishment, Crescent City's airport made the small coastal town into a kind of ad hoc administrative center for congressional fact-finding tours of proposed park lands, as well as meetings among federal, state, and local officials. Crescent City was also the best locale for NPS efforts to coordinate preliminary plans for Redwood. During the "park genesis" period of 1967-1968, for instance, Crescent City proved the logical base of operations for J. Leonard Volz and Don Spalding—who not only established initial operations for Redwood National Park in Crescent City but also worked out of an office in Medford, Oregon. As superintendents for Crater Lake National Park, and responsible for the administration of Oregon Caves National Monument, Volz and Spalding covered a great deal of territory. Located at the western terminus of Highway 199, Crescent City proved the logical site for directing affairs at Redwood and still be within a reasonable driving range to the Oregon parks. Last and perhaps most important, Crescent City was the home base of Representative Donald H. Clausen—whose constituents would directly benefit from the expenditure of federal funds (for construction and salaries) in his district.

### ADMINISTRATION

As park administrators worked within the fiscal, political, and geographic challenges that largely defined their tasks—Redwood's management structure assumed a form during Superintendent Davis's tenure that foreshadowed later arrangements in the post-expansion era. Marked by three divisions (Administration, Maintenance and Rehabilitation, and Interpretation and Resource Management), the management structure also included two outlying positions—a research biologist and a resource management specialist. Unique within the NPS, this staffing arrangement operated like two small, semi-independent divisions by themselves. Despite all of the challenges associated with the lack of a Master Plan, a 1974 *Management Consultation Report* concluded that this "organization structure for

the park seems to be correct for the job at hand . . . [and] is capably handled" by park administrators.[52]

While the Division of Administration was typical of other parks, with five employees working on matters relating to general finances and budgets, personnel, procurement and property management, and communications, the other divisions within the park reflected Redwood's unique conditions. This was especially true of the organization and name of the Maintenance and Rehabilitation Division. Instead of having two subunits like most Maintenance programs in the national park system, Redwood's was divided into three: Roads and Trails; Buildings and Structures; and Utilities, Grounds, and Services. Because the park was so new, and required new trails, waysides, and parking areas as well as substantial upgrading of useable logging roads, the Roads and Trails subunit had a large but focused workload. The same was true of Buildings and Structures, which renovated old structures as well as took care of general construction needs throughout the park (and, unfortunately, had to repair the leaking roof on the new headquarters building). The duties of Utilities, Grounds, and Services, which normally would have been folded into the other two subunits, was saddled with upgrading electrical and sewer systems in the park's older structures as well as well as maintaining and upgrading facilities throughout the park.[53] Besides their maintenance duties, all of these subunits also contributed to *rehabilitation*—a term that had two meanings. On the one hand, it referred to the restoration of old structures and facilities for park use; on the other hand, it also applied to the occasional duties of some work crews to take part in "a continuing project to rehabilitate cut-over lands in the Park" that, by 1975, included "restoring natural drainages to up to four miles of road annually."[54]

Like the much larger watershed rehabilitation program that would become a signature feature of the park in the post-expansion era—these restoration projects were a shared responsibility of different administrative units. Along with Maintenance and Rehabilitation, which provided most of the equipment and labor, restoration also fell under the purview of the Division of Interpretation and Resource Management—with input from the

research biologist and the resource management specialist. Because the program was very small and mostly experimental, it did not occupy a significant amount of personnel time—even though it involved a good cross section of the park's organizational structure.

In many respects, the same could be said of resource management as a whole—at least within its specified administrative division. Falling under the direction of Chief Ranger Homer Leach, who operated much like an assistant superintendent, IRM represented the full spectrum of ranger duties in a national park: information and visitor contact, public safety, law enforcement, fire control, back-country management, search and rescue, interpretation, and resource management. As noted in the 1974 *Management Consultation Report*, "the I & RM title [was] somewhat misleading" because it suggested a "considerable emphasis . . . on Resource Management—more than actually occurs."[55] Interpretation was the most comprehensive unit within IRM; taking up more than a third of the twenty-three positions in the division and the source of many of the park's most successful early plans and programs—including the early completion and implementation of an accepted Interpretive prospectus, the initiation of an outdoor education program with nearby public schools, and the development of a host of well-received visitor programs.[56] Resource management, on the other hand, was not really a distinct unit within the division. Spread across several positions that shared a host of other responsibilities, it could best be defined as the part of a ranger's job that involved wildlife and backcountry management—but these tasks were often eclipsed by other responsibilities. And so long as the old-growth forests and coastlines of the state parks were separate from the national park, the places and resources that would otherwise most involve the attentions of NPS rangers remained the purview of state park employees.

Of course, natural resource management was the celebrated purpose of the Redwood National Park Act, and its stipulation that park management have a dual focus both on the preservation of "significant examples of the primeval coast redwood (*Sequoia sempervirens*) forests and the streams and seashores with which they are associated" inside

the park and on “the consequences of forestry management, timbering, land use, and soil conservation practices” outside the park, found expression in the positions of research biologist and resource management specialist.[57] Operating outside the park’s divisional structure, they reported directly to the superintendent and were jointly responsible for developing and implementing the two basic charges of the 1968 “Activation Actions” for RNP: an ecological study of coast redwoods to determine best management practices for park forests and their susceptibility to the likely impacts of industrial logging in the Redwood Creek drainage; an assessment of land-use practices outside the park to measure their influence on park resources and for establishing a set of guidelines for cooperative agreements between RNP and its corporate neighbors.

This twin approach, while it neatly fit the conditions and situation of RNP, was not easily integrated into a single, effective strategy for resource management. Divided as it was between two individuals with very different sets of tasks and skills, the dual approach mirrored rather than addressed the challenges of park management and like the master planning process, ultimately contributed to the “tension” park officials sought to avoid. Much of this was unavoidable, but it was exacerbated by “a conflict in personalities between” research biologist Steven Veirs and resource management specialist Theologue “Ted” Hatzimanolis.[58] Despite these issues, which will be more fully addressed in following sections, the combination of these two positions laid the groundwork for a dual focus on cooperative management strategies and science-based resource management—two legacies of the 1970s that have since become hallmarks of Redwood’s administration.

### COOPERATIVE MANDATES AND RESOURCE MANAGEMENT, 1969–1974

Recognizing that the park it created would have to occur within a diverse array of jurisdictions and land-use regimes, Congress also authorized the Secretary of the Interior “to acquire interests in land from, and to enter into cooperative agreements and contracts with,

the owners of land on the periphery of the park and on watersheds tributary to streams within the park."[59] As park planners put it, "Congress recognized that the area of the park, as established, cannot be managed as a totally independent, traditional national park." The degree to which it might develop to its "full stature" depended entirely on "the cooperation of all the various and divergent interests operating in the redwoods."[60]

This emphasis on cooperation certainly reflected the basic reality of RNP—the park was subject to and in some respects at the mercy of conditions and developments outside its peculiar boundaries—but it also corresponded to a new trend within the national park system. Part of the issue was a simple lack of large, "unimpaired" or "park-worthy" landscapes in the public domain. As former NPS director Horace Albright noted in the early 1970s, "You don't get a clean park any more, you don't get [164,560 acres of public domain] like you did at Crater Lake [in 1902]. You get a little bit here and a little bit there."[61] These different kinds of park units also required a different kind of management. Interspersed with or surrounded by private holdings, and often pressed up against lands under the control of different local, state, and federal agencies, the less-than-"clean" parks could only be managed in conjunction with these other interests.

The precedent for cooperative management was most clearly expressed in the Outdoor Recreation Act of 1963, which committed the NPS to "cooperative participation of all levels of government and private enterprise" when establishing and administering National Recreation Areas.[62] This approach received an explicit reiteration in The National Trails System Act of 1968, which obligated the Park Service to manage trails "in cooperation with interested interstate, State, and local governmental agencies, public and private organizations, and landowners and land users concerned." Similar language informed the Wild and Scenic Rivers Act, which President Johnson signed on the same day as the Redwood National Park and the National Trails System Acts.[63]

While its enabling legislation shared a great deal with these other laws, Redwood was nevertheless unique. The same year Redwood was created, the Park Service adopted a

three-part classification for administering the national park system: namely, Recreational Areas, Historic Areas, and Natural Areas. Unlike so-called Natural Area parks such as Yosemite, Crater Lake, or the more recently established Canyonlands, Guadalupe Mountains, and North Cascades national parks with which it was classed, Redwood's cooperative mandate aligned it with the many Recreational and Historic Areas established in the 1960s.[64] This made RNP something of an outlier as well as a new precedent within the NPS, and neatly reflected the unique conditions of the park's creation. Because these conditions required an unprecedented level of compromise and innovation to protect the ecological properties that inspired Redwood's establishment, cooperation necessarily became the abiding principle of park administration.

Early efforts to fulfill Redwood's unique cooperative mandate occurred in tandem with the planning process, and mirrored that effort's initial success. In spring 1969, before the first logging season since the park's creation had commenced, park officials initiated direct negotiations with Arcata Redwood Company about scheduled cuts in the Skunk Cabbage and Redwood creek drainages.[65] In the ensuing months, negotiations commenced with the other major landowners that bordered the southern portions of the park, with discussions focusing on Stone's proposed 800-foot buffer zone around the park. Timber companies initially agreed to refrain from cutting in areas of concern to park officials, primarily in places where their activities could be seen or heard from park lands, but they did so with the expectation that any costs incurred by delays or adjustments in cutting schedules would be covered by the federal government.[66]

These early negotiations proceeded well as the interested parties proposed and entertained various plans on the type, rate, and scale of cutting near the park, the location of roads and landings, and the predicted rates of erosion and stand replacement on particularly steep slopes. The groundwork for these discussions was first laid by Superintendent Murdock, whom colleagues admired for his "excellent abilities in community relations."[67] In his short tenure at RNP, Murdock was able to establish solid, forthright relations with timber

company executives and local community groups in part because he did not have to participate in the more acrimonious process of negotiating the final costs of land disposition—a matter that was left to the Department of the Interior. While Superintendent Cone's brief tenure at Redwood did not allow for any significant progress in these matters, Murdock's efforts were soon extended by Superintendent Davis—whose previous work at Cape Cod National Seashore prepared him to work with groups that had a built-in antagonism toward the Park Service. Davis soon began regular meetings with timber company executives in Eureka and Crescent City and at corporate headquarters outside the region. Timber companies welcomed these meetings in part because they saw the Park Service as a potential ally against the claims of environmental groups like the Sierra Club, which advocated greater restrictions on logging throughout the North Coast as well as expansion of the park's boundaries.[68]

Relations with the timber companies also benefited from the participation of the park's first resource management specialist, Ted Hatzimanolis. A longtime employee of the U.S. Forest Service (USFS), he had served eleven years as district ranger of the Redwood Purchase Unit in Six Rivers National Forest before coming to the Park Service in 1969. As a professional forester whose career spanned more than two decades of unprecedented cutting on western national forests, "Hatzi," as his friends and colleagues knew him, had long and extensive experience in authorizing cutting plans for the timber industry. Consequently, he held few reservations about the timber companies operating around Redwood National Park. Indeed, he regarded them as some of the most progressive, stable, and public-spirited corporations in the industry.[69]

Hatzimanolis did not have a similar opinion about the Park Service. He was an opponent of the Redwood National Park Act, especially when it became apparent that the Redwood Purchase Unit would become a crucial bargaining chip in the final compromise bill that created the park, and he harbored a special dislike for the Sierra Club and other environmental groups. While he kept in check his discomfort with the NPS, Hatzimanolis did

clash with Steven Veirs, the park's research biologist, who did not share his colleague's sanguine assessment of the timber industry. [70]

Part of the problem was professional background. Veirs was an ecologist not a forester, and his understanding of timber harvesting practices was limited to his recent observations in Redwood Creek. Hatzimanolis was an experienced forester, but he had not studied the ecology of redwood ecosystems—let alone the geology and hydrology of Redwood Creek.[71] Instead of complementing each other, these different approaches led to conflict and competition. Neither man fully appreciated the other's expertise, and their different understandings about the effects of ongoing timber harvests did not foster much common agreement. In the short run, when cooperation with timber companies on their terms was an urgent necessity, Hatzimanolis's approach to resource management and his background in the USFS put him at the forefront of the park's efforts to deal with the effects of past and ongoing logging operations.[72]

While Hatzimanolis played an important role in the park's attempts to work with the timber industry, the effort proved a failure. Because it was tied so closely to the overall management of the park, Redwood's cooperative mandate suffered from the same budgetary problems that both thwarted and resulted from the master planning process. The congressional authorization to draw up agreements with adjacent landowners clearly implied that timber companies would be compensated financially for any restrictions placed on their operations. For instance, if state forestry laws allowed clear-cuts and tractor yarding in a particular area, but a company instead adopted cable yarding and selective cutting techniques to minimize erosion and maintain a partly forested buffer between the park and more extensively logged areas further away, it could expect compensation for the extra time and costs associated with the lower impact logging.[73] Secretary of the Interior Rogers Morton proved reluctant to authorize compensation to the timber companies on a piecemeal basis, however—preferring instead to wait until Redwood had an approved master plan and had finished developing a comprehensive set of guidelines and valuations for all of the areas

surrounding the park. From the timber companies' perspective, Morton's preference was troubling since it only promised open-ended delay.[74]

With nothing to negotiate with but goodwill and a hope for some common concern about the effects of upstream and upslope logging on park resources, Redwood officials considered it an important accomplishment simply to persuade timber operators to consider alternative timber practices. After all the controversy surrounding the original property taking, and the difficult process of disposition then underway, it simply made no sense to approach the park's most powerful neighbors in anything but conciliatory terms. As former Superintendent Jack Davis recalled, solid relationships with the timber industry were essential to the protection of park resources.[75]

Unfortunately, a necessary and genuine commitment on the part of park officials did not readily translate into the kind of comprehensive set of agreements that Secretary Morton desired. Much of this was due to the simple fact that the Redwood National Park Act only directed the actions of the Park Service, it did not obligate the cooperation of timber companies—which understandably computed altered harvest plans in terms of lost revenue. To the degree that they were willing to cooperate with the NPS, the three largest operators in the Redwood Creek watershed—Arcata, Simpson, and Georgia-Pacific—did so based on their own ideas about what kinds of harvesting practices would help or hurt in-park resources. For instance when Georgia-Pacific informed the Park Service in 1971 that it intended to clear-cut along Bridge Creek and the Emerald Mile, within the proposed Buffer Zone and right up to the park's southwestern boundaries, the company argued that doing so would decrease the potential for "slides and erosion." According to the company's forestry experts, the "large old growth heavy timber should be removed" so that a dense belt of new growth could take its place and provide adjacent park lands with better protection from erosion."[76]

Such views broadly reflected the timber industry's approach to resource protection in the Redwood Creek basin, but the three main landholders did not operate in unison. Arcata

and Simpson generally proved more willing and able than Georgia-Pacific to abide by NPS requests to alter or refrain from timber harvesting in certain areas, but none of the companies could agree on a common set of guidelines that should hold for all stakeholders. In an effort to engage the specific concerns of each company, Superintendent Davis traveled frequently to Seattle, Portland, Eureka, and points in-between to meet with timber company executives and establish common points of agreement. While these efforts helped create trust between the park and its corporate neighbors, it was not enough to overcome the delays associated with the Master Plan and the slow movement toward a comprehensive agreement with the three timber companies. Unable to place operations on hold indefinitely and unsure of their future access to old-growth redwood forest (given the possibility that advocates for park expansion might prove successful), timber companies started cutting at unprecedented rates in the Lower Redwood and Mill creek watersheds.[77]

### THE FAILED COOPERATIVE AGREEMENTS OF 1974

Lack of resolution proved untenable in the long run, as growing public alarm over the rate and scale of clear-cuts in the Redwood Creek drainage and pending changes in California's forest practices law pushed industry representatives to meet with park staff and hammer out a comprehensive set of agreements in 1974. These involved lands owned by Arcata, Simpson, and Louisiana-Pacific (which had recently acquired the holdings of Georgia-Pacific), and covered the Redwood Creek watershed up to and including the tributary watershed of Lacks Creek. Within this area, timber-harvesting guidelines fell within four basic categories: harvesting within an 800-foot Buffer Zone around park lands; streamside harvesting; critical or special zone harvesting; and roads.

In the Buffer Zone, logging would largely be restricted to alternate patches of 20-acre cuts, with a general moratorium on new road construction and a stipulation that a 75-foot-wide vegetative strip of noncommercial species be left standing immediately adjacent to park

boundaries. Streamside harvesting within the Buffer Zone could only utilize cable-yarding techniques, with the nearest landing at least 400 feet from the stream bank, and required leaving a 75-foot-wide vegetative strip along stream banks. Critical or special zone areas were outside the 800-foot-wide buffer area, but because of unstable soil conditions, concerns about windthrow, or steepness of slope, they fell under the same general guidelines applied to the Buffer Zone. Because roads, road construction, and culverts could significantly alter natural drainage patterns and contribute significantly to erosion and stream sediment loads, the cooperative agreements stipulated certain road-building techniques, restricted all roads from streamside areas and steep slopes, and required the use of certain gradients and surfacing materials depending on the conditions and seasonal use of the road.[78]

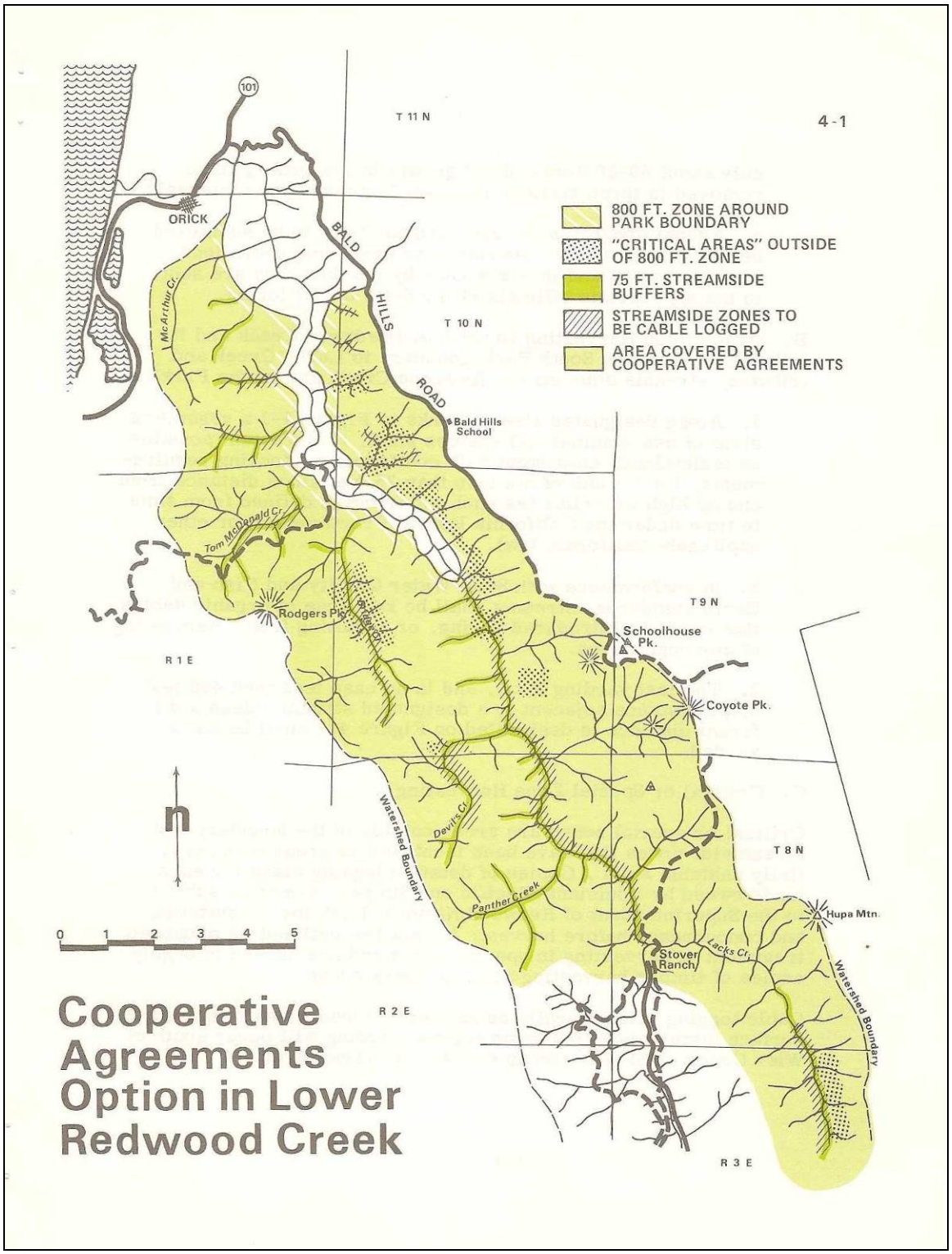


**Figure 3.3 Cooperative agreement options, ca. 1974.** Reprinted from *Environmental Assessment: Management Options for Redwood Creek*, *Redwood National Park*. (San Francisco: National Park Service, Western Regional Office, 1975), 4-1.

The cooperative agreements represented the fruits of many years of complex negotiations among park staff and industry representatives, as well as the intense concerns of a larger public, but the accomplishment proved hollow. Because the agreements were not legally binding, the Secretary of Interior proved reluctant to accept them as sufficient fulfillment of Section 3(e) in the Redwood National Park Act. Even before the Secretary tendered a final decision, however, three key events in 1975 effectively ended the effort to make cooperative agreements the cornerstone of the long-term management of the lower Redwood Creek watershed.

First, in a case not directly related to Redwood National Park, the California Supreme Court determined that the Z'Berg-Nejedly Forest Practices Act of 1973 was subject to the requirements of the California Environmental Quality Act. Thenceforward, all timber harvest plans in the state were required to prepare an environmental impact report (EIR). Even though Z'Berg-Nejedly was not as restrictive as some of the arrangements worked out between the NPS and North Coast timber operators, the EIR requirement—which the forestry industry bitterly opposed—effectively nullified the terms of the cooperative agreements. Second, the Department of the Interior also determined in 1975 that the expenditures for the initial acquisition of park lands had exceeded the $92 million limit established by Congress—so there would be no more money for easements or compensatory agreements without congressional review and reauthorization. Last, a lawsuit brought forward by the Sierra Club in 1973 charging the Department of the Interior with failure to fulfill the congressional mandate to protect the resources of RNP was decided in the Sierra Club's favor. In short, the court determined that the recently completed cooperative agreements were insufficient tools for park management and ordered the Park Service to develop a more effective and more aggressive approach to resource protection.[79]

## RESEARCH AND RESOURCE MANAGEMENT

The relations developed with the timber industry remained important in future years, and the cooperative agreements hammered out between 1969 and 1974 provided the framework for later negotiations, but their failure to produce tangible results—along with the rejection of the Master Plan—marked the end of a brief but frustrating era at RNP. Yet this period also contained the seeds of later successes and important new directions for Redwood as the park became an important locale for a new trend in the NPS toward science-based natural resource management. The growing role that science would play in park planning and administration—as well as in the formulation of another round of cooperative agreements—informed a philosophical shift within the NPS on how to address the difficulties that had so badly undermined the administration of RNP. Pushed by the decision in the Sierra Club suit and the findings of scientists working within and for Interior Department agencies, the Park Service gave up trying to compensate for timber harvesting near Redwood and instead proposed expansion as the best way to correct the deficiencies of an “impossible” park.

Like the early emphasis on cooperative agreements, science-based resource management placed RNP at the forefront of a larger transformation within the NPS that began in 1963—the same year the Park Service came forward with its proposal for a redwood park. That year, Secretary of the Interior Stewart Udall received two landmark reports that would push the Park Service into a new era of ecologically informed management strategies. Known respectively as the Leopold Report and the National Academy of Sciences Report, they made sustained critiques of the Park Service’s failure to support science-based management strategies throughout the national park system and faulted the agency’s long emphasis on accommodating tourism. Coming at the close of the ten-year Mission 66 Program—which celebrated the NPS’s fiftieth anniversary with a spate of road building and new visitor facilities—the two reports marked the beginning of a very new era for the NPS. The Leopold Report recommended “a major policy change” that would

“recognize the enormous complexity of ecologic communities and the diversity of management procedures required to preserve them.” To achieve this end, the authors stipulated that scientific research would have to “form the basis for all management programs”—which would have to be developed under the “full jurisdiction of biologically trained personnel of the Park Service.”[80]

The National Academy of Sciences Report was even more critical in its assessments and more thorough in its recommendations. Scientific research in the national park system, the authors noted, was “marked by expediency,” “lacked direction,” was “piecemeal” and “fragmented,” and repeatedly failed to garner the attention and budgetary support it deserved. Noting that the Park Service had “some confusion and uncertainty” on the purpose of parks, the authors defined national parks as “complex natural systems” that required a “broad ecological understanding and continuous flow of knowledge” to properly manage each unit’s “system of interrelated plants, animals and habitat (an ecosystem) in which the evolutionary processes will occur under such control and guidance as seems necessary.”[81] To carry out this new emphasis on ecosystem management, the report recommended the creation of a Science Division within the Park Service under the direction of a Chief Scientist, a professionalization of ecological management outside the current ranger positions, and an increase in annual funding for scientific work from less than 1 percent to a stable 10 percent of the total NPS budget.[82]

Changing a large and expanding bureaucracy is never a quick or easy task, and some longtime Park Service personnel did not welcome the tone or substance of the two reports. As Horace Albright quipped to then NPS director Hartzog, “Yellowstone was not created to protect an ‘ecosystem.’”[83] Yet the Leopold and National Academy Reports came amid growing national awareness and concern about environmental issues. This inspired a new appreciation for the national parks as bastions of environmental protection—a sentiment the Park Service increasingly promoted. And though the public continued to throng to parks, there was a growing sense that the job of the Park Service was—or should be—more about

protection and resource management and less about access and interpretation. The clearest confirmation of this new trend came a year before Redwood was established, when the Park Service created the Office of Natural Science Studies (ONSS) and placed it under the direction of A. Starker Leopold—who reported directly to Hartzog.[84]

Leopold's tenure did not last long, and the changes he had brought to the Park Service took a while to become a fully institutionalized part of the agency's larger ethos. Nevertheless, his efforts, and the trends they signified, had a direct impact on Redwood's early development—especially in the person of Steve Veirs. Before he came to Redwood in summer 1970 as the park's first research biologist, Veirs had worked for three years as the research coordinator for ONSS in Washington, DC. While this made him aware of most new ecological studies throughout the park system, Veirs took a special interest in Redwood when he received a copy of the Stone Report in spring 1969. He found problems with the report's analysis of natural disturbances, and took particular issue with Stone's use of Giant Sequoia fire records as an analog for coast redwoods. It was clear to Veirs that more knowledge was needed about the nature of the new park's primary resource and its evolutionary context. When he came to Redwood in the summer to help design the park's Buffer and Watershed Management program, Veirs told Superintendent Murdock of his concerns about the lack of sufficient scientific study in the Stone Report. Murdock encouraged him to do his own research on the fire history and ecology of coast redwoods. Veirs followed this advice and eventually left his position with ONSS to join the park staff full time in July 1970.[85]

As Veirs recalled, his first years at Redwood were "frustrating." The quick turnover in superintendents made consistency difficult, and the configuration of the park meant that a lot of valuable time was spent driving the length of the park and along its remote access roads. Relations with the timber industry and local communities were especially tense in the early years, and there was a good deal of fear that ecological studies of the park environment might lead to future restrictions on land use. Irresolution of the state parks issue also affected

his work. Although he could readily obtain permits to work on state park lands, and occasionally gained access to recently cut forests on private property to study tree rings, most of his work was limited to the various chunks of federal land in and around Redwood Creek.[86]

Despite these frustrations, Veirs saw his work at Redwood in the forefront of the trend toward more science-based management in the NPS. He also saw this form of management as the only real opportunity for long-term success—for the park and for the NPS. In a draft natural resource management plan he produced in summer 1974, Veirs described the Park Service's history of not sufficiently "basing the management of natural areas on sound scientific management. Only in the last decade have park managers begun to appreciate these modifications and take steps to restore natural conditions. This new awareness has resulted from a more general appreciation of modern ecology, the great costs often associated with unenlightened management of symptoms instead of causes and finally because of the valuable contributions of Park Service scientists and the scientific community at large."[87] Unfortunately, as Veirs noted, most units of the national park system still fell within three problem categories: parks that had no history of scientific research and no history of active resource management; active management unsupported by research; and, more recently, scientific research not followed by active management. So long as Redwood did not have a Master Plan, it was in danger of following the third scenario—unless more scientific study could be brought to bear on the unresolved planning issues.

Much of what threatened the Master Plan process, of course, was uncertainty about the effect that external conditions would have on in-park resources. To gain some certainty in these matters, as well as to chart a course for managing cutover lands within the park, Veirs embarked on a two-part research program: to develop an understanding of the ecology of old-growth redwood forests to better protect and perpetuate the park's primary resource; and to study the properties of second-growth forests in order to manage them through thinning and purposeful fire to better approximate old-growth conditions.[88] Veirs was only one

person, however, and his research program was too limited to provide definitive answers. And without a careful scientific analysis of conditions and land-use practices outside the park, there was simply no way to develop a comprehensive plan for the management of in-park resources.

### SCIENCE AND EXPANSION

The movement to correct this shortcoming initially came from outside the Park Service, but still paralleled the agency's growing commitment to science-based resource management. When the Sierra Club pulled away from the planning process in 1971 and increased its criticism of the NPS for not doing enough to protect the park from the effects of upstream and upslope logging in the Redwood Creek watershed, it set off a chain reaction that caused the NPS to sponsor new scientific research in the Redwood Creek watershed and ultimately led to park expansion in 1978. When the Sierra Club first went public with its concerns about the planning process in 1971, the Secretary of the Interior's office gave a perfunctory response: "The integrity of the park is in no danger at the present time as a result of logging activities on private lands outside the park."[89] Instead of dismissing the issue, however, Department of the Interior officials chose to support this statement by authorizing two new studies to cover areas outside the purview of Veirs's research program and to augment the findings of the Stone Report.

One study was contracted to Earth Satellite Corporation, which used aerial and satellite reconnaissance to develop a baseline overview of forest composition, logging operations, erosion, and slope slippage. The other study was assigned to Dr. Richard Curry, who worked on National Park and Bureau of Outdoor Recreation issues for Assistant Secretary of the Interior Nathaniel Reed. Contrary to the initial Interior claim that outside activities had no measurable impact on park resources, both reports concluded that outside logging had a considerable effect.

Released in early 1973, the Curry Task Report—which proved the more influential of the two in terms of Redwood's future development—was unequivocal in its conclusion: logging operations were "the greatest threat to the park," and it was "imperative that present land use practices be revised." Curry agreed with Stone that a buffer zone was necessary, but he also recommended park expansion or the implementation of stricter regulations on timber harvesting in critical areas upstream and upslope from the park's boundaries. The Department of the Interior did not release these recommendations to the public, in part because it did not wish to grapple with the legal or financial implications of Curry's recommendation. Assistant Secretary Reed instead dispatched Curry back to Redwood—armed with his findings—to help convince timber companies that it was in their long-term interest to negotiate cooperative agreements with the NPS. These efforts did bear fruit, and led directly to the comprehensive agreements that were signed in 1974, but Curry's return to Redwood also served as a kind of indirect admission that the Park Service had not—or could not—sufficiently mitigate against conditions outside the park.

Aware of the Curry team's report, the Sierra Club sued to make it public under the Freedom of Information Act. They wished to use the recommendations as evidence in their lawsuit against Interior and the NPS for not fulfilling the congressional mandate to "preserve significant examples of the primeval coastal redwood (*Sequoia sempervirens*) forests and the streams . . . with which they are associated." The Sierra Club believed the Curry Task Report would demonstrate their contention that Interior was aware of serious threats to park resources but failed to act on that knowledge. This second lawsuit will receive more attention in the following chapter, but the initial upshot for Redwood was a new wave of increased scientific research. In order to prove the Sierra Club wrong, and to make the case that no clear management actions at RNP had been taken because not enough actionable science had been conducted in the Redwood Creek watershed, the Department of the Interior authorized Dr. Richard Janda of the U.S. Geological Survey (USGS) to conduct a three-year study of sedimentation and erosion in Redwood Creek.

Beginning in autumn 1973, Janda brought in Michael Nolan, Deborah Harden, and other young scientists to establish a program for monitoring long-term channel stability in Redwood Creek. As Janda later reported, the purpose of this work was to measure and document "various geomorphic processes operating in the drainage basin of Redwood Creek, the impact of man upon those processes, and the impact of those processes on the resources of Redwood National Park."[90] Concerns about erosion had long been clouded by claims and counterclaims from environmentalists and the timber industry regarding the causes of sedimentation in Redwood Creek and its effects on salmonid populations and streamside forests like the Tall Trees Grove. The timber industry argued that unstable soils and steep slopes accounted for high natural erosion rates, which were not significantly impacted by current timber operations. Environmentalists complained that logging operations accounted for most of the sediments in the creek channels of the basin and worried that another disaster like the one that befell the Rockefeller Grove in 1955 was just a matter of time. Janda's job was to distinguish between natural and human-caused erosion and to relate the two in terms of the basin's overall ability to handle particular sediment loads.

Much of the USGS study project involved documenting and measuring channel responses to large winter storm events throughout the watershed by repeated measurements of the width and depth of channels and pools, rates of sedimentation and erosion, and the depth of soil deposition in flood zones. In three years, the USGS study produced numerous reports on a wide array of topics, including water chemistry and aquatic biology, erosion and runoff, sediment discharge, and stream channel buildup due to excess sedimentation and erosion.[91]

First brought in to provide geological expertise that the Park Service did not possess, the USGS presence at RNP soon became an institutionalized part of park management. As Jack Davis recalled, Janda's work allowed the park "to defend itself politically" and provided the basic rationale for park expansion.[92] Afterward, geological research became integral to the development and implementation of the Redwood Creek watershed restoration program.

What started as a three-year study to determine the effects of logging on in-park resources has provided decades of continuous data on erosion, sedimentation, reforestation, stream dynamics, and a host of other subjects—making Redwood Creek one of the most studied and best understood watersheds in the world. While this rich trove of data provided a base for watershed studies and forest restoration projects in other parts of the country and the world, the USGS-NPS partnership also became a model of interagency cooperation and science-based resource management that would set the course for the next chapters in the park's history.

---

[1] Henry James Vaux, Kenneth S. Fowler, and Janet Thornton, *Socio-Economic Data for the Redwood National Park* (Berkeley: School of Forestry and Conservation, California Agricultural Experiment Station, University of California, 1973), 25-33.
[2] Jack Hope, "Redwoods Forever! Redwoods Forever?" *Audubon Magazine*, March 1970, 78.
[3] Ibid., 79.
[4] "The Ravaged Environment," *Newsweek*, January 26, 1970, 30.
[5] Quotation is from Richard "Dick" Curry, interview by author, June 23, 2006.
[6] The cutting of trees in the Lady Bird Johnson Grove is described in a news release dated April 6, 1975, Administrative Files, K3415, "Press Releases," Redwood National and State Parks Archives, Orick, California (hereafter RNSP Archives).
[7] Joel Ray Dickinson, "The Creation of Redwood National Park: A Case Study in the Politics of Conservation" (PhD dissertation, University of Missouri, 1974), 543-81.
[8] John H. Davis, interview by author, November 6, 2006.
[9] Dickinson, "Creation of Redwood National Park," 543-81.
[10] Richard M. Leonard, "Mountaineer, Lawyer, Environmentalist," 1975, typed transcript of an interview conducted by Susan Schrepfer, on file at the Bancroft Library, University of California, Berkeley.
[11] For Mott's concerns at this time, and the manner in which irresolution of the state parks issue only furthered the interests of those who did not want to see the state parks become part of a larger Redwood National Park, see Dickinson, "Creation of Redwood National Park," 543-81.
[12] The reference to "politically possible" comes from Secretary of the Interior Stewart Udall, quoted in Daniel M. Ogden, Jr., "The Politics of Conservation: Establishing the Redwood National Park," in *Public Choice and Public Policy: Seven Cases in American Government*, ed. Robert S. Ross (Chicago: Markham Publishing Company, 1971), 82. The "impossible park" quotation comes from Cleve Pinnix, interview by author, June 23, 2006. Pinnix worked as a congressional staffer on the National Parks and Recreation Sub-Committee during the mid-1970s.
[13] U.S. Congress, House Report No. 1890, quoted in Gustav W. Muehlenhaupt et al., *Redwood National Park Management Consultation Report* (San Francisco: National Park Service, Western Region, 1974), 2.
[14] Donald M. Spalding, interview by Stephen R. Mark, April 2, 1991, transcribed by Darci Desharnais Gomolski, RNSP Library.
[15] An Act to Establish a Redwood National Park in the State of California, and for Other Purposes, Pub. L. No. 90-545; 16 U.S.C. 79c, 90th Cong., S.2515 (October 2, 1968).
[16] David Turello, Bruce Black, and Nelson Murdock, "Concept Paper for Proposed 'Buffer and Watershed Management'" (November 21, 1969), 2, Accession # RNSP 00084, Catalog # RNSP 27746, File 44, Agee Collection, RNSP Archives.
[17] Edward C. Stone et al., "An Analysis of the Buffers and the Watershed Management Required to Preserve the Redwood Forest and Associated Streams in the Redwood National Park," Stone and Associates, 1969, 3, RNSP Library.

[18] For Stone's work on behalf of the California Department of Parks and Recreation, see Edward C. Stone and Richard B. Vasey, "Preservation of Coast Redwood on Alluvial Flats," *Science* 159 (January 1968): 157-61.
[19] Quotation is from the full title of Stone, "Analysis of the Buffers and the Watershed Management."
[20] Ibid., 16-17.
[21] Quotation is from An Act to Establish a Redwood National Park.
[22] Stone's ideas are summarized in "Analysis of the Buffers and the Watershed Management," 88-89.
[23] Turello, Black, and Murdock, "Concept Paper for Proposed 'Buffer and Watershed Management,'" 9. Turello was the Planning Team "captain," and is listed as the lead author on the report, but he is probably the sole author of the text. Writing such a report was outside the purview of Bruce Black's duties and Superintendent Murdock would not have contributed directly to its drafting. Turello had replaced Frank Collins, an original member of the Planning Team. Bruce Black, interview by author, September 9, 2009.
[24] Turello, Black, and Murdock, "Concept Paper for Proposed 'Buffer and Watershed Management,'" 10.
[25] Gordon P. Robinson, "A Critique of an Analysis of the Buffers and the Watershed Management Required to Preserve the Redwood Forest and Associated Streams in the Redwood National Park," Sierra Club, 1969, File no. 44, Agee Collection, RNSP Library. Wayburn made his concerns known in summer and fall 1969 through a series of letters and reports to NPS officials in Washington, DC, and the Western Regional Office. For Wayburn quotation, see "Redwood National Park Master Plan (Preliminary Working Draft)," August 1971, 32, RNSP Library.
[26] Quotation is from Turello, Black, and Murdock, "Concept Paper for Proposed 'Buffer and Watershed Management,'" 6. While the Planning Team discussed the basic elements of the Robinson "Critique," it had no effect on the proposed resource management plan, which they described as being "accomplished through the use of innovative and dynamic management techniques that envision the use of man-directed substitutes for certain arrested natural processes." Comment on the proposed resources management plan is from the "Draft Environmental Statement, Proposed Master Plan, Redwood National Park, California," 9, Redwood National and State Parks Crescent Beach Education Center Library (hereafter CBEC).
[27] Turello, Black, and Murdock, "Concept Paper for Proposed 'Buffer and Watershed Management,'" 6.
[28] Richard West Sellars, *Preserving Nature in the National Parks: A History* (New Haven, CT: Yale University Press, 1997), 213-14.
[29] The term *interference* comes from Davis, who recalled the added frustration that Sierra Club concerns could bring to the basic administration of the park. Davis also credited the Sierra Club's tireless effort to expand the park as an ultimately welcome solution to many of the park's early problems (Davis interview). The greatest animosity toward the Sierra Club no doubt came from Ted Hatzimanolis, the park's resource management specialist. Hatzimanolis, who served as the point person in relations with the timber industry, disdained environmentalists, in general, and the Sierra Club, in particular. See Ted Hatzimanolis, *Forester at Klamath: Personal Memoirs* (Crescent City, CA, April 1993), 21-24, referenced in Kaaron Carver, "The Conflicting Visions and Versions of the Oral and Public History of Klamath" (master's thesis, California State University, Long Beach, 1994), 107-11.
[30] A concise acknowledgement of these concerns is stated in Davis to Director, Western Region [Joseph C. Rumburg, Jr.], July 20, 1971, and Davis to Director [Rumberg], October 22, 1971, both in File 41, Agee Collection, RNSP Library.
[31] Alfred Runte, *Yosemite: The Embattled Wilderness* (Lincoln: University of Nebraska Press, 1990), 202.
[32] Ibid., 202-6. Also "Redwood National Park General Management Plan Task Directive (Rough Draft No. 1)," July 27, 1977, 5-11, Folder 87, Agee Collection, RNSP Library. Quotation is from a statement on the *General Management Plan* in "Superintendent's Briefing Book, 1977," General/Unsorted Files, Folder "Redwood, 1977 Summary Statements and Backgrounders," NPS-Pacific West Regional Office Archives, Oakland, California (hereafter PWRO Archives). For those accustomed to the amount of time now given to the creation of a *General Management Plan*, the delays at Redwood may not seem out of the ordinary. Yet it is worth noting that the *GMP* for North Cascades National Park—established the same day as Redwood—was completed in 1970. At Redwood, the issues were far more complex and controversial, and thus more susceptible to the problems stemming from the Yosemite planning

process. For the North Cascades Master Plan, see David Louter, *Contested Terrain: North Cascades National Park Service Complex: An Administrative History* (Seattle: National Park Service, 1998), 68.
[33] *Draft Master Plan*, 33.
[34] Ibid., 36.
[35] "Prologue," *Master Plan: Redwood National Park*, *California* (Denver: U.S. Department of the Interior, National Park Service, Denver Service Center, 1973).
[36] "Turello, Black, and Murdock, "Concept Paper for Proposed 'Buffer and Watershed Management,'" 1, 5a.
[37] *General Management Plan* (*GMP*), "Task Directive (Rough Draft No. 1)," 5-11; and GMP Statement in "Superintendent's Briefing Book, 1977."
[38] Turello, Black, and Murdock, "Concept Paper for Proposed 'Buffer and Watershed Management,'" 8.
[39] Redwood National Park, *Master Plan: Environmental Impact Statement*, 6.
[40] *Master Plan*, 14, 18. The history of sea exploration was an important theme in Bearss, *History Basic Data*.
[41] Ibid., 9-13.
[42] Wayburn made this exact argument early in the planning process (*Draft Master Plan*, 32).
[43] GMP, "Task Directive (Rough Draft #1)," 5-6; and GMP Statement in "Superintendent's Briefing Book, 1977."
[44] *Master Plan*, 4.
[45] National Environmental Policy Act (1969), Pub. L. No. 91-190, 42 U.S.C. 4321-4347, 91st Cong., S. 1075 (January 1, 1970), Section 102(2)(C).
[46] "Superintendent's Briefing Book, 1977." The *Master Plan* officially weighed in at fifty-seven pages, but much of this included illustrations, appendices, and references. The plan itself only comprised twenty-two pages of text—and much of that was framed in oversized margins and trimmed with illustrations.
[47] Quotation is from handwritten margin note by Regional Superintendent Howard H. Chapman in response to recommendations in Muehlenhaupt et al., *Redwood National Park Management Consultation Report*.
[48] These accomplishments are broadly summarized in Muehlenhaupt et al., *Redwood National Park Management Consultation Report* and the "Superintendent's Briefing Book, 1977." They are also chronicled throughout the "Press Releases" files in the RNSP Archives. Historical, archaeological, and natural resource inventories include Bearss, *History Basic Data*; Michael J. Moratto, *An Archeological Overview of Redwood National Park*, *Publications in Anthropology (Western Archeological Center)*, No. 8 (Tucson: Cultural Resources Management Division, Western Archeological Center, National Park Service, 1973); Theologue F. Hatzimanolis, *A Definitive Land Ownership Study*, *Redwood Creek Hydrologic Unit* (1972), Stephen Veirs, *Draft Natural Resource Management Plan* (1974); and *Environmental Assessment: Management Options for the Redwood Creek Corridor*, *Redwood National Park* (San Francisco: Western Regional Office, National Park Service, 1975).
[49] "Redwood Park in California Enters First Year," *Western Conservation Journal* 26, no. 3 (May-June-July 1969): 56-57; and "Superintendent's Briefing Book, 1977." Constructed by the Civilian Conservation Corps in 1941, the YREF building is now used by the Yurok Tribe. See Kenneth N. Boe, "Yurok Redwood Experimental Forest," unpublished historical sketch, 1983, http://www.fs.fed.us/psw/publications/4351/boe.pdf (accessed October 9, 2007); and Pamela A. Conners, *A History of the Six Rivers National Forest: Commemorating the First 50 Years* (Eureka: U.S. Department of Agriculture, Forest Service, Pacific Southwest Region, 1998), 136-39.
[50] In 1974, RNP was also in the middle of a $1,474,464, five-year construction program that included the building of the new headquarters, roads, trails, parking areas, and work facilities. "Superintendent's Briefing Book, 1977"; Muehlenhaupt et al., *Redwood National Park Management Consultation Report*, Appendix A.
[51] These goals are presented in "Statement for Management: Redwood National Park" (1976), 32-33, RNSP Library. For specific projects, see news releases dated June 18, 1969; June 15 and August 25, 1970; May 21 and June 29, 1971; January 17, June 9, September 7, 27, 1972; August 1, 31 1973; September 6, 1974; and February 10, 1975, all in K3415, "Press Releases," RNSP Archives.
[52] Quotation is from Muehlenhaupt et al., *Redwood National Park Management Consultation Report*, 17.
[53] Ibid., 13-21.

[54] September 8, 1975, press release, K3415, "Press Releases," RNSP Archives.
[55] Muehlenhaupt et al., *Redwood National Park Management Consultation Report*, 6.
[56] Ibid., 6-13
[57] An Act to Establish a Redwood National Park.
[58] Quotation is from George Von der Lippe in Muehlenhaupt et al., *Redwood National Park Management Consultation Report*, 9.
[59] An Act to Establish a Redwood National Park.
[60] Quotation is from "Prologue," *Master Plan*. The same wording is used in the "Prologue" to the 1971 *Draft Master Plan*.
[61] Albright quotation comes from a reminiscence by Spalding, interview by Steven Mark. The use of terms like *park worthy*, *unimpaired*, and *national park standards* were common when Albright oversaw the growth of the NPS in the 1920s. For a concise overview of these matters, see Bruce M. Kilgore, "Forty Years Defending Parks," *National Parks Magazine* 33 (May 1959): 13-16.
[62] "Outdoor Recreation for America— ORRRC Report, 1962," in Lary M. Dilsaver ed., *America's National Park System: The Critical Documents* (Lanham, Md.: Rowman and Littlefield Publishers, 1994), http://www.nps.gov/history/history/online_books/anps/anps_5d.htm (accessed October 18, 2007).
[63] "Wild and Scenic Rivers Act, 1968" in ibid.,, http://www.nps.gov/history/history/online_books/anps/anps_6f.htm ; and "National Tails System Act, 1968," in ibid.,, http://www.nps.gov/history/history/online_books/anps/anps_6g.htm, (accessed October 18, 2007).
[64] North Cascades is especially illustrative since part of the Park Service complex was designated as wilderness and part as a national recreation area (Louter, *Contested Terrain*, 59-60). For distinctions between Recreational Areas, Historic Areas, and Natural Areas, see "Administrative Policies for Recreation Areas, 1968," in Dilsaver ed., *America's National Park System*, http://www.nps.gov/history/history/online_books/anps/anps_6h.htm; "Administrative Policies for Historic Areas, 1968," in ibid.,, http://www.nps.gov/history/history/online_books/anps/anps_6i.htm; and "Administrative Policies for Natural Areas, 1968," in ibid.,, http://www.nps.gov/history/history/online_books/anps/anps_6j.htm, (accessed October 18, 2007).
[65] William L. Bowen, Regional Director to W. B. Carter, Chairman, State Board of Forestry, April 4, 1969, File 40, Agee Collection, RNSP Library.
[66] John H. Davis to Director, Western Region, memorandum on Buffer Zone Meeting, July 20, 1971, and related correspondence in File 41, Agee Collection, RNSP Library.
[67] Quotation on Murdock from Davis interview. Bruce Black, who knew Murdock since both were rangers at Sequoia and Kings Canyon National Park in the 1940s, described Murdock as "the perfect person for the job. To him, everybody was a friend" (Black interview).
[68] Davis, "Memorandum," and related correspondence; Stephen D. Veirs, Jr., interview by author, June 20, 2006.
[69] James K. Agee, interview by author, June 27, 2006; Veirs interview; August 27, 1974, press release, K3415, "Press Releases," RNSP Archives; and Conners, "History of Six Rivers," 137-39.
[70] Hatzimanolis, *Forester at Klamath*, 21-24, cited in Carver, "Conflicting Visions," 107-11.
[71] Ibid.
[72] Davis to Assistant Director, Park Management, WASO, April 2, 1971, File 384, Agee Collection, RNSP Library. See also Veirs and Agee interviews.
[73] Yarding refers to the movement of a felled tree from a slash pile to a landing or other storage site, where it is transported by truck, rail, or water to a mill. Tractor yarding involves the use of a tractor to drag one or more fallen trees across the ground. Cable yarding brings felled trees to a landing area by cable leads and a winching system.
[74] These negotiations are extensively documented in correspondence and memoranda dating from 1969–1974 that James Agee compiled in January 1978; Files 40-42, Agee Collection, RNSP Library. Also see Susan R. Schrepfer, *The Fight to Save the Redwoods: A History of Environmental Reform, 1917–1978* (Madison: University of Wisconsin Press, 1983), 188-89.
[75] Davis interview. The specter of eminent domain and the Redwood National Park Act's stipulation that the Secretary of the Interior could adjust the park's boundaries to better protect its existing

resources may have loomed as a potential threat against any intransigence on the part of the timber industry, but it was a distant one at best.

[76] Quoted in Schrepfer, *Fight to Save the Redwoods*, 188. Also see Correspondence and Memoranda, 1969–1974, Files 40-42, Agee Collection, RNSP Library.

[77] Davis interview. Also see Correspondence and Memoranda, 1969–1974, Files 40-42, Agee Collection, RNSP Library.

[78] Milton Kolipinski et al., "Status of Natural Resources in Redwood Creek Basin, Redwood National Park: A Report to the Director of the National Park Service from a Scientific Evaluation Team," December 10, 1975, http://www.humboldt.edu/~rrz7001/pubs/Kolipinski.pdf (accessed October 16, 2006). Also see Correspondence and Memoranda, 1969–1974, Files 40-42, Agee Collection, RNSP Library.

[79] Schrepfer, *Fight to Save the Redwoods*, 193-97; Dale A. Hudson, "*Sierra Club v*. *Department of the Interior*: The Fight to Preserve the Redwood National Park," *Ecology Law Quarterly* 7 (1979): 781-859; Wayburn, *Your Land and Mine*, 165-66; Richard "Dick" Curry, interview by author, June 23, 2006; and Alastair R. Lucas, William A. Tilleman, and Elaine Lois Hughes, *Environmental Law and Policy*, 3rd ed. (Toronto: Emond Montgomery Publication, Limited, 2003), 497-99.

[80] Sellars, *Preserving Nature in the National Parks*, 214-15.

[81] Quoted in ibid., 215.

[82] Ibid., 215-16.

[83] Quoted in ibid., 204.

[84] Ibid., 226-27.

[85] Veirs Interview.

[86] Ibid.

[87] Veirs, *Draft Natural Resource Management Plan* [1974], 41, RNSP Library.

[88] Ibid., 6-8.

[89] Quoted in Schrepfer, *Fight to Save the Redwoods*, 189.

[90] Richard Janda, "Testimony Prepared for Presentation in San Francisco, California on September 18, 1976 at the Subcommittee on Conservation, Energy, and Natural Resources of the U.S. House of Representatives Committee on Government Operations' Public Hearing Concerning the Special Need for Federal Action to Preserve and Protect the Resources of Redwood National Park" (Menlo Park: U.S. Departmentof the Interior, Geological Survey, September 1976), 1. In written comments on the final draft Administrative History, Mary Ann Madej decribed Nolan and Harden as real "workhorses throughout the 1970's."

[91] Summary examples of this work include Janda et al., "Watershed Conditions in the Drainage Basin of Redwood Creek, Humboldt County, California as of 1973," U.S. Geological Survey, Menlo Park, CA, October 1975; Janda, Nolan, and Harden, "Graphic and Tabular Summaries of Water and Suspended-Sediment Discharge During Eight Months of Synoptic Storm Sampling in the Lower Drainage Basin of Redwood Creek, Humboldt County, California," U.S. Geological Survey, Menlo Park, CA, 1975; Janda, "Recent Man-Induced Modifications of the Physical Resources of the Redwood Creek Unit of Redwood National Park, California, and the Processes Responsible for Those Modifications," U.S. Geological Survey, Menlo Park, 1975; and Nolan, Harden, and Janda, "Graphic and Tabular Summaries of Recent Changes in Stream-Channel Cross Sections for Redwood Creek and Selected Tributaries, Humboldt County, California," U.S. Geological Survey, Menlo Park, CA, 1976.

[92] Davis interview.

# Chapter Four

## EXPANDING REDWOOD NATIONAL PARK, 1976–1980

After spending most of the day cooped up in a meeting room at the Louisiana-Pacific Mill near Big Lagoon, James Agee stepped outside to clear his mind and take in the air. “It was a day I’ll always remember,” Agee recalled many years later; a glorious, crystal-clear afternoon in late October 1976 that marked the end of two months of closed-door negotiations on a final set of timber harvest review plans. Known as the “Redwood Agreements,” these represented the culmination of the National Park Service’s long effort to develop a set of binding cooperative agreements with the timber industry for logging operations in the Redwood Creek drainage. Even the weather seemed to provide a sort of benediction on the accomplishment.[1]

The impetus for this last round of negotiations had come the previous spring, when the Department of Justice threatened legal action against the timber industry to adopt National Park Service (NPS) guidelines for timber harvests in the lower half of the Redwood Creek watershed. Lumber companies countered with a set of less stringent recommendations, convinced that legal precedent was on their side and secure in the support of allies within President Gerald Ford’s administration. Their confidence was nevertheless undermined by growing public concern about logging near the park, which found ample expression in summer 1976 at a well-publicized hearing on forest management and the Redwood National Park before the Conservation, Energy, and Natural Resources Subcommittee of the House Committee on Government Operation.[2]

Within the context of this legal standoff and a brewing public controversy, the Park Service and timber representatives came together to negotiate the Redwood Agreements in September and October, and it was with a mixture of satisfaction and exhaustion that Agee stepped outside the Louisiana-Pacific offices “to refresh and shed the stress.” The final items

had been determined and agreed upon, and it was now time to turn everything over to the Department of Justice and timber company attorneys to draw up the formal documents.[3]

Agee, who served as the Regional Forest Ecologist for the NPS, stood with a few others commenting on the remarkable weather. After a while, they all noticed a small figure at the far end of the access road to the mill offices. Curious, they watched and wondered aloud about who or what it could be. The clear dry air made it hard to judge distance, and it took a while to realize that the figure was a person racing toward them. “We seemed to watch this guy forever,” Agee recalled, “as he came running down the road, slowly getting closer, closer, and closer.” Eventually they could hear him shouting and saw that he was waving a paper over his head. He had rushed down to the meeting site to announce that the Park Service had just made a formal proposal to expand Redwood National Park (RNP).[4] The timber company representatives suddenly looked at Agee with absolute distrust. Either he had strung them along with a lie or, if they believed his protests that he was as surprised by the news as they were, he was so far out of the decision-making loop that he had no business negotiating with them. Agee was genuinely surprised by the news, and like everyone else he felt that much of the hard work over the past few months had all been for naught.[5]

The surprise that Agee and the timber company representatives felt on that brilliant October day dramatically illustrates a number of important points. First, expansion clearly represented a break with past administrative policy and marked a very new direction for the park. Before fall 1976, park superintendents and staff did not operate under the expectation that Redwood would ever be enlarged. They understood their task as a matter of compensating for rather than opposing or correcting Redwood’s odd boundaries. The issue of expansion had been raised by environmentalists and their allies in Congress over the past few years, and North Coast timber interests were concerned enough in the issue by April 1975 to put out a pamphlet entitled *Proposed Expansion of the Redwood National Park: The Industry’s View*. Neither the Department of the Interior nor the NPS viewed expansion as a

viable management option for RNP at the time, however, and Agee had authored a draft report for the NPS Western Regional Office entitled “Redwood Creek Management Problem: An Optimal Solution” in October 1975 that recommended a mix of cooperative agreements, rehabilitation, and fee-simple acquisition of 150-foot-wide streamside buffers.[6] The 1968 boundaries may have been a proverbial “sow’s ear,” but RNP officials were committed to making it into the best purse they could.[7]

The sudden prospect of expansion changed the attitude and approach of park administration and launched Redwood into a new realm of planning and management. Yet the expansion of RNP was neither a complete nor an immediate break with the past. The idea of expansion received some consideration during the original Master Plan process, albeit as a sort of straw man that highlighted what park planners viewed as a more plausible program of park management. At best, park expansion was an impossible ideal. one that was too expensive and too politically unfeasible to entertain seriously. Once the long dismissed ideal suddenly seemed possible, however, it tended to augment more than it superseded established management strategies.

Park expansion would eventually mark a new era in the history of RNP, but the new era did not suddenly begin—and the old era end—in March 1978 with passage of the Redwood National Park Expansion Act. Worth noting is that the agreements Agee helped finalize in October were officially signed on November 8, 1976—just one week after presidential candidate Jimmy Carter told an election-eve audience that he advocated “immediate action . . . to protect the Park and the Redwoods from further jeopardy.”[8] Company executives no doubt believed that signing the Redwood Agreements was still in their best interests—as a good-faith gesture that might curtail or even prevent a large park expansion bill. The NPS viewed the Redwood Agreements in a similar manner; despite the agency’s official commitment toward expansion, no one in the Park Service believed that enlarging RNP would end the long-standing necessity for cooperation with timber companies or that all the work that went into the Redwood Agreements would have only short-term

results. On this last count, park officials were right. When the expansion act passed some fifteen months later, the 1976 Redwood Agreements became the basis for continued relations between RNP and timber companies operating in the Redwood Creek drainage and adjacent to other areas of the park.

The period between 1976 and 1980 marks an important transition for RNP that led to the resolution of old, seemingly intractable problems and set the basic course for park management over the next decade and a half. In the process, RNP maintained its reputation as a precedent-setting park: the park's cooperative approaches to resource management were adapted to new conditions; nascent efforts in science-based resource management became a full-fledged centerpiece of park administration; and RNP completed one of the Park Service's first new General Management Plans. This era also brought forth a final decision on the rerouting and upgrading of U.S. Highway 101 around Prairie Creek Redwoods State Park and—with the funding that came with expansion—saw a dramatic increase in park budgets for facilities development and staffing. These four years also required park officials to engage older, unresolved issues with surrounding communities—most notably the concerns of local Native American groups as well as the newly inflamed anger and fear of displaced timber workers. Redwood benefited from some important successes in these matters, but other long-standing issues did not reach any kind of resolution. The matter of national and state park integration, for instance, became even more problematic, which only further complicated efforts to develop a coherent visitor experience.

### A Landmark Environmental Law and the Push for Expansion

Even if expansion marked a significant moment in Redwood's history, it was an issue as old as the park itself. At the dedication ceremonies in November 1968, the Sierra Club was already talking to the press about a new campaign to expand "the Worm" by adding at least 20,000 more acres of the Redwood Creek drainage to the park.[9] A few months later,

members of the new 91st Congress—still smarting from Representative Wayne Aspinall's last-minute rewriting of the RNP bill—introduced legislation to incorporate Skunk Cabbage Creek, the Bald Hills, and the Emerald Mile into the southern portions of the park. Similar motions came forward in subsequent years, but so long as Aspinall remained chair of the Interior and Insular Affairs Committee and the Nixon and Ford administrations sought to protect their allies in the timber industry, no new bills related to RNP came to the floor of the House.[10] This impasse reflected the same controversies that defined the 1968 Redwood bill, but it also demonstrated the continuing vitality of the original park movement, which grew rather than diminished in the early 1970s as Skunk Cabbage Creek and other areas around the southern portions of the park were clear-cut.

Although an abiding congressional interest in RNP, combined with a growing popular concern about logging and old-growth forests, was not enough to bring about park expansion at this time, it did lay the groundwork for an important precedent in environmental law that eventually forced Congress into decisive action. The trigger came in May 1971, when the Senate Interior and Insular Affairs Committee opened hearings on perceived problems at Redwood National Park, with particular attention given to the possible consequences of accelerated logging in the lower Redwood Creek drainage. To reassure the senators that their concerns were unwarranted, the Department of the Interior eventually commissioned the studies by the Earth Satellite Corporation and the Curry Task Force noted in the previous chapter.

Even while the studies were still underway, statements from Interior and the White House made it clear that no action would be forthcoming on the concerns raised in the Senate. On September 16, 1972, Interior Secretary Rogers C. B. Morton announced in a news conference that budgetary restraints and difficulties with Redwood's planning process made it impossible to develop a program for additional park protection. Four months later, President Richard M. Nixon proposed extensive budget cuts across the federal government that significantly reduced potential funding for resource protection at RNP. By March 1973, in

hearings before the House Subcommittee on National Parks and Recreation, it became stated policy that the federal government would not acquire interest in buffer areas surrounding Redwood—let alone add new acreage to the park.[11] In short, Secretary Morton preemptively announced that the studies commissioned by the Department of the Interior would have no bearing on policy—regardless of their conclusions.

The Sierra Club and other environmental groups viewed this as a formal abrogation of Interior's obligation to "afford as full protection as is reasonably possible to the timber, soil and streams" of RNP.[12] When Secretary Morton buried the findings of the Curry Report, which environmentalists rightly expected would undermine the department's sanguine assessment of logging near the park, the Sierra Club's newly formed Legal Defense Fund sued for public release of the document under the Freedom of Information Act. Interior complied with the demand even before the case was settled, though the Whitehouse redacted Curry's final recommendations. These could easily be inferred from the rest of the document, however, which provided the evidence for a follow up lawsuit by the Sierra Club.[13]

In the new case of *Sierra Club v*. *Department of the Interior et al*., the plaintiff charged the federal government with failing to act as a guardian of the public trust. As former Sierra Club president Edgar Wayburn recalls, this was a radical new interpretation of environmental law: "While federal agencies had been sued in the past for what they had done, never had an agency been sued for what it had *not* done."[14] In effect, the Sierra Club charged Interior with willful neglect in its administration of RNP. Judge William T. Sweigert of the U.S. District Court for Northern California agreed: by not acting on the conclusions of its own studies on the need for greater park protection, Secretary Morton and the Department of the Interior "unreasonably, arbitrarily, and in abuse of discretion [had] failed, refused and neglected to take steps to exercise and perform duties imposed upon them." On July 16, 1975, Sweigert gave Interior just five months to rectify the situation and fulfill its obligations at Redwood.[15]

In the wake of Sweigert's ruling, the NPS and U.S. Geological Survey (USGS) jointly released a set of newly completed studies by Dr. Richard Janda on the effects of commercial logging in the Redwood Creek drainage. Janda noted that the recent timber harvest practices mandated by the 1973 Forest Practices Act would, by themselves, cause less erosion and sedimentation than the kind of logging that was typical along the North Coast in the 1950s and 1960s. Yet his research made clear that the Redwood Creek watershed had been so compromised by earlier logging operations that it could not handle the effects of ongoing harvests. While most of the erosion, sedimentation, and flooding that occurred within the watershed came from previously logged over areas, the threats they posed to the national park were significantly increased—and might even be accelerated—by current and expected timber harvests.[16] With Janda's data, and in light of the Sierra Club lawsuit, the Park Service redoubled its efforts to establish cooperative agreements with the timber industry. In addition, the NPS advocated for a voluntary moratorium on nearby logging operations until possible legal or legislative actions could establish protective zones around the park and regulate logging in sensitive upstream areas.[17]

When Judge Sweigert evaluated these new developments, he concluded that Interior and the NPS had responded in good faith to his earlier directive and were doing all they could to protect the park—within the mandates of the Redwood National Park Act. He consequently dismissed the Sierra Club case against Interior, but in doing so, he made it clear that the problems which engendered the lawsuit had not gone away. Rather, they had been created—and would have to be resolved—by Congress.[18]

## REDWOODS AND POLITICS

Concurrent with the Sierra Club lawsuit and the Park Service's efforts to comply with Judge Sweigert's directives, the state of California initiated hearings on new environmental regulations for the redwood logging industry. At issue were a number of competing claims

about the effects these regulations would have on the North Coast economy, the long-term environmental health of its forests, and conditions within the national park and the three state parks.[19] All of this took place against the backdrop of a growing public outcry about the pace and scale of logging in the redwood belt and throughout the West. The most dramatic expression of these various concerns occurred when Lynette “Squeaky” Fromme, in protest of the continued logging of ancient redwoods, attempted to assassinate President Gerald Ford on September 5, 1975, as he made his way to a meeting in Sacramento with California governor Jerry Brown.[20] Controversy, court decisions, state hearings, and strange headlines (Fromme was a highly quotable follower of Charles Manson) all made old-growth redwoods and clear-cuts front-page news again and, along with high-profile campaigns by the Sierra Club, the Natural Resources Defense Council, and other environmentalist groups, “saving the redwoods” and expanding the national park became a campaign issue in the 1976 general election.

**Figure 4.1 Tall Trees Grove, 1976; photograph by Dave Van de Mark**. Images like this one, showing clear-cut logging just above the boundaries of "the Worm," inspired a new round of public concern for Redwood National Park. Source: Dave Van de Mark Photograph Collection, RNSP Archives.

Concerns about RNP did not significantly affect the outcome of the elections, and the membership of the new 95th Congress did not differ much from its predecessor. Yet during their reelection campaigns, many representatives had gone on record in support of

expanding the park, and the oversight hearings and tabled bills of the previous Congress soon gave way to actual legislation. This new movement benefited from Carter's election and his appointment of Cecil D. Andrus—a former governor of Idaho and strong supporter of environmentalist concerns—as Secretary of the Interior. However, the most significant change in Washington came with the assignment of new committee chairs. In the 1970s, House Committee chairs still wielded enormous political power, and could largely determine the decisions of their committees and dictate a bill's fate. Such was the case in 1968, when Representative Aspinall was able to single-handedly hold up and then gut the Redwood National Park bill, which in its original form had overwhelming bipartisan support. Aspinall was no longer a member of the House, however, and in January 1977, the chair of the Interior and Insular Affairs Committee went to Morris Udall—brother of former Secretary of the Interior Stewart Udall and a longtime advocate for national parks and conservation. While this marked an important change, the most significant new chair—at least in terms of Redwood National Park—came when Phillip Burton of San Francisco created and then took charge of the Subcommittee on National Parks and Insular Affairs. Representative Burton, with support and acquiescence from Udall, Andrus, and Carter, became the individual most responsible for Redwood's expansion.[21]

Burton had long favored a larger RNP, and had even cast one of the few dissenting votes against the 1968 act because he believed the resulting park was too small and insignificant. In ensuing years, he variously authored or cosponsored legislation to expand the park only to find it shot down in Aspinall's committee. The year 1977 thus represented Burton's first real chance to make good on this long-held concern, and at the very first meeting of his subcommittee, he dramatically declared that no legislation would move until a redwoods expansion bill was approved.[22] On this issue, Burton received considerable support from the Park Service in the person of Richard Curry—the leader of the Curry Task Force and now a newly appointed NPS associate director with direct responsibility for new

legislation. Curry was joined by Cleve Pinnix, a Burton staffer and former NPS ranger; together, the three men worked almost nonstop to craft a park expansion bill.

### "THINGS NO ONE HAS EVER THOUGHT POSSIBLE"

Burton's interest in Redwood hardly represented the concern of an environmentalist politician. Before assuming his new role as chair, he had lost the election for the Speakership of the House to Jim Wright of Texas by just one vote. A subcommittee in Interior was not an appropriate consolation prize, but Burton saw it as an opportunity to strengthen his position within the House. "Parks were good," biographer John Jacobs noted. "People liked them. He could deliver more. Members [of Congress] would owe him. That would give him power."[23] Burton was also driven by the desire to accomplish the unprecedented, and he saw his new position as a chance to "pull the environmental community into the late twentieth century." With a different agenda but a sense of importance that echoed the efforts of Redwood's first Planning Team, he wanted to "do things no one has ever thought possible."[24] Redwood was the obvious place to make his mark since public outcry, scientific study, and recent legal judgments all supported prompt and radical action. After months of almost constant work with Pinnix, Curry, and Sierra Club lobbyists John Amodio and Linda Billings, Burton crafted a landmark bill that Pinnix later described as "the most comprehensive" piece of legislation anyone had ever seen.[25]

To blunt industry criticism of a park expansion bill, and in recognition of the logging that had already occurred near Redwood, Burton initially considered a park that might include some logging within its boundaries. Curry, who had developed a close and often jovial working relationship with Burton, challenged him with the same kind of course, expletive-laden talk for which the Congressman was famous: "What the f**k do you want," Curry asked, "a park or a god damned recreation area?" Burton laughingly deferred to the younger man, saying that Curry could teach him about the national park system, he would

teach Curry about politics, and together they would make a “real park.”[26] Burton wanted a 74,000-acre expansion of the park that would have brought the protected acreage within the Redwood Creek drainage to essentially the 90,000-acre level that the Sierra Club had proposed in the mid-1960s. The Park Service was already on record with a 21,500-acre proposal that would have filled out “the Worm” and added blocks from the Skunk Cabbage, May, Boyes, and Lost Man creek drainages. In developing this proposal, the NPS had also considered—but decided against—a 48,000-acre addition to the park that Secretary Andrus and the Federal Council on Environmental Quality now preferred. Other options were also floated, but Burton and Andrus—with the support of the Save-the-Redwoods League (SRL), Sierra Club, National Wildlife Federation, Natural Resource Defense Council, Wilderness Society, and National Parks Association—soon agreed to cooperate on a 48,000-acre addition.

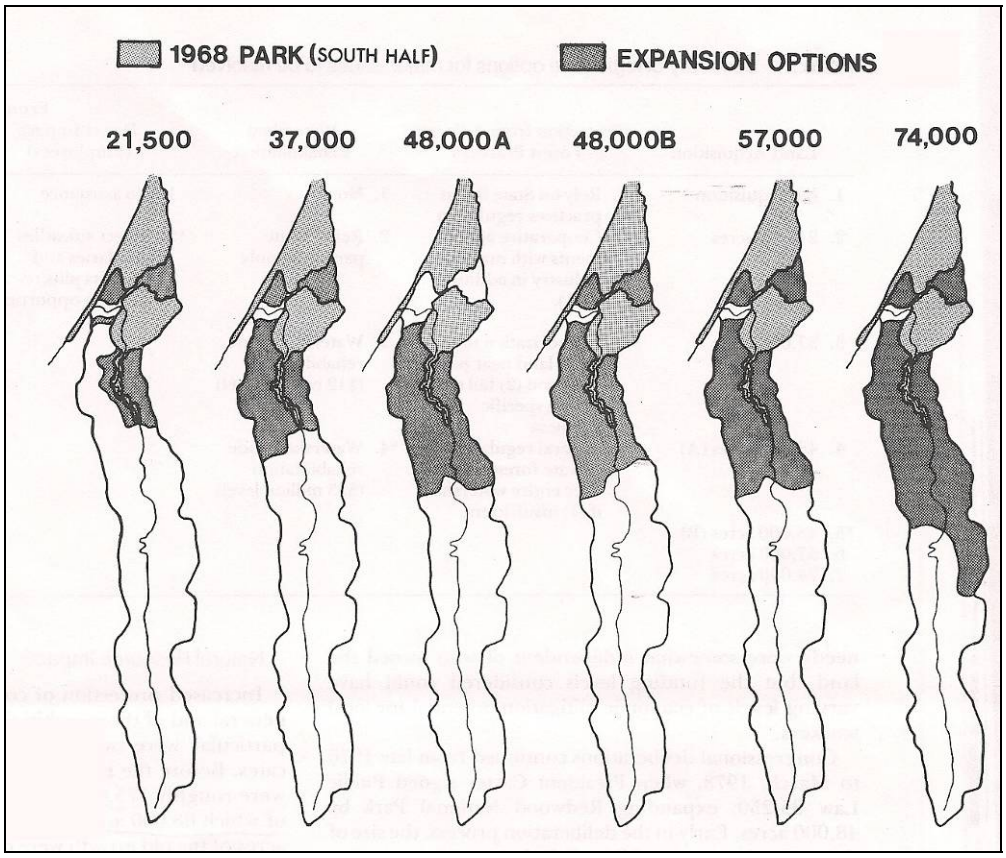

**Figure 4.2 Expansion proposals for Redwood National Park.** Reprinted from James K. Agee, "Issues and Impacts of Redwood National Park Expansion," *Environmental Management* 4 (September 1980): 414.

## THE REDWOOD NATIONAL PARK EXPANSION ACT OF 1978

With all of the national environmental groups in support of the same plan, and with the strong support of California governor Jerry Brown's administration, Burton managed to push through the park bill in little more than a year. From February 22, 1977, when Burton drafted his first resolution for park expansion, to March 27, 1978, when President Carter signed the Redwood National Park Expansion Act, Burton used his considerable political skill to shepherd his bill through committee hearings, public forums, meetings with administration officials, and conference committees. In the end, the resulting park boundaries closely resembled Burton's first conception. The expansion act took in the whole lower Redwood Creek watershed from ridgeline to ridgeline, adding 48,000 acres to the park—including 9,000 acres of old-growth forest. Upstream from the new southern boundary of the park, a 30,000-acre expanse of the middle watershed (basically, the difference between a 48,000- and a 74,000-acre park) was designated a special Park Protection Zone (PPZ). Park Service oversight on logging in the PPZ essentially recreated Burton's original intent to allow limited cutting within some portion of the park and provided a statutory basis for incorporating the basic principles of the 1976 Redwood Agreements into future park management.

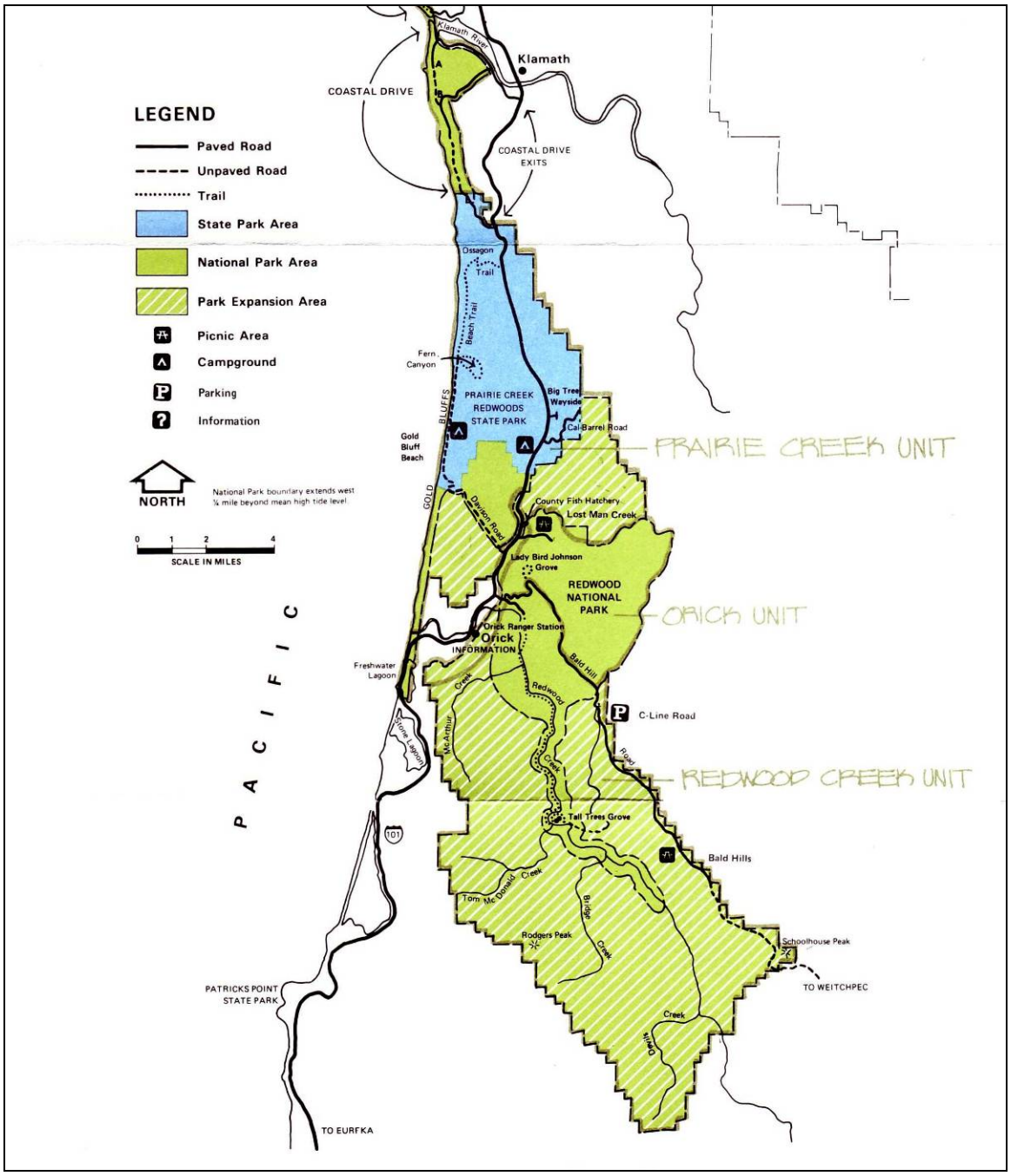


**Figure 4.3 Redwood National Park expansion, 1978.** Reprinted from *Springboard: Redwood National Park*, *December 1978* [Crescent City, Calif.]: US Department of the Interior, National Park Service, [1978], 4 (map detail).

The Redwood National Park Expansion Act essentially addressed two basic issues. On the one hand, it set out to unmistakably define congressional intent and correct what many had called the "impossible" boundaries of the original park.[27] These sentiments were

clearly expressed in the act's preamble: "In order to protect existing irreplaceable Redwood National Park resources from damaging upslope and upstream land uses, to provide a land base sufficient to insure preservation of significant examples of the coastal redwood in accordance with the original intent of Congress, and to *establish a more meaningful* Redwood National Park for the use and enjoyment of visitors."[28] The second purpose of the act aligned more closely with Burton's own political universe; namely, a soul-felt commitment to working-class interests and a personal desire to craft an extraordinary piece of legislation. Instead of simply compensating landowners for their property, the act also made generous accommodation for displaced forest industry workers and their broader contributions to the local economy. This part of the act garnered the support of national labor unions and helped undermine combined opposition from timber companies, fearful workers, and members of Congress concerned about the effects of park expansion on the area's faltering resource-dependent economic base.[29]

In the end, the expansion act had something for just about everyone. This basic legislative virtue overwhelmed any misgivings about the act's estimated price tag of $450 million, which was five times more than the amount provided in the original Redwood National Park Act. Because the $93 million allotted for land acquisition in 1968 eventually exceeded $200 million, no one really doubted that a similar dynamic would occur with expansion—yet the legislation passed the House 328-60 and the Senate by a margin of 63 to 26.[30]

Comprised of two distinct parts, Title I and Title II, the Redwood National Park Expansion Act of 1978 was an extremely long and wide-ranging piece of legislation; a testament to the energy and thoroughness of Burton as well as a reflection on the incomplete nature of the first Redwood National Park Act. Along with an explanation of the park's purpose and boundaries, Title I covered a series of "economic, silvicultural, environmental, and social factors" related to increasing the land base of the park and managing the Park Protection Zone. These included a careful outlining of the terms for land acquisition and

cooperative agreements with the timber industry as well as a $33 million authorization for the rehabilitation of cutover lands. Title I also dealt with the act's socioeconomic impacts by directing the Secretary of the Interior, in consultation with the secretaries of Labor, Commerce, and Agriculture, to contribute to the economies of Del Norte and Humboldt counties through preferential hiring programs, increased timber-harvest schedules in the Six Rivers National Forest, and designating $15 million of in-lieu tax relief to local governments for the loss of jobs and timber taxes. Because of the cost and complexity of the legislation, Title I also required the Park Service to furnish Congress with annual reports for the next ten years on the status of land acquisition and watershed rehabilitation, the mitigation of adverse economic impacts caused by the act, the hiring of affected workers by the NPS, and the development and implementation of a *General Management Plan* (*GMP*) for the park.[31]

Title II comprised eleven of the statute's twenty pages of text, and mainly detailed the terms of the $25 million Redwood Employee Protection Plan (REPP) to compensate and retrain loggers and mill workers. Along with the elements in Title I that called for the employment of displaced forest workers on park rehabilitation projects and provided funds to Del Norte and Humboldt counties for unemployment assistance, REPP proved the most controversial and—in terms of winning the support of organized labor—the most essential component of the expansion act.

Once the basic elements of REPP became public knowledge, it was attacked for being too broad in its definitions of affected workers and the amounts they would be compensated. When the CBS program *60 Minutes* ran a story on the subject in March 1979, it generated a heated response. As one viewer noted in a letter to his Congressman, "I can't believe my government would do such a stupid thing—pay a group of people so much money for doing nothing!"[32] William Kroger expressed the thoughts of many in an article for *Nation's Business* in which he quipped, "Never have so many given so much for so few."[33]

Whether it deserved such criticism, REPP had a mixed legacy. As of December 1988, the General Accounting Office concluded that REPP had spent about $104 million on

3,500 individuals—far more than the $25 million originally budgeted in the expansion act. Moreover, just 13 percent of these individuals enrolled in retraining—in part due to delays in implementing the program as well as from a lack of financial incentive to forego benefits for the risky venture of developing a new career.[34]

The REPP provisions of the Redwood National Park Expansion Act were extraordinary and new, but they were more unique than precedent setting. In his signing statement, President Carter noted his "serious concerns with the extraordinary worker protection provisions contained in H.R. 3813." Carter had no qualms about assisting "individuals and communities adversely affected by the park expansion," but he did not view their plight as significantly different from "all workers [throughout the country] who have lost their jobs through no fault of their own [and deserved to] be treated equally by the Federal Government. In the end Carter acquiesced, but with conditions: "While I am signing H.R. 3813 for the purpose of providing needed protection for Redwood National Park, this action in no way constitutes an endorsement by this administration of special worker benefits programs in future legislation."[35] This last sentiment has prevailed among federal policy makers ever since, especially as the actual costs of REPP continued to climb while the effects on the local economy proved difficult or impossible to assess.

## The Expansion Act: A New Mandate for the National Park Service

Even if the most novel aspect of Burton's legislation had no application beyond the North Coast, the Redwood National Park Expansion Act still marked an important shift for the Park Service as a whole. The seeds of this change lay In the case of *Sierra Club v*. *Department of the Interior et al*., which determined that Interior—in compliance with the National Environmental Policy Act (NEPA) and in its role as guardian of the public trust—must take all reasonable measures to anticipate, prevent, and actively mitigate against potential threats to parks and other protected units of the public domain. The expansion act codified this

interpretation and provided a key amendment to the 1916 Organic Act that first established the Park Service.

While the Organic Act originally gave national parks a dual purpose—namely, "to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same"—the Redwood National Park Expansion Act placed a greater emphasis on the first half of that original mandate.[36] As Congress put it in 1978, "The protection, management, and administration of [park] areas shall be conducted in light of the high public value and integrity of the national park system and shall not be exercised in derogation of the values and purposes for which these various areas have been established."[37] In the context of the expansion act, such "derogation" essentially referred to natural resource values and, as late historian Robin Winks observed, virtually all legal scholars and "commentators at the time and since have concluded that the 1978 provision added to the Park Service's mandate to protect ecological values."[38] In other words, the expansion act marked the culmination of what historians have called the Park Service's environmental or ecological shift away from the emphasis on visitor accommodation and recreational developments that characterized agency policy from the 1910s through the Mission 66 era and toward the vigorous protection of natural resources.[39]

The 1978 act also provided another, less remarked upon precedent for NPS efforts to address external environmental threats. The three main natural resource elements of the expansion act—boundary expansion, rehabilitation, and designation of the PPZ—all represented a profound extension of the original 1916 Park Service mandate, but expansion was not just a matter of conserving more scenery, natural objects, and wildlife. In the short run, Congress authorized the condemnation and purchase of 48,000 acres of largely cutover and inaccessible lands in order to better protect the resources within the preexisting boundaries of RNP. Acquiring lands that were intended almost entirely for rehabilitation and resource protection was perhaps the clearest possible expression of the new "ecological" emphasis within the National Park Service. However, carrying this emphasis to lands and activities beyond park boundaries (to the PPZ and the upper Redwood Creek watershed) as

Judge Sweigert had ruled, represented a physical expansion—and not just a clarification—of the NPS Organic Act of 1916. In short, expansion, rehabilitation, and cooperative management in the PPZ redefined RNP and marked a watershed moment in the history of the NPS.[40]

### A New Planning Model for a New Park

The concerted push for park expansion that began in late 1976 coincided with a new planning effort at RNP, which itself became part of a new planning model for the entire Park Service. In light of the problems that arose at Yosemite, Redwood, and other parks working to bring planning into compliance with NEPA standards, an NPS task force recommended in late 1974 that Master Plans be replaced with General Management Plans. The existing Master Plan model dated back to the 1930s, and its emphasis on visitor facilities development and new construction served through the Mission 66 era. It was not a sufficiently deliberative process, however, and it did not easily incorporate key stipulations of NEPA and the 1973 Endangered Species Act that sharply restricted the impacts that development projects could have on natural and cultural resources.[41] The task force's work resulted in the NPS *Planning Process Guideline* of 1978 (more commonly referred to as Director's Order 2), which delineated five benchmarks in the planning process: development of a statement for management; outline of planning requirements; identification of task directives; development of a *GMP*; and development of implementation plans.[42]

Before their widespread adoption throughout the national park system, these new guidelines were initially formulated and tested at a few parks in the Western Region, including RNP. The planning process at Redwood thus followed the basic tenets of Director's Order 2 even before it became the standard for the NPS as a whole.[43] By November 1976, the park already had an approved Statement for Management; and by July of the following year, the park planning team, led by Team Captain Terry Carlstrom from the Denver Service Center, had formulated a 100-page draft Task Directive.[44] When Director's Order 2 was

officially promulgated in July 1978, baseline information had been generated on natural resources, visitor usage, and cultural resources, the preliminaries for an environmental assessment were in full swing, and Redwood National Park was on target for completing a *GMP* that met the new standards within two years.[45]

The rapid and steady pace of planning at Redwood was partly the fortunate consequence of a steep learning curve. The planning process from 1969 through 1974 amply demonstrated the pitfalls of an overly conceptual approach—particularly one that tried to include and appease antagonistic interests from the very beginning. The 1974 planning task force recommendation initiated a deliberate and thorough procedure that kept park planners focused on key goals and set a specific time in the process for public comment. In the next few years, Park Service personnel at both the regional and individual park levels became increasingly familiar with the new direction in planning, and many of the same people who worked on the Redwood *GMP* had also worked on plans adopted at Crater Lake (1977), John Day Fossil Beds (1979), and Yosemite (1980). Along with these three other parks, Redwood thus became part of what historian Stephen Mark called a "prototype planning process" that developed the first comprehensive GMPs in the national park system.[46]

Planning was also aided greatly by the likelihood, and then eventuality, of park expansion. The Sierra Club, which had proved the most obstinate critic of the original Master Plan because it did not consider the possibility of park expansion, expressed no real qualms about the new GMP process. The timber industry also took little interest in the planning efforts at RNP, but instead focused its attention on Congress where the expansion bill was debated and amended. With policy disagreement and debate focused in Washington, DC, park planning centered on issues that remained independent of the final size and scope of the enlarged park.

As noted in the draft Task Directive of July 27, 1977, the unresolved issues that "continued to hinder implementation of the park's purpose" were primarily "related to in-park

natural resources management, . . . land rehabilitation, cultural resource management, development, and visitor use and interpretation." All of these "major issues" persisted in large part because the park never had an approved Master Plan. These would become the focus of the new planning effort, which developed around "a prescriptive land classification scheme and specific action programs related to visitor use, services, and interpretation; natural and cultural resource management; and development necessary to achieve those programs."[47]

"Land classification" and "action programs" were standard planning terms, and the four land management zones developed by the planning team mostly corresponded to new management standards then under adoption throughout the NPS. Nevertheless, Redwood's designated Natural, Historic, Park Development, and Special Use Zones corresponded to specific conditions at the park. The Natural Zone was understandably the largest and included two subzones: Outstanding Natural Features and Natural Environment. The first covered all of the old-growth forests and other coastal, riverine, and woodland areas not "substantially modified" by human use. In total, the Outstanding Natural Features subzone was made up of several areas that comprised 57,000 acres or 53 percent of the expanded park. While these areas contained the kinds of features for which the park had originally been established, approximately half of this subzone remained within the three California state parks—and so remained largely outside the purview of the NPS planning process.

The Natural Environment subzone covered 48,250 acres or 45 percent of the park, and basically included all of the cutover lands acquired by the federal government in 1968 and 1978. This subzone would attract the lion's share of park budget and staffing, and required a great deal of innovative work in watershed rehabilitation and forest restoration. From a planning perspective, however, this subzone represented a fairly straightforward task since Congress had mandated, funded, and broadly defined the park's "program for the rehabilitation of areas within and upstream from the park contributing significant sedimentation because of past logging disturbances and road conditions, and, to the extent

feasible, to reduce risk of damage to streamside areas adjacent to Redwood Creek and for other reasons."[48]

The Historic Zone was not a special planning challenge at Redwood, in part because it only comprised a small portion of the total park acreage—namely, a few buildings and noted archeological sites. More important, the original Redwood National Park Act and the expansion legislation placed special emphasis on natural resource management and protection. While not necessarily a secondary concern for park planners, cultural resource management did not garner the same level of funding or attention as other aspects of the *GMP*. For the most part, planners relied on standard language to describe the statutory responsibilities of the Park Service to study, protect, and interpret "the historical/cultural scene"—with active preservation or restoration of historic structures limited to a small number of sites listed in the National Register of Historic Places.[49] Within the new expansion area of the park, historical modifications to the landscape that related to recent logging or ranching fell under the heading of "nonconforming use." The few areas within this Natural Environment Subzone that possibly fit the criteria for historical significance would receive protection only when doing so was "compatible with the legislative intent to rehabilitate and protect the watershed;" otherwise, rehabilitation of all nonconforming use areas would proceed without restriction.[50]

Like the plan for the Historic Zone, planning for the Special Use Zone was also very straightforward. The primary concern involved existing federal, state, and county owned transportation rights-of-way on U.S. Highways 101 and 199, California State Highway 197, and the Bald Hills and Walker roads. The main change contemplated within this Zone involved the rerouting and upgrading of U.S. Highway 101, a still unresolved issue that predated the park's establishment. It did receive ample attention in the expansion act, however, and Congress directed the Secretary of the Interior, contingent on the state of California's designation of a new "right-of-way for a bypass highway around the eastern side of Prairie Creek Redwood State Park . . . , to acquire such lands or interests in lands as may

be necessary for such a highway and . . . [donate them] to the State of California for a new bypass highway." In this as in other matters, congressional action clarified and resolved an issue that had long clouded park management. Actual locating of the new highway corridor, conducting necessary environmental impact reports and developing mitigation plans for its construction were different matters altogether, but such concerns went well beyond the scope of the *GMP*.[51]

The issue that created the most challenges for park planners involved the Park Development Zone, which included four subzones: the Visitor Support Subzone (facilities related to visitor orientation and park interpretation); the Recreation Subzone (recreational developments like campgrounds, picnic areas, and parking); the Residential Subzone (employee housing); and the Access Circulation Subzone (park roads). All of these together only comprised 425 acres—less than 0.5 percent—of the park, yet development of any size or scale threatened to spark many of the controversies that had plagued park management over the past ten years.

### PLANNING FOR VISITOR USE

Developing park visitor facilities did not easily jibe with the "ecological shift" within the NPS, especially at RNP. Yet Park Service arguments for the establishment and subsequent expansion of Redwood had also involved vague promises and expectations that the park would become a tourist destination that would serve as the cornerstone for a new regional economy.[52] Understandably, local business interests expected the Park Service to construct ample visitor facilities to meet this promised influx of tourists, including more campgrounds, scenic overlooks, and byways, a large visitor center, and perhaps even a park lodge. Environmentalists took a very different view of such possibilities, which once again put the NPS within the same oppositional dynamic that shadowed planning efforts in the early 1970s.

In part because of this potential controversy, and as a consequence of the condition in the 1968 Establishment Act that had withheld funding for development until the completion of a Master Plan, visitor use proved the most challenging component of the new planning process. Of the nine special “Problems and Concerns” listed in the beginning of the “purposes and need for action” section of the Draft Environmental Statement, eight were directly related to planning and management in the Park Development Zone—and most of these were related to visitor use and recreation. As park planners described it, the visitor experience at RNP over the previous decade was comprehensive only in its many failures: the “pattern of federal and state land within the park” created “confusion in the minds of visitors; “incongruent land uses along U.S. Highways 101 and 199 [left] visitors bewildered and lacking a unified park experience;” the “mixture of commercial and visitor traffic on public roads creat[ed] hazards and access problems;” an incomplete and unconnected trail system; a lack of “information/orientation services normally associated with a national park;” an inability to meet “demand for vehicle, . . . primitive and walk-in campsites” during summer; and a “diversity of human activities on park beaches [resulting] in conflicts among various user groups.”[53]

All of these matters were holdovers from the pre-expansion era, but none was directly addressed by any language in the expansion act, and so they became central to the planning process as a whole. According to the new standards laid out in Director’s Order 2 , the Redwood Draft Environmental Statement presented four options for the management and development of park resources. Because Congress had expressly defined and funded key aspects of park management, there was almost no difference among the four alternatives—except for the portions of the *GMP* devoted to visitor use. This fact was most clearly reflected in the titles given to each option laid out in the Draft Environmental Statement: “no action” (Alternative A); “Extended Visits” (Alternative B); “Restructured Visitor Use” (Alternative C); and “Preferred” (Alternative D). The “no action” alternative would have left visitor access, camping, and facilities essentially unchanged except for a few upgrades to

existing buildings. Alternative B emphasized “the development of additional facilities and services within the park to permit longer visits and more opportunities for enjoying the park.” Alternative C involved somewhat less visitor facility development within the park and emphasized “closer interaction between the National Park Service and adjacent communities” to meet tourist needs outside the park.[54]

In truth, there was very little difference between Alternatives B and C. The only difference of note related to the proposed development of a recently clear-cut area on Skunk Cabbage Hill just north of Orick. Plan B called for development of an “activity site” (a small, site-specific interpretive center) with parking for 100 vehicles, 20 picnic sites, 50 walk-in and vehicle campsites, and 5.5 miles of trails. Alternative C offered a more scaled-down site with 30 parking spaces and 20 new primitive campsites, but the rest remained the same. Elsewhere in the Draft Environmental Statement, the differences between Plans B and C were negligible, as evidenced in the proposal for the May Creek Activity Center. This would have served as the primary visitor center for the park with 3,000 square feet of structures and 150 parking spaces. Plan A called for no such center, but Plans B and C were identical except for the latter’s addition of regular shuttle service to Fern Canyon, Cal-Barrel Road, Bald Hills Road, and Geneva Road on routes that would also remain open to private vehicles.[55]

Alternative D, the preferred plan that was eventually adopted, was a combination of B and C that called for activity centers at May Creek and Hiouchi Flat, and themed activity sites at Crescent Beach North and South and Lagoon Creek (“The Coast” theme), Mill Creek Campground (“Upland Redwoods” theme) and Skunk Cabbage Hill (“Redwoods to the Sea” theme). In regards to other concerns and problems in the Park Development Zone, seasonal employee housing remained in the park but all permanent employees were to be located in surrounding communities—thus diminishing the scale of development in the park and creating more connections among local residents and park employees. Maintenance and administrative facilities would remain separate, with the former centered on the old radar

base at Requa and the latter divided between park headquarters in Crescent City and a Resource Management Office in Orick that would oversee rehabilitation projects. Besides its proximity to the lower Redwood Creek watershed, an NPS facility in Orick also addressed a number of other concerns: like visitor accommodations, it would keep development of park-related facilities outside park boundaries; it appeased Humboldt County officials, who wished to see RNP commit personnel and capital in the county where most of the federal park lands were located; it cut down on the driving time required to manage the long narrow park from Crescent City; it would create a strong administrative presence halfway between Humboldt Bay and Crescent City; and—like the decision about permanent employee housing—it served as a good faith effort to bring park personnel into closer proximity to neighboring communities.[56]

Public response to the Preferred Alternative was generally favorable, though one commenter noted that a lack of any clear alternatives in the Draft Environmental Statement may have simply fostered a kind of disengaged acquiescence.[57] Federal and state agencies commended the proposed *GMP*, as did the Sierra Club and a host of environmental groups. Some offered suggestions for greater mitigation of visitor impacts, but these did not amount to broad attacks against the plan itself. Local commercial and political interests in Del Norte and Humboldt counties wished to see more tourist development and disparaged what they termed “environmental extremist positions,” but none suggested the plan was inherently flawed. For the most part, their concerns related to elements in the Preferred Alternative that involved the disposition of the three state parks. Planners did not address this issue except through vague assumptions about the future status of campgrounds and facilities at Prairie Creek Redwoods State Park.[58]

## REORGANIZING PARK ADMINISTRATION

Much like the new four-year planning process that ended in 1980 with the park's first *GMP*, Redwood underwent significant administrative changes over the same period that sought to resolve old issues and accommodate new conditions. This was especially true of resource management. As noted in the previous chapter, a 1974 *Management Consultant Report* recommended reevaluation and clarification of the responsibilities assigned to the research biologist, chief of Interpretation and Resource Management, and resources management specialist. As Superintendent George Von der Lippe acknowledged, some of the overlaps and ambiguities among these three components of natural resource management stemmed from professional and personality differences between Stephen Veirs (research biologist) and Ted Hatzimanolis (resource specialist). Part of the problem also reflected changes in the NPS ranger corps, which, along with traditional responsibilities for interpretation, visitor orientation, resource protection, and resource management, was increasingly involved in law enforcement and public safety. As the responsibilities of rangers multiplied, the Park Service as a whole started to place greater emphasis on scientific research and ecologically based resource management—and gave these responsibilities to university-trained scientists with advanced degrees. This was certainly the case at Redwood in the person of Veirs.[59]

All of these issues help explain the organizational structure that had taken shape at Redwood; they also explain why that organizational structure would not hold as the park embarked on a new planning process and then prepared for expansion. Like the failed Master Plan process and the awkward nature of Redwood's original boundaries, the park's administrative approach to resource management reflected a larger effort to engage multiple interests that were themselves undergoing significant transition. The result was less than satisfactory. Because resource management was the "highest priority at Redwood now and for many years to come," as the management consultants noted in their 1974 report, reorganizing this part of the park's organizational structure was critical.[60]

Superintendent Von der Lippe, in conjunction with park staff and with the support of Western Region director Howard H. Chapman and deputy regional director (and former RNP superintendent) Jack Davis, sought to create a more cohesive approach to resource management through a combination of administrative restructuring and the addition of new personnel. Within a year of Chapman's March 1974 approval of the RNP *Management Consultation Report*, the park's organizational structure underwent a significant revision. In place of three divisions (Administration, Maintenance and Rehabilitation, and Interpretation and Resource Management), and two staff specialists (research biologist and resource management specialist), park administration was reorganized into four divisions. The Division of Administration remained essentially the same, as did the Division of Maintenance and Rehabilitation, which retained its three-part subunit organization of Roads and Trails, Buildings and Structures, and Utilities, Grounds, and Services. The big shifts came with Interpretation and Resource Management, which became Interpretation and Protection, and the creation of a new Division for Resource Management and Research.

Interpretation and Protection better fit the basic and evolving duties of the NPS ranger corps, while Resource Management and Research brought together the various components of the park's resource management program under the direction of a single division. Homer Leach, who previously headed Interpretation and Resource Management, remained head of Interpretation and Protection. Except for the loss of a forest ranger technician position and Leach's diminished involvement in resource management planning, this division largely mirrored its former incarnation. The brand new Resource Management and Research Division was a different matter altogether. Einar Johnson, who had previously served as superintendent of Crater Lake National Park from 1970–1973, was appointed the head of Resource Management and Research, which included five core positions: forester (former resource management specialist), engineering geologist, hydrologist, research scientist, and physical science technician, and a number of seasonal and temporary technicians.[61]

Reconfiguring and rationalizing resource management addressed a number of problems that had plagued park administration since 1968, and created a framework for transitioning into the post-expansion era. This was certainly the formulation of the Redwood Agreements in 1976 and the subsequent development of the watershed rehabilitation program. Successful negotiation of the cooperative agreements certainly reflected growing public and political pressures to modify or halt logging operations near the park, but they also benefited from the new staff and organization that comprised Resource Management and Research. Veirs and the new coterie of RNP geologists and technicians worked with Regional Forester Agee to define the park's position and assess the timber industry's proposals. As the Redwood Agreements were being negotiated and implemented, Hatzimanolis's responsibility waned. As he neared the end of a long career that was rooted in redwood timber management for the USFS, his contributions to park management were eclipsed by Johnson's authority for the new division, the division's expressed emphasis on science- and research-based management, and Agee's professional training as both a forester and an ecologist.

While Hatzimanolis (who retired in 1978) represented some of the administrative goals and resource management strategies from which the park was moving away, the staff who came to work under the new divisional framework were instrumental in transitioning the park into the expansion era. By early 1978, when a final expansion bill was imminent, the team that would design and direct the park's rehabilitation program was largely in place. Working in conjunction with Dick Janda's USGS Forest Geomorphology Project and Veirs, this group included William "Bill" Weaver (engineering hydrologist), Harvey Kelsey (forest hydrologist), Mary Ann Madej (geologist), and Greg Bundros (physical science technician). Danny Hagans filled another physical science technician position by midsummer and played an instrumental role in developing the rehabilitation program.

The basic organization of Resource Management and Research held through the first year and a half following expansion, even as the division grew from ten permanent and

two seasonal positions to nearly three times that number by the end of fiscal year 1979. As Veirs noted in a memorandum to Superintendent Von der Lippe in 1977, the Resource Management and Research Division worked because it allowed resource managers and scientists to operate in close concert, and because it was large enough to address substantial resource management projects. Yet because it retained some of the separate functions that preceded the formation of the division, it was also flexible enough to take on several smaller projects that related to different kinds of park resources.[62] The benefits of size and flexibility were evident in 1977 and 1978 as staff developed and evaluated experimental rehabilitation techniques at different sites in the park. As RNP ramped up the rehabilitation program in 1979 and 1980, however, it became clear that a new organizational structure that could handle far more personnel—and foster even more flexibility—would be necessary. The result was the dissolution of Resource Management and Research and the creation of two new divisions: Natural Resources Management and Technical Services. In many respects, this new organizational change—which will be discussed in the following chapter—neatly marks the end of the transitional period that saw RNP move toward and then accommodate expansion.

### ENGAGING OLD NEIGHBORS

The period from 1976 to 1980 may have seen the resolution of many long-standing issues with park planning and management, but the buildup to expansion badly inflamed already difficult relations with the communities surrounding Redwood. Local resistance to the 1968 establishment of the park was often fierce, with forest workers and timber company executives finding common cause in their opposition to urban environmentalists and Washington politicians. This animosity toward the park remained after its establishment, and former RNP staff members recalled that the “local situation was quite tense”—with very little interaction among NPS employees and longtime residents.[63] Once word came that

Redwood was slated for expansion, the local response became threatening almost overnight. Ancient trees in the park were variously hacked, girdled, and cut, park property and vehicles were vandalized, and some park staff received death threats against themselves and their families.[64] When public hearings were held on park expansion at the Eureka Municipal Auditorium in April 1977, thousands of angry timber workers and their allies, followed by three hundred logging trucks, held a march and rally to protest park expansion. In the auditorium, which was jammed to twice its capacity of 2,300 people, the crowd heckled and jeered Representative Burton, and the few people who spoke in favor of expansion required police escorts into and out of the building.[65]

With the North Coast lumber industry in a prolonged recession, and as increased automation in the mills trimmed company payrolls, timber workers saw park expansion as a serious and direct threat to their precarious livelihoods. Because such matters did not seem to concern environmentalists, fears about jobs combined with anger over the perceived indifference of urban recreationalists and a general distrust of the federal government. The Park Service was singled out as a special culprit, since the proposed expansion represented a failure to live up to early promises and expectations: expansion seemed to abrogate the original commitment to manage the park through cooperative agreements; and the park had not become a significant contributor to the regional economy—as suggested during the run-up to the original Redwood National Park Act. In short, expansion confirmed every distrust and fear that locals had about the park. Such concerns explain but do not excuse threats of violence. They nevertheless became part of the broader environment in which park managers had to work in the years following expansion.[66]

Amid these tensions, the park had one notable success in its relations with local communities; namely, the continued growth and development of the outdoor education programs that had begun in the park's early years. Born out of a 1968 NPS program called National Environmental Education Development, outdoor education was intended to encourage "environmental awareness and values through the application of five 'strands' [of

learning]: (1) variety and similarities, (2) patterns, (3) interrelation and interdependence, (4) continuity and change, (5) adaptation and evolution." "Woven" into park interpretive programs, these strands provided the pedagogical basis for National Environmental Study Areas—sites in national parks where school classes could explore park environments while living and working together in an Outdoor School. One of the very first National Environmental Study Area sites was established at RNP in 1971 at Nickel Creek near Crescent City. The following year, it was moved to an abandoned homestead and renamed Howland Hill Educational Center. Also in 1972, two teachers from Orick School asked park officials for permission to conduct science field trips at the old Wolf Creek logging camp. This prompted identification of the property as a National Environmental Education Development site, which the Humboldt County Office of Environmental Education operated with the support of the Park Service.[67]

By 1975, eighty units of the national park system had one or two National Environmental Study Areas that served 180,600 students from 202 school systems, but the program started to falter later in the decade, partly in response to budgetary pressures but also because of a retrenched emphasis within the Interpretive branch of the Park Service that favored direct interpretation of park resources over educational outreach. At Redwood, however, the program remained strong. Through their work at Wolf Creek, Humboldt County educators developed the "Green Box" environmental learning kit, which school districts and education programs around the United States soon adopted.[68] Success like this made the outdoor education programs very popular within their respective school districts. Because the Wolf Creek and Howland Hill programs were developed with and integrated basic components of Redwood's interpretive programs, the outdoor schools were also viewed as critical links between the park and the surrounding community. To bolster that connection, the outdoor school sites shared in the increased federal funding and new employment programs that came with park expansion. At Howland Hill, for instance, the NPS joined with California Employment and Training Act employees, the California Conservation Corps, the

Youth Conservation Corps, and volunteers to renovate the old cabin at the Howland Hill site and construct five new A-frame sleeping quarters. In ensuing years, similar cooperative efforts led to further upgrades of the facilities at Howland Hill and Wolf Creek, with the construction of kitchens, water systems, kitchen facilities, composting toilets, new fire rings, and eating areas.[69]

### AMERICAN INDIANS IN A NEW CONTEXT

Outdoor education at Redwood represented a new and successful cooperative venture among the Park Service, local communities and various state, county, and municipal agencies—one that neatly matched a growing national interest in environmental education in the years following the first Earth Day (1970) and a long-held desire of RNP officials to find common ground with local and regional interests. The late 1970s also saw park officials and local Native American communities make tentative but significant steps toward cooperative endeavors in and around the park. Much like the Outdoor Schools, relations between RNP and nearby Native American communities resulted from local initiatives that coincided with national trends and new NPS directives. Of course, Native American relations raised a whole different set of issues that long predated the park's establishment, and involved important legal precedents regarding treaty rights and federal obligations toward tribes. For these and other reasons, Redwood officials initially worried that Native American concerns might affect park resources or impinge upon administrative programs. Such a defensive posture was common throughout the NPS, but between 1978 and 1980, Redwood National Park officials and Native American community leaders shared a deep commitment to communication and cooperation that far exceeded most other efforts in the national park system.[70]

The shift in local conditions that eventually brought Native American issues to the attention of Redwood officials centered on the mouth of the Klamath River, and derived from two significant developments that date back to the years before the park's establishment.

The first began in 1963 with the case of *Jessie Short v. United States*. Finally settled in 1973, it recognized the Yurok as distinct from the Hupa Tribe, with whom they had been administratively consolidated since 1891, and defined the lower 40 miles of the Klamath River as "Indian Territory." The immediate effect of *Short v. U.S.* was an order requiring the Hupa Tribal Council to grant Yurok individuals the same per capita payments that Hupa enrollees had received for the sale of timber on tribal lands—both within the so-called Hoopa Square that comprised the Hupa Reservation and the parcels of tribal trust lands from the old Yurok Reservation along the Klamath River. The decision in *Short v. U.S.*, which occurred in conjunction with three other cases from 1966 to 1973 that recognized Yurok fishing rights, also provided a firm legal basis for a growing movement to constitute the Yurok as a distinct, sovereign tribe with a reservation centered on the Lower Klamath River.[71]

The *Short* case reflected a long animosity between Yuroks and Hupas, and it began as a response to the Hupa Tribal Council's authority over places, resources, and cultural sites that were historically associated with the Yurok. Within a year of the 1963 court filing, however, conditions on the Lower Klamath changed profoundly and, after ten years of litigation, the decision rendered in *Short v. U.S.* applied to a very different context. The "1,000-year flood" of 1964 that threatened the Tall Trees Grove and energized the national park movement also destroyed the town of Klamath. What little remained when the waters subsided was quickly bulldozed by the U.S. Army Corps of Engineers, and the 4,000 or so people who lost their homes and businesses received low-interest loans from the federal government that they could spend to rebuild or relocate within a year. Because preparing a new town site on higher ground took longer than the allotted year, many former residents simply moved away. Those who eventually reestablished themselves in Klamath had to contend with a local economy hard hit by the flood and still struggling with the regional effects of the tsunami that hit Crescent City on March 28, 1964. These conditions, combined with a slowing timber market and moratoriums on cutting within proposed national park acquisition areas, caused the population of Klamath to plummet by more than half.[72]

Despite the demise of the town of Klamath, a resurgence of the Yurok community occurred over the next few years as a number of Native American families returned to the area. In doing so, they also brought a new model of economic and cultural revitalization. Inspired by the successful efforts of tribes in the Pacific Northwest to protect Native American access to salmon, they set out to revive the commercial fishery that had once employed significant numbers of Yurok men and women before it was banned in 1933 to protect declining fish stocks. The ban only applied to commercial fishing in the river, however, and did not affect ocean trolling or sportfishing. Through the court cases of the late 1960s and early 1970s, however, Yuroks gained an exclusive right to fish commercially on the Klamath and at the mouth of the river. This included the traditional use of gill nets, which were otherwise banned in California.[73]

Energized by their recent series of court victories, the growing Yurok community around Klamath, along with the upstream villages at Pecwan and Weitchpec, began to coalesce into a strong tribal entity by the late 1970s. When a severe drought in 1978 led to a dramatic impasse among Native American fishers, state and federal officials, and local non-Indians, the Yurok movement toward self-determination became a powerful force. With river levels low and salmon populations in sharp decline, federal officials banned all net fishing on the Klamath. Yurok, Hoopa, and Tolowa fishers held a “fish-in” in late August 1978 and resisted the efforts of U.S. Fish and Wildlife agents to prevent them from setting nets. Some violence occurred, and the famous “Salmon Wars” began. Secretary Andrus and Assistant Secretary for Indian Affairs Forrest Gerard made a special visit to Klamath in early September, and Andrus stated his general support for Native American fishing rights while speaking to reporters from a Yurok fishing boat.[74] Congressional hearings held the following May further bolstered the Yurok position and made clear that efforts to protect or restore salmon runs needed to move away from Indian fishers and focus instead on ocean trolling, dams, and upstream habitat loss due to logging, ranching, and agriculture.[75]

The cultural, political, and legal developments that energized the Indian community on the Lower Klamath occurred within a broader context of Native American activism and cultural resurgence across the United States. In terms of federal policy, this had its clearest manifestation in the passage of the American Indian Religious Freedom Act in August 1978, which stipulated that "it shall be the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the[ir] traditional religions . . . , including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites."[76]

A good deal of the American Indian Religious Freedom Act was directed toward the management of federal lands, since most of the sacred sites that concerned Native American spiritual leaders were in the public domain and many of the ceremonial items they required came from plants and animals on federally managed lands. The most restrictive public lands agency had always been the NPS, which protected resources "for the benefit and enjoyment of the people" but—intentionally and unintentionally—often to the exclusion of Native American traditionalists. In an effort to correct this history and in anticipation of the American Indian Religious Freedom Act's eventual passage, Secretary Andrus issued Special Directive 78-1in early February 1978, which declared that "in carrying out its mandate for the conservation and public enjoyment of park lands and their resources, the [National Park] Service, consistent with each park's legislative history, purpose and management objectives, will develop and execute its programs in a manner that reflects informed awareness, sensitivity, and serious concern for the traditions, cultural values and religious beliefs of Native Americans who have ancestral ties to such lands."[77]

Coming amid park expansion and the new *GMP* planning process, Special Directive 78-1 and the increasing activism of Indian communities on the North Coast had a particular effect at Redwood. Prior to this time park relations with local Native American communities involved visitor demonstrations of basket and canoe making as well as occasional consultations on archeological sites.[78] In spring 1978, following the issuance of Special

Directive 78-1, park officials contracted with San Francisco State University anthropologist Polly McW. Bickel for a study of cultural resources in Redwood National Park. Bickel also initiated a formal process of consultation with local Native American communities that resulted in a two-day (May 22-23) Native American Conference on Cultural Resources in Redwood National Park at the Red Lion Inn in Eureka.[79] Drawing more than forty American Indians, the conference was organized to gain information from the surrounding Native American community on places and resources within the park of cultural significance and to elicit recommendations for their protection. As Stephen Rios, executive secretary of the Native American Heritage Commission, noted to Superintendent Von der Lippe, the conference was "very productive in that it opened important lines of communication and formed the basis for a valuable working relationship between your agency and the Indian community."[80]

The issues of greatest concern included burial grounds, ceremonial sites, spiritual training sites, and access to raw materials and food plants within and near park boundaries. The immediate results of the conference were an initial inventory of Native American cultural resources on park lands and the establishment of five Native American Heritage Advisory Committees that corresponded to traditional, historic and contemporary Tolowa, Chilula, Hupa, and Yurok use areas. Subsequent Native American Heritage Advisory Committee meetings occurred with some frequency, primarily in response to the *GMP* planning process then underway. As Park Archeologist Ann King Smith later summarized the results of these meetings, the "initial inventory of contemporary Native American cultural resources and recommendations for the protection of these sites, along with requests for Native American access and use, was incorporated into the *GMP*. [Many t]rails and proposed developments [were] located away from burial grounds and ceremonial places, campsites . . . removed from old villages sites, [and] interpretive signs which drew attention to a power training area" were removed and visitor access to these areas was discouraged.[81]

**Figure 4.4 Area of boundary overlap between National Park Service lands and the Yurok Reservation.**

The *GMP* also included statements supporting Indian-controlled interpretation of Native American cultural heritages, NPS assistance for ceremonies and cultural programs on park lands (including reconstruction of a Yurok Brush Dance site near the mouth the Klamath River), recruitment and employment of local Indians, and a commitment to resolve the boundary overlap between the park and old Yurok reservation lands along the lower three miles of the Klamath River.[82] Despite these positive statements, a number of individuals at Native American Heritage Advisory Committee meetings in December 1979 complained that they had not received ample time to study and comment on the draft *GMP*. The Yurok from the Lower Klamath River were especially concerned about the irresolution of the boundary overlap and its omission from the Draft Environmental Statement, and several Native American Heritage Advisory Committee groups wished to see a more clarified policy on Native American food and resource gathering within the park.[83] The first concern required a good deal of further study by the Solicitor for the Department of the Interior, and could not be

incorporated into the *GMP* beyond a simple commitment to pursue the matter further. The latter was also noted but not formally incorporated into the final *GMP*, and like the boundary concerns and the commitment to a Native American hiring program, it remains an unresolved issue between the NPS and North Coast. Despite the disappointment expressed by Native American Heritage Advisory Committee members in 1979, and the still unfulfilled expectations of the *GMP* planning process, the efforts by RNP officials and local Indian groups to communicate and resolve issues of mutual concern were not false starts. Indeed, they established channels of communication and interaction that would slowly deepen over time.

### UNFINISHED BUSINESS: STATE PARKS AND MAY CREEK

By summer 1980, the issues that had plagued Redwood through most of the previous decade had largely been addressed and the park was poised to enter a new era. Before Redwood could begin to fulfill its promise and significance, however, the unexpected collapse of two key components of the new *GMP* gave new significance to old, unresolved issues and forced administrative adjustments that would affect the park for more than a decade. The first of these concerned the integration of the three state parks with the national park, which had become a fundamental expectation of park planning in the wake of the Redwood National Park Expansion Act. The second involved the cornerstone of the park's new program for interpretation and visitor services—the May Creek Activity Center. Both represented some of the most basic assumptions about the park's future—in terms of resource management, interpretation, and increased visitation. And both went down in spectacular fashion.

The history of the NPS is full of dramatic moments and unexpected twists, but perhaps nothing compares to the sudden demise in June 1979 of the effort to bring California state park lands under NPS management. For that reason alone the story deserves retelling,

but it is all the more significant for what it reveals about the NPS at the time and, especially, for its impact on the park's subsequent history. The long moribund issue of state park transfer to the NPS was addressed in the expansion act, which had new provisions for the incorporation of state park lands and promised employment in the NPS to affected California Department of Parks and Recreation (CDPR) employees. Because outstanding legal issues would require further negotiation, and might require action from the state's legislative bodies, Public Law 95-250 did not spell out the exact procedures by which the transfer would occur.[84] The intent of Congress was nevertheless quite clear; as Representative Burton noted in the Congressional Record of March 14, 1978, while "Section 101 (a)(3) [of the expansion act] provides for the donation of State park lands but no date certain for the donation is stated. . . . It is our intent that both the State and Federal responsibilities be carried out expeditiously."[85]

Negotiations between state and federal governments did proceed in an expedited fashion. Some in California still chafed at the matter of losing the state's crown jewels to the Park Service, but much had changed in recent years. For starters, the Gerald Brown administration was far more supportive of NPS concerns than Governor Reagan had been in 1968. More significant, voters had recently passed a landmark property tax measure, Proposition 13, which sharply reduced budgets in Sacramento and undermined the state's ability to manage its park system. In short, the CDPR was open to negotiations with the NPS and welcomed the opportunity to reduce the state park budget.

To speed up the process and bypass the legal issues that might involve an outright acquisition of the state parks, attorneys for the Department of the Interior proposed a federal lease of state park lands with management consolidated under the NPS. By all appearances, this arrangement was essentially a done deal by April 1979. In advocating the lease approach, NPS director William Whalen told CDPR director Russell Cahill, "we stand ready to do all that is necessary to make this transfer possible. Please consult with your folks, and if possible, develop a lease that you can live with. We will then review it immediately and

work out the differences [during my visit to] Sacramento if we have to."[86] Within a month, Cahill and state officials worked out a lease agreement that satisfied the concerns of all parties, and the NPS director planned to personally authorize the transfer when he came to California in early June.

Whalen's itinerary included a ceremony at Prairie Creek Redwoods State Park to dedicate the Aubrey and Newton Drury Grove in honor of the two brothers' many decades of service to the Save-the-Redwoods League (SRL), California Department of Parks and Recreation, and the National Park Service. The event would also provide a formal occasion for marking the agreement between NPS and CDPR. Enroute to the ceremony site, Whalen took a brief tour of the state park and was impressed with how well California had managed the redwoods over the past half-century. This feeling struck a deep chord with the director and stayed with him as he joined the other dignitaries on the platform. By the time he rose to speak, Whalen had suddenly come to a clear new understanding of the state park and national park issue. During his speech, which quickly strayed from his prepared text, Whalen told the audience of two hundred that "it simply doesn't make sense" for the federal government to take over lands that are already well protected and managed by a state agency. Instead, "it would be a good idea" for the two to work together but maintain separate operations.[87]

Whalen's announcement came as a complete shock to everyone assembled. Representative Burton was so furious, Cleve Pinnix recalled, it was probably the only time in his life he was actually left speechless. Twenty-seven years after the event, Pinnix joked that his own "knee still hurts from how hard my jaw dropped."[88] Others present at the dedication ceremony also expressed a similar level of shock and surprise, including Director Cahill. Yet some were delighted with the announcement, most notably the members of the SRL who always wanted the lands they had acquired to remain within the state park system. As former RNP interpreter Jean Swearingen recalled, SRL members "just screamed and applauded" with joy.[89]

Even Director Whalen was somewhat surprised by the words that came out of his mouth. “My decision was just made out of my gut,” he later recalled. “I first said the words, first committed to the decision [not to integrate the parks] at the Newton Drury dedication.”[90] Considering Whalen’s unique background in the Park Service, however, it is clear that the decision was not a simple whim that came from out of the blue. After working for the Job Corps in the early 1960s, Whalen began his career with the Park Service training rangers to operate in the growing number of new urban park units in the East. This soon led to his appointment in 1972 as the first superintendent of Golden Gate National Recreation Area (GGNRA) where he had to manage a new kind of park unit amongst the countervailing claims of private, municipal, county, state, and federal agencies. He also became the point person in the difficult and, from the Park Service perspective, unsuccessful negotiations to integrate Mt. Tamalpais and Angel Island state parks into GGNRA. These were two of the most utilized and dearly loved state parks in the Bay Area and William Penn Mott, Jr., director of the CDPR from 1967 to 1974, vigorously and effectively argued that these treasured areas belonged to Californians. To release them to the federal government, Mott proclaimed, “amounted to an abdication of the state’s mandate”—a sentiment that he also extended to Del Norte, Prairie Creek, and Jedediah Smith Redwoods state parks.[91]

Whalen personally respected Mott’s reasoning and frequently encountered similar arguments from Marin County residents, the city of San Francisco, and the U.S. Army—which still controlled the Presidio portion of the sprawling GGNRA. The often forceful manner in which state officials, members of the SRL, and private citizens defended their parks’ autonomy, coupled with the unique cooperative agreements, leases, purchases, and acquisitions that formed the jurisdictions of the GGNRA, certainly made Whalen more amenable than most in the NPS to considering alternatives to standard park management. Indeed, Whalen almost preferred alternative management arrangements as a matter of principle. Near the end of his life, he complained that the NPS operates as a kind of “religion, with a certain way to do things.” In the case of Redwood, this meant only being able to see

the three redwood state parks as incomplete and separate parcels that required administrative integration under the NPS to become part of "a meaningful park."[92]

These views serve as important background for Whalen's decision, but more immediate concerns also shaped his thinking. Besides a discomfort with the NPS "religion" of land acquisition and exclusive management, Whalen also became uncomfortable with other aspects of the Redwood park integration plan he helped craft. Foremost among these was the sudden eagerness of the CDPR to release their lands to the federal government. The passage of Propositions 13 (1978) and 4 (1979) forced a rapid reduction and restructuring of public expenditures at the state and local level. The state park system was hit especially hard and, looking for ways to reduce budgets and landholdings, state officials suddenly found merit in the proposals that Mott and others had once found impossible to entertain. Faced with the pending addition of enormous new holdings in Alaska, and saddled with the financial and administrative burdens of the National Parks and Recreation Act of 1978—not to mention the unprecedented expense and administrative scope of the Redwood National Park Expansion Act—Whalen felt uneasy with a trend of extraordinary but possibly unmanageable growth in the NPS. As he noted to a reporter for the *San Francisco Chronicle* after the Drury dedication ceremony, "There have been 33 new national parks added in 16 months, making a total of 323 in the federal system. . . . I don't really see any percentage [in taking] on state parks that are run well when there are many areas that are threatened and need our help."[93]

Whalen later admitted that he actually resented California's sudden cooperation with the NPS as nothing more than a desire "to dump the financials on us." His decision may also have been informed by a meeting with SRL officers in San Francisco a few days before the Drury dedication, where members gently reminded the director of their preferences for retaining the state parks.[94] Whatever the case, Whalen's announcement at the Drury Grove dedication was not a sudden decision so much as it was the dramatic culmination of a

thorough consideration of the issue. “It was not the coolest way to unveil something,” he later admitted, “but it was the only decision to make.”[95]

For park officials at Redwood, Whalen’s sudden announcement was a stunning disavowal of the expansion act and the forthcoming *General Management Plan*. A few weeks after Director Whalen’s announcement, Superintendent Barbee was still fuming. “The Superintendent’s feeling,” he noted in a Briefing Statement Update, “is that the Director’s comments at the Drury Dedication” still required a statement “clarifying the National Park Service position regarding [a] matter [that] . . . is still unsettled in the minds of many who are concerned with the Park’s future. It would be most helpful if the Superintendent and the General Management Plan Project Manager would be included in any discussions leading to a definitive Service position. Simply stated, it is the fundamental belief of the Superintendent and the Planning Team that Redwood National Park will not be complete in any sense, until the State Parks are integrated into the National Park.”[96]

From the superintendent’s and planning team’s perspective, Whalen’s decision allowed a host of problems to persist, including an unnecessary duplication of services, an unequal quality of management and interpretation since the state agency was severely underfunded, and a general lack of integrated strategies for managing contiguous resources. Without a single administrative body to coordinate programs and decisions, resource management could not seamlessly combine work in cutover areas with old-growth forest management in the state park lands, and otherwise connected stream systems and strips of coastal land had to be managed in a piecemeal fashion that corresponded to the limits of federal jurisdiction. Whalen’s decision probably had its clearest impact on efforts to create an integrated visitor experience—with a single agency developing trails, campgrounds, visitor facilities, and interpretive programs. All such plans suddenly fell by the wayside and, as park administrators put it in fall 1979, the peculiar arrangement of state and federal park lands continued to lead to the “disorientation and frustration experienced by visitors who have difficulty locating facilities and activities in the park and region.”[97]

On this last score, RNP suffered another major blow when plans for the May Creek Activity Center were rejected in 1980. Like Whalen's sudden decision on park integration, this failure cut to the very heart of Redwood's plan for visitor use and facilities development. Construction of a visitor center had been stymied by the original Park Act's stipulation that no such development could occur without an authorized Master Plan. The completion of the *GMP* and the funding that came with the expansion act directly addressed this restriction and seemed to set the course for the future. Yet the breakdown of the May Creek plans essentially turned the calendar back twelve years and, like the issue of separate park jurisdictions, insured that two basic conditions that plagued park management through the 1970s would carry into the next decade.

Located a few miles north of Orick and just off U.S. Highway 101, the May Creek Activity Center was to be sited at the south end of Elk Prairie on Park Service land adjacent to Prairie Creek Redwoods State Park. The first and largest of two planned activity centers (the other was set for Hiouchi Flat), May Creek was also expected to serve as the southern gateway to the park. Instead of the leased storefront in an Orick shopping center, where cramped quarters, highway noise, crowded parking, and poor visibility prevented NPS interpreters from effectively meeting visitor needs, May Creek would provide a quiet introduction to redwood forests and their associated wildlife that featured a nature trail, elk viewing areas, an information center, and an outdoor deck area for quiet rest and formal presentations. Plans for May Creek also called for a dining facility called the Sunshine Café—a feature that Director Whalen personally championed—that would serve "simple but hearty," healthful food.[98]

For NPS planners, May Creek was the cornerstone of the park experience and its development. As the Park Planning Team put it, May Creek represented the only effective solution to Redwood's chronic problems with "poorly located, inadequate information systems, which in essence leave visitors to their own devices." The activity center was "a response to known visitor needs, a response to a spectacular setting, and a response to a

mandate of preservation and use . . . . When you tailor-make a facility to the clientele, the setting, and the conditions, alternatives do not exist. . . . May Creek is interwoven into the [*GMP*]. It does not, nor can it, reside singularly. It controls visitor movement, it dictates capacity, and it provides continuity and understanding to Redwood National Park."[99] In short, there was no other facility or development project that matched the significance of the May Creek Activity Center.

Despite all the hopes and expectations wrapped up in this one site, trouble started at the beginning of the public comment period. Nearly everyone who commented on the Draft Environmental Statement supported the concept of an activity center, and all saw the need to orient visitors in the southern part of the park in a manner and setting that met the high standards of the NPS. Unfortunately for park planners, the most influential public agencies and advocacy groups all found fault with the May Creek site. The California Department of Fish and Game and CDPR concurred with nearly every aspect of the preferred alternative in the draft *General Management Plan*, but both singled out the May Creek Activity Center as problematic. Bringing so many visitors into close proximity with elk—and converting some of the prairie into a parking lot—might force the animals to abandon the area as well as cause them to put too much pressure on other fragile grazing environments. These two California agencies, which had a long history of managing the Roosevelt elk herds that centered on Prairie Creek Redwoods State Park, were understandably cautious about the construction of the activity center. The same was true of the SRL, which had raised the funds to protect Elk Prairie in 1923.

Even the park's strongest advocates—the environmental groups that most fervently championed expansion—took issue with May Creek. While they had a less proprietary interest in the elk herds than the State of California or SRL, they generally opposed the conversion of undisturbed park resources into visitor facilities—especially at RNP. This was certainly the case for the National Parks and Conservation Association, which called the May Creek Activity Center "the most objectionable feature of the entire draft plan."[100] Citing

concerns about such a development in prized elk habitat, the national organization of the Sierra Club and the North Group Redwood Chapter of the Sierra Club located in Arcata also expressed strong reservations about May Creek.[101]

Because these organizations generally supported the rest of the *GMP*, and because they did not turn their attention to the planning process until after passage of the expansion act, this one subject seems to have become the focus of all their potential misgivings about the park. Although formed late in the planning process, and not based in any studies of elk movements or populations, these objections proved strong enough to override all NPS rejoinders that the elk would still have more than sufficient prairie habitat and were long habituated to tourists and cars. In the end, however, one of the prime attractions of the site—the Elk Prairie herd—became its downfall.[102]

In the face of strong and insurmountable opposition, the Park Service dropped the entire project. In the final *General Management Plan*, official mention of May Creek was replaced with a less specific reference to a "southern activity center [which] would be located at a site determined through a joint study by the National Park Service and the California Department of Parks and Recreation."[103] This clarification did not lead to any resolution, however. Four sites remained under discussion, including the original May Creek site, the nearby B-Mill deck site, an area near Little Lost Man Creek, and the existing visitor facilities in Prairie Creek Redwoods State Park. The first three were not strongly favored: May Creek was a nonstarter; B-Mill deck raised many of the same concerns about elk that May Creek did, plus it involved a costly and environmentally difficult conversion of an industrial area; and it was determined that the entire Little Lost Man Creek watershed should remain completely undeveloped. The preferred alternative for the Park Service was to upgrade the historic facilities at Prairie Creek, but this option was opposed by the CDPR and SRL. The immediate consequence of Whalen's decision obviously complicated matters here, and the attempt to choose a location through a "coordinated effort between the National Park Service

and the California Department of Parks and Recreation" was an official bust by the end of 1980.[104]

The failure to create a coherent visitor experience, along with the nonresolution of the state parks issue, ensured that old problems would persist. Indeed, the undoing of these efforts in part resulted from the intractability of these old problems. The period from 1976 to 1980 marked a transition away from the necessarily vague concepts and visions of Redwood's early years, but in many important respects, the new era that followed expansion was still marked by past challenges. The nonintegration of parks, for instance, led to a particular emphasis on the management of federal lands—which were mostly cutover and would not be open to visitation or interpretation. With most of the large blocks of old-growth forest in the state parks, scientific studies in the expanded park focused largely on geology, hydrology, salmonid habitat, and revegetation—and very little work was done that would inform the maintenance and protection of ancient forest ecology.

In many respects, the mandated and necessary emphasis on watershed rehabilitation would come to define the park more than its namesake resource. This led to revolutionary new changes in resource management that once again placed Redwood at the forefront of NPS developments. In the process, some in the Park Service came to think of Redwood more as a project than a park. While not an entirely complimentary characterization, it was echoed by locals who wanted more tourism and by visitors still confused by the park's administrative geography. The next decades would see the growth and maturation of the watershed rehabilitation program as well as new efforts to contend with old problems and challenges that remained intrinsic to the park and the region.

---

[1] James K. Agee, interview by author, June 27, 2006; "Redwoods Agreement, November 8, 1976," Accession # RNSP 00084, Catalog # RNSP 27746, File 378, James Agee Collection, Redwood National and State Parks Archives, Orick, California (RNSP Archives).
[2] Susan R. Schrepfer, *The Fight to Save the Redwoods: A History of Environmental Reform*, *1917-1978* (Madison: University of Wisconsin Press, 1983), 201-3; Dale A. Hudson, "*Sierra Club v. Department of the Interior*: The Fight to Preserve Redwood National Park," *Ecology Law Quarterly* 7, no. 3 (1979): 781-859.

[3] Agee interview. The documents were signed November 8, 1976, by several legal representatives for the timber industry and Peter R. Taft, Assistant Attorney General for the Land and Natural Resources Division in the Department of Justice.
[4] The announcement referred to the Park Service's formal "Proposed Land Acquisition: Redwood National Park," prepared by Western Regional Office, National Park Service, San Francisco, CA, October 1976, General/Unsorted Files, Folder "Redwood Land Acquisition, 1976," NPS-Pacific West Regional Office Archives, Oakland, California (PWRO Archives).
[5] Agee interview.
[6] Agee, "[Draft] Redwood Creek Management Problem: An Optimal Solution," October 16, 1975,,File 58, Agee Collection, RNSP Archives.
[7] John H. Davis, interview by author, November 6, 2006; Cleve Pinnix, interview by author, June 23, 2006; Agee interview; and *Proposed Expansion of the Redwood National Park: The Industry's View* ([San Francisco]: Western Council or Lumber Production and Industrial Workers AFL-CIO, Redwood District Council of Lumber and Sawmill Workers AFL-CIO, Local 2592 Lumber and Sawmill Workers AFL-CIO, Arcata Redwood Company, Louisiana-Pacific Corporation, Simpson Timber Company, April 1975), Bancroft Library, University of California, Berkeley.
[8] Quoted in Schrepfer, *Fight to Save the Redwoods*, 202.
[9] William M. Blair, "Mrs. Johnson Dedicates Redwood National Park," *New York Times*, November 26, 1968, 29.
[10] Jack Hope, "Redwoods Forever! Redwoods Forever?" *Audubon Magazine* (March 1970): 78-82; and Charles E. Randall, "National Outlook," *Journal of Forestry* 71, no. 5 (May 1973): 260-61.
[11] Save-the-Redwoods League, "Chronology: Redwood National Park," July 1973, 11, unsorted files, Save-the-Redwoods League Archives, San Francisco, California (SRL Archives).
[12] An Act to Establish a Redwood National Park in the State of California, and for Other Purposes, Pub. L. No. 90-545, 16 U.S.C. 79c, 90th Cong., S.2515 (October 2, 1968).
[13] Alastair R. Lucas, William A. Tilleman, and Elaine Lois Hughes, *Environmental Law and Policy*, 3rd ed. (Toronto: Emond Montgomery Publication, Limited, 2003), 497-99; Schrepfer, *Fight to Save the Redwoods*, 189-93; and "Possible Park Damage from Logging Reviewed," *Eureka Times-Standard*, February 7, 1973, 21.
[14] Edgar Wayburn with Allison Alsup, *Your Land and Mine: Evolution of a Conservationist* (San Francisco and Berkeley: Sierra Club Books; Distributed by University of California Press, 2004), 165.
[15] Quoted in Schrepfer, *Fight to Save the Redwoods*, 193. Also see Dale A. Hudson, "*Sierra Club v. Department of the Interior*: The Fight to Preserve the Redwood National Park," *Ecology Law Quarterly* 7 (1979): 781-859; Wayburn, *Your Land and Mine*, 165-66; Richard "Dick" Curry, interview by author, June 23, 2006; and Lucas, Tilleman, and Hughes, *Environmental Law and Policy*, 497-99.
[16] The USGS studies on Redwood Creek are summarized in Richard J. Janda, *Recent Man-Induced Modifications of the Physical Resources of the Redwood Creek Unit of Redwood National Park*, *California*, *and the Processes Responsible for Those Modifications* (Menlo Park: U.S. Geological Survey, 1975). The reference to "accelerated" comes from an NPS report that borrowed heavily from Janda's work. See Milton Kolipinski et al., "Status of Natural Resources in Redwood Creek Basin, Redwood National Park: A Report to the Director of the National Park Service from a Scientific Evaluation Team," December 10, 1975, http://www.humboldt.edu/~rrz7001/pubs/Kolipinski.pdf (accessed October 16, 2006).
[17] Schrepfer, *Fight to Save the Redwoods*, 193, 197; and Agee, "Issues and Impacts of Redwood National Park Expansion," *Environmental Management* 4 (September 1980): 414.
[18] Wayburn, *Your Land and Mine*, 166; Hudson, "*Sierra Club v. Department of the Interior*," 781-859; and Schrepfer, *Fight to Save the Redwoods*, 197.
[19] Stephanie Sabine Pincetl, "The Environmental Policies and Politics of the Brown Administration, 1975-1983" (PhD diss., University of California, Los Angeles, 1985), 100-136.
[20] "Fromme: 'There Is a Gun Pointed,'" *Time*, September 22, 1975, http://www.time.com/time/magazine/ article/0,9171,917862,00.html, (accessed November 30, 2007).
[21] John Jacobs, *A Rage for Justice: The Passion and Politics of Phillip Burton* (Berkeley and Los Angeles: University of California Press, 1995), 328-31.
[22] Ibid., 335.
[23] Ibid., 333.

[24] Ibid.
[25] Ibid., 340; and Pinnix and Curry interviews.
[26] Curry interview.
[27] In February 1977, NPS director Gary Everhardt stated before Congress that "we know that the existing boundaries of Redwood National Park place an impossible burden on the National Park Service to protect a resource in the downstream and downslope portion of an inherently unstable drainage basin and frustrates the intent of Congress to provide inspiration and enjoyment in one of the key areas of the park." Quoted in "Protecting Redwood National Park: First Report by the Committee on Government Operations Together with Additional and Dissenting Views," House Report, 95-106, 95th Cong., 1st sess., March 23, 1977 (Washington, DC: GPO, 1977), 15.
[28] An Act to Amend the Act of October 2, 1968, An Act to Establish a Redwood National Park in the State of California, and for Other Purposes, Pub. L. 95-250, 16 U.S.C., 92 Stat 163-182. 95th Cong., S.1976 (March 27, 1978), emphasis added.
[29] Jacobs, *Rage for Justice*, 340.
[30] President Carter expressed this reticence and fear of precedent in his signing statement; "Redwood National Park Expansion Bill Statement on Signing H.R. 3813 Into Law, March 27th, 1978," at John T. Woolley and Gerhard Peters, *American Presidency Project*, http://www.presidency.ucsb.edu/ws/index.php?pid=30562, (accessed December 2, 2006). Also see Jacobs, *Rage for Justice*, 340-50.
[31] An Act to Amend the Act of October 2, 1968.
[32] Roger C. Kaumans to Representative Tom Coleman, March 18, 1979, General/Unsorted Files, "General Correspondence, 1979," PWRO Archives.
[33] Quoted in Christopher E. DeForest, *Watershed Restoration*, *Jobs-in-the Woods*, *and Community Assistance: Redwood National Park and the Northwest Forest Plan*, *Gen*. *Tech*. *Rep*. *PNW-GTR-449* (Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station), 10, http://www.treesearch.fs.fed.us/pubs/2991 (accessed December 2, 2006).
[34] *Dislocated Workers: A Look Back at the Redwood Employment Training Programs; Briefing Report to Congressional Requesters* (Washington, DC: General Accounting Office, 1993).
[35] Carter, "Statement on Signing."
[36] An Act to Establish a National Park Service, and for Other Purposes; approved August 25, 1916 (39 Stat. 535), in Lary M. Dilsaver ed., *America's National Park System: The Critical Documents* (Lanham, Md.: Rowman and Littlefield Publishers, 1994), http://www.nps.gov/history/history/online_books/anps/anps_1i.htm, (accessed December 12, 2007).
[37] An Act to Amend the Act of October 2, 1968.
[38] Robin W. Winks, "The National Park Service Act of 1916: 'A Contradictory Mandate'?" *Denver University Law Review* 74, no. 3 (1997), http://www.nature.nps.gov/Winks/ (accessed December 3, 2006).
[39] Richard West Sellars, *Preserving Nature in the National Parks: A History* (New Haven, CT: Yale University Press, 1997), 257-66; Alfred Runte, *National Parks: The American Experience*, 3rd ed. (Lincoln: University of Nebraska Press, 1997), 197-208; and Lary M. Dilsaver, "The Ecological Revolution, 1964-1969," in *America's National Park System*, http://www.nps.gov/history/history/online_books/anps/anps_6.htm, (accessed December 12, 2007).
[40] This new geographic scope also parallels the Clean Air Act Amendments of 1977 and their application to national parks. See Robert Maynard, "The Clean Air Act Amendments and the National Parklands," *University of Michigan Journal of Law Reform* 11, no. 2 (Winter 1978): 290-316.
[41] *Planning and Public Involvement: Constituency Building for the Parks*, vol. 7, *Investing in Park Futures: A Blueprint for Tomorrow* (Washington, DC: National Parks and Conservation Association, 1988), 2-7.
[42] *Planning Process Guideline* (Washington, DC: National Park Service, 1978); Dwight R. McCurdy, *Park Management* (Carbondale: Southern Illinois University Press, 1985), 132-135. The new NPS planning process received further authorization in the National Parks and Recreation Act, Pub. L. No. 95-625, 92 Stat. 3467, 16 U.S.C. §1 et seq. (November 10, 1978).
[43] The planning team initially included John Reynolds and Jean Swearingen of the Denver Service Center, Redwood National Park Superintendent John Davis, Crater Lake National Park Superintendent

Ernest Borgman, Gerry Patten from the Washington office, and Jim Rouse from the Pacific Northwest Region.

[44] Other members of the planning team included Polly Mcw. Bickel (consultant, cultural anthropologist), Mike Donnelly (Denver Service Center [DSC], landscape architect)—who later replaced Carlstrom as team captain, Betty Jones DSC, sociologist), Bill Koening (DSC, economist), Tom Mulhern (Western Regional Office, cultural resources), Ken Raithel (DSC, chief, Branch of Planning, Pacific Nortwest/Western Team), John Sacklin (DSC, environmental specialist), Bob Schiller (DSC, environmental specialist), Stephen Veirs (RNP, research biologist), George Von der Lippe (RNP, superintendent), and Glennie Murray Wall, (DSC, cultural resource specialist).

[45] "Statement for Management, Redwood National Park," RNSP Library; "Redwood National Park General Management Plan Task Directive" (Rough Draft #1), July 27, 1977, File 87, Agee Collection, RNSP Archives; "Department of the Interior Draft Environmental Statement: Proposed Land Requirements, Redwood Creek Watershed, Redwood National Park, California" (1977), File 102, , Agee Collection, RNSP Archives; "Draft Resource Plan for Management" (1976); "Superintendent's Briefing Book, 1977," Redwood 1977, Summary Statements and Backgrounders, File "Briefing Statements," PWRO Archives; and Polly Bickel, *A Study of Cultural Resources in Redwood National Park* (Denver: U.S. Department of the Interior, National Park Service, Denver Service Center, 1979).

[46] Stephen R. Mark, *Floating in the Stream of Time: An Administrative History of John Day Fossil Beds National Monument* (Seattle: National Park Service, 1996), January 2005, http://www.nps.gov/archive/joda/adhi/adhi4-3.htm, (accessed December 9, 2007).

[47] "Redwood National Park General Management Plan Task Directive" (Rough Draft #1), July 27, 1977, 1.

[48] An Act to Amend the Act of October 2, 1968.

[49] *Redwood National Park: General Management Plan* ([Denver]: U.S. Department of the Interior, National Park Service, 1980), 40-41.

[50] Ibid., 45. Park planning also benefited from the completion of a historical basic data study by Edwin Bearss in 1969, which contained an extensive National Register inventory that provided a solid basis for the management of historic sites and properties. Park officials had also contracted with Michael Moratto from the California State University, San Francisco, for an archaeological survey of the park in 1970 and 1971—the first archaeological inventories conducted in RNP. In the midst of developing the *GMP*, Redwood also underwent two cultural resource overviews by Polly Bickel and staff at the Denver Service Center. These historical, archaeological, and cultural resource studies led park planners to assume that a few significant sites might exist in the expansion area. Any protection of such sites might need was covered in the recent (1976) Amendment to Section 106 of the National Historic Preservation Act, which required federal land-use managers to avoid, minimize, and mitigate for any adverse impacts that management programs might have on designated and eligible National Register of Historic Properties sites. Bearss, *History Basic Data*; Bickel, *Cultural Resources in Redwood National Park: Inventory Information and Recommendations* (Denver: U.S. Department of the Interior, National Park Service, Denver Service Center, 1978); Bickel, *Study of Cultural Resources*; and Michael J. Moratto, *An Archeological Overview of Redwood National Park*, *Publications in Anthropology (Western Archeological Center)*, *No. 8* (Tucson: Cultural Resources Management Division, Western Archeological Center, National Park Service, 1973). A full text of the National Historic Preservation Act of 1966, Pub. L. No. 89-665; 16 U.S.C. 470 et seq. (1966) and its subsequent amendments is available at *The National Historic Preservation Act of 1966*, *As Amended* (Denver: U.S. Department of the Interior, National Park Service, 1987, 1991), http://www.achp.gov/nhpa.html, (accessed June 30, 2009).

[51] An Act to Amend the Act of October 2, 1968.

[52] These are summarized in *Redwood National Park Expansion Alternatives: Summary of Aesthetic and Recreational Values* (Sacramento, CA: State of California, the Resources Agency, Department of Parks and Recreation, 1977).

[53] *Draft Environmental Statement: Summary—General Management Plan*, August 1979, 4, RNSP Library.

[54] Ibid., 6-9.

[55] Ibid., 17.

[56] Ibid., 6-7. By the time the *GMP* was released for public input, the Planning Team comprised a new roster: Bob Barbee (RNP, superintendent, Mike Donnelly, Leslie Starr Hart (DSC, cultural resources

management specialists), Reed McCluskey (DSC, environmental specialist), John Ochsner (DSC, landscape architect), Dennis Piper (DSC, park planner), John Sacklin (DSC, environmental specialist), Robert Schiller (DSC, environmental specialist), Jean R. Swearingen (DSC, interpretive planner), and Grant Werschkull (NPS, park technician).

[57] Anonymous, handwritten comments included in "Responses" section of the *Final Environmental Impact Statement—General Management Plan: Redwood National Park*, *California*, 124, RNSP Library (hereafter *Final EIS*).

[58] In Del Norte County, there was particular concern about NPS plans to relocate or remove locally popular state park campgrounds once park integration had occurred. While this went against a local desire to see more, not less, visitor accommodation for nearby residents and money-spending tourists, it also suggested that an apparent emphasis on "environmental preservation" within the NPS might lead to future restrictions on other local concerns. The "diversity of human activities on park beaches" that so bothered park planners and occasionally resulted "in conflicts among various user groups" generally involved the use of vehicles on beaches for launching and retrieving commercial fishing boats, for gathering firewood, or for summer cook-outs and camping along the shore. Local beach users easily surmised that such activities—like the large state campgrounds they enjoyed—might be affected by NPS management. F.W. "Frosty" Godfrey, Executive Director, Del Norte Municipal League, to Robert D. Barbee, December 14, 1979, reprinted in *Final EIS*, 78-79.

[59] Sellars, *Preserving Nature in the National Parks*, 231-32, 234-35; and Dennis L. Soden and Worth H. Hester, "Law Enforcement in the National Park Service: The Ranger's Perspective," *Criminal Justice Review* 14 (Spring 1989): 63-73.

[60] "Redwood National Park Management Consultation Report, August 1974" (National Park Service, Western Region), 21.

[61] These changes are detailed in organizational charts and employee rosters between June 20, 1975, and September 10, 1977, RNSP Archives. Johnson's previous tenure at Crater Lake is discussed in Harlan D. Unrau, with additional material by Stephen R. Mark, *Crater Lake National Park: Administrative History* (Denver: U.S. Department of the Interior, National Park Service, 1987, 1991), http://www.nps.gov/archive/crla/adhi/adhi10.htm (accessed December 12, 2007).

[62] Stephen Veirs, interview by author, June 20, 2006.

[63] Quotation from Davis interview. Also Veirs and Agee interviews.

[64] Death threat noted in Agee interview. Vandalism and ranger patrols noted in Staff Meeting Notes for February 10, March 13, and May 30, 1977, General Files "Other Field Offices," Folder 8, RNSP Archives. NBC Evening News covered the violence and vandalism around RNP in a broadcast dated January 25, 1978, *Vanderbilt Television News Archive*, http://tvnews.vanderbilt.edu/diglib-fulldisplay.pl?SID=20081015996398925&code=tvn&RC=495934&Row=167, (accessed May 5, 2007).

[65] Jacobs, *Rage for Justice*, 337-39; and Pinnix interview. Also see George Ringwald, "'That Awful Woman from Trinidad,'"*North Coast Journal*, June 14, 2001, http://www.northcoastjournal.com/061401/cover0614.html (accessed May 5, 2008).

[66] John H. Grobey et al., *Redwood National Park Tourism Study: Economic Impacts of Alternative Park Development Plans* ([Arcata, CA]: Humboldt State University Foundation, 1979); William McKillop, *Economic Losses Associated with Reduction in Timber Output Due to Expansion of the Redwood National Park: A Report Prepared for the California Department of Forestry* (Berkeley: Department of Forestry and Conservation, University of California, 1977); Rudolf Willem Becking, *An Analysis of the Redwood National Park in Relation to the Timber Economy of Humboldt and Del Norte Counties*, *Ca*. ([Arcata, CA], 1975); and Henry James Vaux, Kenneth S. Fowler, and Janet Thornton, *Socio-Economic Data for the Redwood National Park* (Berkeley: School of Forestry and Conservation, California Agricultural Experiment Station, University of California, 1973).

[67] Quotations are from Barry Mackintosh, *Interpretation in the National Park Service: A Historical Perspective* (Washington, DC: National Park Service, 1986), http://www.nps.gov/history/history/online_books/mackintosh2/directions_environmental.htm (accessed December 12, 2007). Also see *National Environmental Study Areas: A Guide* (Washington, DC: National Park Service, 1970).

[68] Developed in 1975, the Green Box was described by the Humboldt County Schools Office of Outdoor Education as "A Kit of Environmental Awareness Activities to be Conducted on Field Trips." A brief narrative description of the journal article, document, or resource. Approaching "environmental education from a humanistic point of view," the kit included "a series of cards and booklets for student

and teacher use. 96 'DO cards' listed information "concerning student directed investigations; 25 THINK cards provide[d] topics intended to foster students' knowledge into an awareness of the interdependence, the use, the change, and the adaptation of the environment; and 250 SHOW cards suggest[ed] methods by which students communicate what they have learned. . . . A total of 15 outdoor problem solving activities and 15 lengthy outdoor investigations, along with a bibliography of additional sources of environmental education activities, complete this 'curriculum in a box'" (Education Resources Information Center, "ED121592 - Green Box. [A Kit of Environmental Awareness Activities to be Conducted on Field Trips]"),, http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=ED121592&ERICExtSearch_SearchType_0=no&accno=ED121592 (accessed November 12, 2009).

[69] Staff Meeting Notes for June 20 and September 20, 1979, February 8 and May 13, 1980, and January 20, 1981, all in General Files, A4031 "Other Field Offices," Folders 2 and 3; and *Superintendent's Annual Report: Redwood National Park—1980*, 6, CF A2621 "Reports and Related Correspondence: Superintendent's Annual Reports, 1980-1986," both in RNSP Archives. Also see Lynda Mealue, "25th Anniversary of Howland Hill Outdoor School," *Redwood Currents: Redwood National and State Parks Resource Management Newsletter* 18 (March-May 2004): 7-8; and "Howland Hill Outdoor School Education Guide," 5-6, http://www.nps.gov/redw/forteachers/howland-hill-outdoor-school.htm (accessed December 6, 2007).

[70] Jean Rodeck, interview by author, February 26, 2008. For the history of relations between the NPS and tribes, see Mark David Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (New York: Oxford University Press, 1999). The case at Redwood is all the more remarkable since the Native American communities that park officials dealt with were generally not affiliated with a federally recognized tribe: the small rancheria communities in Humboldt and Del Norte counties lost federal recognition in the wake of the California Rancheria Termination Act (1958), and would not regain that status until after the U.S. Supreme Court upheld the lower court decision in *Tillie Hardwick et al*. *v United States* (1983); the Yuroks—as a distinct political entity—were subsumed by the Hupa Tribe until 1988. Early concerns about a "possible problem" at Redwood were expressed in a phone message from Dr. Logan of the Denver Service Center to Tom Mulhern at the Western Regional Office regarding conversation between Tom Lucki and Superintendent Von der Lippe, April 4, 1978, message written in a memorandum, "REDW & Native Americans," Archeology Records, PWRO Archives.

[71] These matters are well detailed in Susan Berry, "Taking Back the Land: Problems in Yurok Tribal Sovereignty" (master's thesis, Brown University, 1979), 61-66.

[72] Berry, "Taking Back the Land," 9-10; and Kaaron Carver, "The Conflicting Visions and Versions of the Oral and Public History of Klamath" (master's thesis, California State University, Long Beach, 1994), 107-11. The tsunami also caused some damage at Requa, and the effects of the tidal surge were felt 1.5 miles upriver; see "Tsunamis That Have Affected North Coast California in Historic Time," http://www.humboldt.edu/~geology/earthquakes/tsunami!/n_coast_tsunamis.html (accessed December 13, 2007).

[73] Carver, "Conflicting Visions," 68.

[74] "Secretary Andrus to Visit Klamath River Next Week," U.S. Department of the Interior, News Release: Office of the Secretary, September 1, 1978, http://www.fws.gov/news/historic/1978/19780901c.pdf (December 13, 2007); and Ivan Sharpe, "Indian Beliefs Come into Play in Klamath Dispute, *San Francisco Examiner*, September 12, 1978, 1.

[75] Carver, "Conflicting Visions," 73-74.

[76] American Indian Religious Freedom Act, reprinted in *Landmark Indian Law Cases*, American Association of Law Libraries Series, no. 65 (Buffalo, NY: William S. Hein Company, 2002), 714.

[77] Acting Director to All Regional Directors, February 6, 1978, File Code A5623 (560), PWRO Library,.

[78] The most notable of these occurred in November 1977, when some human remains were exposed in an eroded bluff. Park Service personnel at the regional and park level worked out an agreement with the Northwest Indian Cemetery Protective Association for careful excavation and reburial of the remains; an arrangement that Western Region chief of cultural resources management Tom Mulhern described as "a solid example of how we can work with native American groups to meet both their concerns and Service concerns/preservation requirements"; Chief, Cultural Resources Management:

to Deputy Regional Director, memorandum, November 15, 1977, "Native American Remains Found in REDW," Archeology Records, PWRO Archives.

[79] "Scope of Work: Inventory of Traditional Cultural Locations within Redwood National Park," March 29, 1978; Superintendent, Redwood National Park, to Regional Director, June 14, 1978, with following enclosures: "Draft Summary of Proceedings" and draft "Resolution" from Indian participants who attended the Native American Conference on Cultural Resources in Redwood National Park. All documents in "REDW, Native American Advisory Committee, 1978," Archeology Records, PWRO Archives.

[80] Stephen M. Rios to George Von Der Lippe, June 6, 1978, "REDW, Native American Advisory Committee," Archeology Records, PWRO Archives.

[81] Ann King Smith, "Native American Consultations," in Janet P. Eidness, *A Summary of Cultural Resource Projects: Redwood National Park* (Arcata: Redwood National Park, 1988), 102-3.

[82] General Management Plan (1980), 43.

[83] These concerns are noted in comments from Polly McW. Bickel, which were included in *Final EIS*, 68-73.

[84] Legal concerns revolved around two matters. First, the original transfer of lands acquired by the SRL and granted to the state of California may have come with stipulations that they could never be sold or deeded by the state. Second, because publicly passed bond initiatives paid for most of the acquisition of the state park lands, some in the SRL echoed an old argument once put forward by John C. Merriam and Newton B. Drury in the 1940s and 1960s: because the redwood state parks were largely the result of the 1928 State Park Bond Act, which was passed by the legislature then affirmed in a general election, transferring the state parks to the NPS would necessarily require new legislative action and another vote of the people. Some believed that granting those lands to the federal government might require special legislative action or even the authority of another popular vote. On the basics of these two arguments, see Samuel Trask Dana and Kenneth B. Pomeroy, "Redwoods and Parks," *American Forests Magazine* 71 (May 1965): 6-7. By the 1980s, these strict legal interpretations held little sway in Sacramento, Washington, or among the officers of the SRL: see Newton Bishop Drury, "Parks and Redwoods, 1919-1971"; 2-volume typed mss. of an interview conducted by Amelia Roberts Fry and Susan Schrepfer, 1972, on file at the Bancroft Library, University of California, Berkeley, 645-50; and John B. Dewitt to Huey D. Johnson, September 1, 1978.

[85] *Congressional Record*, 95th Cong., 2d sess., March 14, 1978, 124, 6861.

[86] William J. Whalen to Russell W. Cahill, April 5, 1979, copy enclosed in letter from Whalen to John B. Dewitt, April 15, 1979, SRL Archives.

[87] Dale Champion, "U.S. Official Lets State Keep Control of 3 Redwood Parks," *San Francisco Chronicle*, June 4, 1979: 3.

[88] Whalen, interview by author, June 21, 2006; and Pinnix interview.

[89] Jean Rodeck (née Swearingen), e-mail correspondence with author, March 14, 2006.

[90] Whalen interview

[91] Quotation is from Hal K. Rothman, *The New Urban Park: Golden Gate National Recreation Area and Civic Environmentalism* (Lawrence: University Press of Kansas, 2004), 40; for comments on redwoods, see 36-37. For Whalen's career, see Michael Frome, *Regreening the National Parks* (Tucson: University of Arizona Press, 1991), 86-98.

[92] Whalen interview; and Rothman, *New Urban Park*, 44-57. Jean Rodeck recalled Whalen making very similar comments in 1977 during a function honoring the new director at the Southwest Regional Office in Santa Fe; Jean Rodeck (née Swearingen), interview by author, February 26, 2008.

[93] Champion, "U.S. Official."

[94] Dewitt to Whalen, May 3, 1979, SRL Archives. Whalen did not have any recollection of this meeting.

[95] This and the preceding quotation are from Whalen interview.

[96] "Briefing Statement Update, June 30, 1979," 5-6, General Files A 2623 "Reports and Related Correspondence, Situation—Briefing Statements, 1978-1979," RNSP Archives.

[97] *Draft Environmental Statement: General Management Plan for Redwood National Park* (Crescent City, CA: Redwood National Park, 1979), 18 (hereafter *DES: GMP*)

[98] For description of NPS visitor facility in Orick see *Environmental Assessment: Redwood Visitor Center* (National Park Service, October 1982). For description of May Creek and the activity center concept, see *DES: GMP*, 183-85. Whalen's interest in May Creek and the Sunshine Café noted by Robert Barbee, interview by author, April 28, 2008.

[99] "May Creek Activity Center: A Concept for User-Responsive Design," document attached to Superintendent's Briefing Statement to Regional Director, June 18, 1980, General Files A 2623 "Reports and Related Correspondence, Situation—Briefing Statements, 1980-1981," RNSP Archives.
[100] *Final EIS*, 35-37.
[101] Ibid,, 88. The SRL did not offer formal comments on the draft *General Management Plan* (*GMP*), but voiced concern through other channels; Memorandum for John B. Dewitt, Executive Director, December 23, 1980, SRL Archives.
[102] *Final EIS*, 102, 105.
[103] Ibid., 2.
[104] *GMP*, 30. For a brief overview of the CDPR and NPS effort to agree on a southern activity center site, see *Environmental Assessment: Redwood Visitor Center*, 1, RNSP Library; and "Report to Congress in Accordance with Pub. L. No. 95-259: General Management Plan for Redwood National Park" (January 1980), 2, in "Redwood—Report to Congress," History Reference Records, PWRO Archives.

# Part Three

## MANAGING THE SECOND-GROWTH OF REDWOOD NATIONAL PARK, 1980–1993

While the Redwood National Park Expansion Act of 1978 nearly doubled the size or Redwood National Park (RNP), park budgets and staff numbers grew by an even more significant magnitude. This growth augmented and redefined the park's basic mission and administrative structure. In working through the implications of the expansion act, Redwood became the site for an unprecedented commitment (within the National Park Service [NPS]) to science-based resource management. In a matter of a few years, park staff developed a watershed rehabilitation program that became a model for the NPS, U.S. Forest Service, Bureau of Land Management, California Department of Parks and Recreation (CDPR), and other public lands agencies, for private organizations, and even for programs in other nations working to correct some of the growing consequences of environmental degradation. In short, RNP became a new park and a new kind of park. As Superintendent Douglas Warnock observed in 1984, Redwood came to embody "a radical departure from the basic preservation and protection mission of the Park Service."[1]

The following two chapters cover the period from the early 1980s, after the first park *General Management Plan* was created and most new plans and projects began implementation, until the mid-1990s when RNP entered into a cooperative management agreement with CDPR to form the Redwood National and State Parks complex (RNSP). This span of time represents a period of remarkable growth and success, but it was not without significant challenges. Some of these were technical, as park staff developed novel approaches for managing and restoring cutover lands, while others were related to the budgetary and administrative implications of operating a large and unique resource management program. As detailed in the following two chapters, the decade and a half after the expansion act was a mixed bag of progress, setback, and reevaluation that ultimately led to a redefinition in 1993–1994 with the formation of RNSP. Chapter 5 deals with the five main

directives of the expansion act: property acquisition; economic development; watershed rehabilitation; addressing land management practices outside the park; and construction of U.S. Highway 101. Chapter 6 re-covers the same period of time, but takes a more subject oriented and episodic—as opposed to chronological—approach to park administration. The chapter gives additional coverage to the watershed rehabilitation program, particularly as it relates to parkwide management goals, but also takes up a host of subjects outside the purview of the expansion act.

---

[1] Warnock quoted in Robert Belous, "A View from Redwood Creek: Learning by Doing," *Park Science* 4 (Winter 1984): 6.

# Chapter Five

## ACTING ON THE WILL OF CONGRESS, 1978–1993

The Redwood National Park Expansion Act of 1978 was a remarkable piece of legislation, not only for the breadth of issues it covered and the financial obligations it assumed but also for the level of specificity that accompanied each element of the act. From details over the disposition of downed timber to the definitions of an "affected worker" or the route of the U.S. Highway 101 bypass around Prairie Creek Redwoods State Park, the act seemed as much a management plan as a piece of legislation. Such thoroughness certainly reflected the political signature of Representative Phillip Burton, but it also came from a more broadly shared sense in Congress that the 1968 Establishment Act was a weak and poorly thought out piece of legislation. Correcting the failings of the 1968 act involved much more than a simple expansion of the park's boundaries (as difficult and expensive as that was); it meant clarifying "the original intent of Congress, and . . . establish[ing] a more meaningful Redwood National Park."[1] With so many perceived errors in need of correction and clarification, there was wide agreement in Congress that the expansion act had to be comprehensive.

On one level, the effort to clarify the purpose of the park and make it "more meaningful" extended well beyond Redwood National Park (RNP). For Burton and his allies, the expansion act represented an effort to politically link environmental and economic issues as well as codify a new and growing emphasis within the National Park Service (NPS) on ecologically based resource management. On another, more specific level, the expansion act operated as a kind of administrative template for how these two broader goals could be achieved in a specific context. In the end, correcting the problems of the 1968 act was not just a matter of doing what should have been done ten years earlier; it was also about setting things anew and making Redwood into something of a model for the Park Service as whole.

Such matters were largely outside the purview of park staff at Redwood, but the thoroughness of the expansion act and the intense interest it garnered in Congress had a pronounced effect on how the park would be managed through the 1980s. Along with the details of the legislation itself, Congress stipulated that RNP—through the Secretary of the Interior—"submit an annual written report to the Congress on January 1, 1979, and annually thereafter for ten years." The subject of the reports spanned every significant section of the Act, covering "the status of payment . . . for real property acquired . . . ; the status of the actions taken regarding land management practices and watershed rehabilitation efforts . . . ; the status of efforts to mitigate adverse economic impacts as directed by this Act; [the] status of National Park Service employment [of affected timber workers]; the status of the new bypass highway and of the agreement for the donation of the State park lands . . . ; and, the status of the National Park Service general management plan for the park."[2]

The requirement to report on the implementation of key components in the expansion act guaranteed a high level of compliance with the will of Congress. It also fostered a very thorough and subtle understanding of the act's many implications, which in turn shaped planning and management at the park. This was especially true of the watershed rehabilitation program--a central feature of pre-expansion planning at Redwood and a cornerstone of the expansion act itself. As park geologists Mary Ann Madej, William "Bill" Weaver, and Harvey Kelsey noted, early efforts to develop the rehabilitation program were modified and placed in a much broader administrative context after "studies of the legislation and legislative history revealed a number of additional tasks to be accomplished. These included the erosion and sedimentation studies . . . , provisions regarding [employment and services for developmentally disabled clients of] Redwoods United, Inc., the U.S. Highway 101 by-pass, revestment of personal property and down timber, a west-side access road and the development of timber harvest guidelines."[3]

In this and other matters, the expansion act determined a good deal of the park's overall administration—especially over the eleven-year span of annual reports to Congress. While two superintendents guided RNP through this period (Robert Barbee and Douglas Warnock), and each set his own agenda based on a particular set of priorities, both operated within the clear parameters set by Congress. Their specific administrations will be treated more fully in the following chapter, but the present discussion will focus on their combined effort to fulfill a very clear, but very complex, congressional mandate.

### ACQUISITION, COMPENSATION, REDEVELOPMENT, AND PARK ADMINISTRATION

One of the key concerns of Congress in authorizing the Redwood National Park Expansion Act of 1978 involved "appropriate and effective mitigation of the economic impacts" that resulted from the legislation.[4] This was a threefold effort that involved payments "for real property acquired," economic stimulus projects to offset lost tax revenue and help diversify the economy of the North Coast, and economic assistance and retraining programs for timber workers affected by park expansion.[5] Fulfilling these requirements of the expansion act represented an enormous task, and clearly indicated that socioeconomic mitigation was at least as important—and far more costly—as efforts to mitigate against past and present logging practices through watershed rehabilitation.

The ultimate responsibility for land assessment and acquisition, employment programs, and assistance to local government and communities was assigned to the Secretary of the Interior's Office, which was obligated to consult with the Departments of Agriculture, Commerce, Labor, and Justice. Park Service officials at Redwood and the Western Regional Office were nevertheless involved in all aspects of the economic mitigation programs, from assigning contracts for timber cruises and land assessments to supervising boundary surveys, arranging negotiations with landowners, and hiring unemployed timber workers. Even when park administration was peripheral to such matters, RNP

superintendents and their staff were ultimately responsible for tracking all of these developments, assessing their progress, and presenting their findings in a full report to Congress. And even though park officials did not administer the legal valuation and disposition of private property or the mitigation of economic hardships, close knowledge of these matters nevertheless shaped park management.[6]

### "THE MOST EXPENSIVE PARK EVER"[7]

As with the park's establishment in 1968, the most fundamental aspect of the Redwood National Park Expansion Act involved the federal taking of private land. In accordance with the Fifth Amendment of the Constitution, which closes with the famous restriction against "private property be[ing] taken for public use, without just compensation," this required a difficult and lengthy process of defining the fair market value of the property in question. The first order of business was a cadastral survey of the newly enlarged park boundaries, which the Bureau of Land Management completed in summer 1979.[8] With the boundaries firmly established, the Park Service then contracted for a cruise and inventory of the timber volume and species type within the 46,000-acre expansion area. One contract for $300,000 was awarded to Robert T. McDougal of Ukiah for a cruise of the twenty small ownerships in the expansion area. The firm of Hammon, Jensen, Wallen, and Associates of Berkeley was awarded a $2 million contract to conduct a three-year cruise and inventory of the new park lands that had belonged to the "Big Three" timber companies—Louisiana-Pacific, Arcata Redwood, and Simpson Timber—which together owned about 93 percent of the park expansion area.[9]

The Big Three also conducted their own cruise and inventory, and worked up an appraisal for their lost property—minus the approximately 7,330 million board feet (MMBF) of downed timber they removed from park lands in accordance with the terms of the expansion act[10] The Department of the Interior held off on a full appraisal until after Hammon, Jensen,

Wallen, and Associates completed its cruise and inventory, but nevertheless made initial payments totaling $300 million to affected landowners for the expected minimum costs of the lands and timber under question. Nearly two-thirds of these funds went to Louisiana-Pacific, which gave up 26,544 acres that included a fair amount of prime old-growth. The remainder mostly went to Arcata Redwood Company ($90.8 million) and Simpson Timber Company ($14.1 million), with the twenty small landowners receiving a combined $16.5 million or 5 percent of the total.[11]

The cruise and inventory for the small properties was completed in 1980, while the larger contract for the lands owned by the Big Three did not conclude until late 1981. The results concurred with the tallies of the private landowners and all parties settled on a final figure of approximately 1.4 MMBF.[12] Agreement on timber quality and volume did not mean agreement on value, however. On the twenty small holdings, which totaled some 3,400 acres, the government and eighteen landowners managed to settle without litigation and protracted negotiation. The final values were sometimes well in excess of the preliminary payments, which reflected the difference between the original estimates and the actual appraised values as well as the government's willingness to complete these settlements in a timely manner, even if it meant having to make somewhat more generous payments. The eighteen claimants who settled with the government by October 1982 had received initial payments totaling $1,925,500.00, but after final appraisal and negotiations, that number climbed to $6,048,489.00. The two hold outs, who initially refused any preliminary payments for their lands, eventually settled with the government for a combined $280,375.[13] Although considerably more than the original payments, the final figure of $6.3 million represented less than 2 percent of the original $380 million appropriation for land acquisition but garnered 7 percent of the 48,000-acre expansion area. While these lands tended to have less valuable stumpage than the holdings of the Big Three, the final negotiated price still fell within the original expectations of Congress.

Reaching final agreement with Louisiana-Pacific, Arcata Redwood, and Simpson Timber proved far more difficult and expensive, and involved protracted litigation in federal court. At issue were two different approaches to appraising timber value. In addition to receiving full market price for their timberlands, the companies also wanted compensation for lost opportunity costs. *Opportunity cost* is a term used in economics that defines the value of a foregone activity in one of two ways. In some cases, it is akin to a punitive damage award that compensates for the lost opportunity to pursue a preferred economic activity—even if that loss does not create any financial hardship. More commonly, opportunity costs relate to lost investment opportunities. In the case of a logging company, the time, money, and equipment invested in timber harvesting is equated with a similar investment in some other highly capitalized economic pursuit—and factoring the long-term income potential of that other pursuit into full valuation of the presently conducted business. Big Three timber owners claimed the government owed them for both kinds of opportunity costs—for not being able to pursue their preferred economic activity and for not having directed their previous investments in timber cutting and production toward some other enterprise that would not have been subject to a federal taking.[14]

The Department of the Interior did not concur with the Big Three on this liberal interpretation of lost opportunity costs, but it did agree that just compensation included payment for timber at the market price on the day of the taking along with severance damages for the lost economic usefulness of mills, roads, and equipment. In addition to these payments, the government also reasoned that the timber companies would be further—but indirectly—compensated by the increased value of their remaining timber reserves since the expansion of the park reduced by 15 percent the market supply of a unique resource. In economic terms, the increase in value of remaining property that a taking causes is called *enhancement*. Federal law permits this value to offset compensation paid for a taking, and the point where the Big Three and Interior disagreed most strenuously was on

the accounting and applicability of enhancement. The Big Three argued that since they had no choice in what they sold and what they retained, the market value of all their lands should be calculated in terms of the price they would have received for their entire holdings if a willing buyer could have been found on the day of the expansion act—a fictional scenario that would have incorporated any enhancements into the purchase price.[15]

Not surprisingly, the Big Three and the Department of the Interior arrived at very different figures for how they assessed the value of the land and timber within the expansion area. Arcata appraised their timber at $300 million, while the government arrived at a figure of $150 million. This basic two-to-one ratio held in the other cases, with Simpson and Louisiana-Pacific claiming lost values of $54 million and $464 million respectively and the government appraising those same lands at $26 million and $214 million. The margin of difference was too great for direct negotiation and the various parties brought their cases to the U.S. District Court for Northern of California in April 1984.[16]

Justice Thelton Henderson and the litigants were initially hopeful that ultimate disposition might be reached by March 1986, but matters proved more complicated than anticipated. Ninety-one court days were given over to the presentation of evidence, which included testimony from forty-three witnesses, and the cases—which were tried together—dragged on for four years. Based on the calculations of a court-appointed Land Valuation Commission, which was directed by Henderson to not consider the matter of enhancement, the final settlement—exclusive of interest—amounted to $363,950,050 for Louisiana-Pacific, $275,721,000 for Arcata, and $49,846,000 for Simpson. After factoring in ten years of interest, however, the total for land acquisition ballooned to $1 billion. The Big Three subsequently used some of this money to pay back taxes and long-term debts that had been accrued under the condition that they would be repaid after settlement with the government. However, the lion's share stayed with the companies, which became the extraordinary beneficiaries of something they had so strenuously opposed. While these sums vastly

exceeded the original calculations of Congress and the Park Service, the size of the payouts also undermined the expectation that these funds would be invested in the local economy and thus further the goal of making park expansion a cornerstone for new economic development. Instead, these suddenly cash-rich corporations diversified their portfolios and, especially in the cases of Arcata and Louisiana-Pacific, invested outside the area and the industry.[17]

### THE REDWOOD EMPLOYEE PROTECTION PLAN

Besides the outright purchase of private lands, the other great expense associated with park expansion came in the form of the Redwood Employee Protection Plan (REPP). Intended to compensate timber workers displaced by the federal taking of 48,000 acres, REPP designated the expenditure of $25 million to compensate for lost wages and retirement benefits, and for expenses associated with retraining, job seeking, and relocation. Authorized to run for eleven years, the full period of the annual reports to Congress, REPP ultimately cost $104 million.[18]

Part of the gross expansion in the overall costs of the program resulted from the broad criteria used by Congress to define an affected worker. More concerned about not covering all affected employees than covering too many, Congress operated under the simple assumption that anyone employed in the North Coast redwood timber industry who was terminated or partially laid off in the months before and after expansion was eligible for REPP benefits. In a cyclical industry where seasonal lay-offs and chronic unemployment were compounded by recent trends toward greater mechanization and shrinking payrolls, this proved a costly decision. In a 1980 report to Congress, the General Accounting Office (GAO) noted that because “workers whose layoffs are not related to the park expansion also qualify for the benefits . . . , about 88 percent more employees than originally estimated have established program eligibility during the first 18 months of the program.” The GAO also

found that because REPP did not tie receipt of benefits with enrollment in a retraining program or active job seeking, “the program’s exceptional benefits reduce[d] incentives to work.”[19] Consequently, many beneficiaries remained unemployed or underemployed for much longer than originally predicted.

On average, the 3,500 workers who used REPP received $30,000 in compensation—and some received lump sum pay outs of $45,000. Yet less than 13 percent of eligible workers enrolled in retraining, and a quarter of those who did subsequently left the area.[20] By the late 1980s, no one could claim that REPP was either a success or a model for other federal programs. On the contrary, the high costs of land acquisition and poor public perception of REPP led many to deride the expansion of Redwood National Park as both the high point and the end of an era marked by environmentalist excess and congressional overreaching. During the Reagan years, such views became political gospel, and political reality, as the Park Service underwent a long budgetary decline that was in part seen as a kind of payback for the expenses associated with Redwood’s expansion and the 1980 Alaska National Interest Lands Conservation Act.[21]

For all its problems and consequences, REPP did represent a noble effort to revive and restructure the chronically depressed economies of the North Coast. In this respect, the expansion act echoed some of the more ambitious projects of the New Deal era that sought to reform the social, ecological, and economic conditions of blighted areas. Yet REPP was never intended to be a stand-alone program; rather, it was just part—albeit the most expensive part—of an integrated plan to retrain displaced workers, to employ ex-loggers in new industries and as watershed restoration workers in RNP, and to assist Del Norte and Humboldt counties with economic planning and grants. When these other elements of the plan faltered, or when support from various state and federal agencies stalled or failed to materialize, REPP could not possibly meet expectations.

The first great blow to REPP came early on in the program because Department of Labor regulations for retraining workers were not implemented until fourteen months after the expansion act passed. Educational institutions responsible for the training were forced to hold off on the development of their programs and through the long interim, many workers interested in learning a new trade simply drifted away. This unplanned delay was further compounded by the slow pace of the California Employment Development Department's bureaucracy, which in some instances delayed health insurance, pension payments, and retraining stipends by eighteen months or more.[22]

Unexpected administrative delays were not the only problems, however. The Redwood Employee Protection Plan and its associated programs also faltered because many of the assumptions of park advocates and the Park Service simply failed to materialize. The projected two million annual visitors the enlarged park was expected to attract to the area turned out to be pie in the sky, and the tourist economy that was supposed to replace the timber industry did not take hold.[23] Likewise, the expectation that RNP would hire dislocated timber workers to carry out its forest restoration projects never happened as planned. In the first year of the watershed rehabilitation program, when much of the work in the Redwood Creek basin was done manually, the park utilized sizeable work crews. However, government contracting rules stipulated that work had to be awarded to lowest bidders, which in this case were members of communes and back-to-the-land groups from Mendocino County and western Washington. Once park scientists realized that using heavy equipment for watershed restoration was far more effective and far less expensive than manual labor, these contracts were not renewed and the potential for hiring significant numbers of ex-timber workers to rehabilitate the basin disappeared altogether. Between 1978 and 1987, the Park Service offered only six permanent career positions to REPP beneficiaries, and in no year during the program were there more than thirteen positions—temporary, term, or career—filled by eligible timber-industry workers.[24] Whenever possible,

the park would contract with heavy equipment operators that had local connections, and they would in turn hire workers with some previous connection to the timber industry, but this seasonal, subcontracted employment was not monitored nor did it represent a concerted effort to provide jobs to displaced workers.[25]

The Park Service's inability to provide substantial employment to affected workers reflected broader social and economic realities that went far beyond the specifics of the watershed program. For starters, intense local animosity toward the park always kept the applicant pool of REPP beneficiaries very small and no amount of recruitment could have changed this basic fact. And even if every applicant received a job, their numbers would not have affected regional economic trends. As it turned out, most displaced workers who remained in the area went back into the timber industry, which initially benefited from an increase in timber sales from the adjacent Six Rivers National Forests. These were intended to offset the loss of old-growth and mature second-growth timber when the park expanded, and sales from the national forest did rise more than 25 percent in the years immediately following expansion. Almost as quickly, however, harvests dropped by more than half as high interest rates and a severe recession killed housing starts and undermined the national timber industry as a whole. By the time harvest levels started to rebound on the North Coast in the late 1980s—some ten years after expansion—new concerns about spotted owls, marbled murrelets, and decades of unsustainable forest management throughout the Pacific Northwest led to a sudden and sharp reduction in timber sales and harvest levels on national forest lands.[26]

### REGIONAL ECONOMIC DEVELOPMENT

These basic trends only exacerbated a decades-long, but accelerating, decline in timber-related employment along the North Coast and throughout the Pacific Northwest. The ongoing mechanization of the timber industry, falling lumber prices, a growing market for

unfinished logs in East Asia, and the divestment of large timber-based corporations from the wood and paper products industries to other sectors of the national and international economy all took a heavy and long-lasting toll on the region's economy.[27] In the context of this larger economic restructuring, the part of the expansion act dedicated to economic development faltered during the decade of annual reports to Congress. Even with a sustained influx of cash from REPP payments and the U.S. Economic Development Administration's (EDA) expenditure of $13.4 million for high-risk business loans and infrastructure development, the economy of the North Coast remained sluggish. At best, EDA funds led to the creation of six hundred jobs over ten years—far less than the number lost in 1978, but arguably more than the region's economy might have created on its own even without the 1978 expansion.[28]

When the lumber industry fell into a steep decline in the late 1980s and early 1990s, however, the EDA component of the expansion act finally started to show some long-term benefits as the region's population and economic basis changed. This largely occurred through the auspices of the Redwood Region Economic Development Commission (RREDC), which used EDA funding for a variety of public projects including the Arcata/Eureka Airport Terminal Building, the Fields Landing Boat Building and Repair Yard, and the Aldergrove Industrial Park, and maintained a revolving loan fund for local business development. The RREDC projects helped diversify the economy of Humboldt County and attracted a better-educated population. An influx of retirees and growing enrollments at Humboldt State University led to new housing construction that helped raise long-stagnant real-estate values, and local tax revenues finally started to stabilize in the 1990s.[29]

Del Norte County did not share in these benefits, in part because the EDA program was directed primarily toward Humboldt County where all of the expansion occurred. Even without the RREDC, however, Humboldt was also better positioned to weather the recession of the 1980s since it already had a larger population and a more diverse economy. Also

unlike Del Norte County, which relied a great deal on its increasingly restricted access to national forest lands, almost all of the timber harvesting in Humboldt occurred on private lands. Consequently, Del Norte County required an even greater amount of outside public funds, and its economic fortunes only started to improve when the State of California built the Pelican Bay State Prison near Crescent City in 1989. This brought nearly 2,000 jobs to the county and established a level of employment and economic stability the county had never seen—even before the establishment of RNP. Instead of tall trees, tourism, and new kinds of employment, retirees and prisoners altered the timber-dependent economies of the North Coast in the years after the various economic mitigation programs ended; and with the passage of time and more hopeful prospects, these new demographic and economic conditions helped temper once-bitter local fear and resentment of the NPS and RNP.[30]

### "DEVELOPMENT AND IMPLEMENTATION OF A PROGRAM FOR . . . REHABILITATION"

The high costs associated with land acquisition and economic mitigation programs were part of a broad vision for RNP and the North Coast, and they were central components of the 1978 Redwood National Park Expansion Act. Yet in almost every respect, it was the watershed rehabilitation program that defined the newly enlarged park's purpose and significance. Explicitly authorized by Congress and funded with an appropriation of $33 million, "Rehab" became the most extensive and well-funded resource management project in the entire national park system. Given the emphasis in the expansion act on developing and implementing "a program for . . . rehabilitation," as well as the large percentage of the park's overall budget and personnel the program encompassed, the sections devoted to describing "the actions taken regarding land management practices and watershed rehabilitation efforts" constituted the bulk of the parks annual reports to Congress. The reports in turn provided the forum where the park's basic goals and purposes were most clearly articulated on a regular basis.

The phrase “land management practices and watershed rehabilitation efforts,” as it appeared in the expansion act, was a wide-ranging reference to a related set of administrative obligations that became different subsections of the annual reports to Congress. These included cooperative agreements among the NPS and agencies that included the U.S. Geological Survey (USGS), Bureau of Land Management, and California Department of Forestry (CDF) as well as the employment of affected timber workers in rehabilitation projects.[31] However, as park staff understood it—and as members of Congress apparently concurred—land management and rehabilitation essentially referred to the more specific program of mitigating or erasing the hydrological and ecological effects of past, present, and future timber harvesting in the Redwood Creek basin.

For the most part, this meant five things: conducting research on erosional and watershed processes to understand the effects of, and treatment for, past and future land use in the watershed; physical rehabilitation of cutover lands within the park; long-term monitoring of watershed conditions to observe the effects of land use in the watershed and rehabilitation projects within the park; NPS participation in the formulation of timber harvest plan reviews on private lands upstream from the park; and working to address a number of unresolved issues regarding the effects of engineered flood-control measures in the Redwood Creek estuary.

## EARLY REHABILITATION WORK TO 1980

In early 1977, with Congress expected to include a program to restore cutover lands in the new expansion bill, the relatively small staff in Resource Management and Research prepared a preliminary watershed rehabilitation plan and organized a conference on the subject to bring in outside experts. By summer, park staff initiated three small pilot projects in the existing park that totaled 273 acres and included just .6 miles of logging road. Centered on Little Lost Man Creek, May Creek, and Dolason Prairie, the sites were selected by park

staff for differences in terrain, accessibility, and the nature and timing of previous logging. In October, four separate pilot rehabilitation projects were undertaken by three outside contractors to further explore different combinations of erosion control measures. The following March, the Park Service convened a workshop on rehabilitation and erosion control techniques that brought together scientists and technicians from state and federal agencies as well as academics and timber company representatives.[32]

The following summer and fall, park staff undertook five more pilot rehabilitation projects on recently tractor-logged lands within the new park expansion area. These included an 80-acre project in upper Miller Creek, 80 acres in lower Emerald Creek, 85 acres in upper Bond Creek, 7 acres in lower Bond Creek, and 2 acres in lower Miller Creek. Along with the workshop proceedings, the pre- and post-expansion test projects revealed important lessons for subsequent development of the rehabilitation program. In particular, the test plots showed the limitations and prospects of different manual labor techniques and—through consultation and interaction with heavy equipment operators—introduced park staff to the potential effectiveness of bulldozers, excavators, backhoes, and dump trucks in unmaking what these machines had recently wrought in the service of the timber industry. This lesson ran counter to expectations, which were based on older techniques developed in the 1930s by the Civilian Conservation Corps and aligned with the “back-to-the-earth” and “hands-on” ethics of 1960s and 1970s environmentalism. In summing up these early lessons, park geologist Terry Spreiter observed that "you've got to get in there with the beast that created the problem to solve the problem." Redwood staff also learned valuable lessons about contracting procedures, running crews in the forest, and assessing the effectiveness of different rehabilitation techniques.[33]

With the expansion act passed and a $33 million authorization for rehabilitation slated to begin the coming fiscal year, Redwood started a spate of new hiring and Resource Management and Research staff pushed into a new set of experimental plots. Staff treated

271 acres and 1.6 miles of road in 1978; they adopted several new techniques and refined others, while ruling out still others as ineffective or too costly. As park staff later reported, the lessons from the 1978 work season "resulted in a major evolutionary change in the approach to watershed rehabilitation. Careful analysis of unit erosion control costs indicated heavy equipment was more effective and cost effective in achieving desired levels of erosion control than were labor intensive secondary treatments." This shift is most dramatically illustrated in the budgets for 1978 and 1979. In the first year, the use of heavy equipment accounted for 5-25 percent of the costs for different projects, while in 1979 it increased to 85-95 percent of total costs.[34]

Heavy equipment use also led to the discovery and implementation of previously unconsidered rehabilitation measures. Removing large volumes of road material from stream crossings, for example, revealed the original channel bed. No one expected it to have remained intact after so much fill and compaction, but it did. So, instead of cutting and contouring a new streambed through the fill material—which had been the practice with hand tools—heavy equipment allowed for a much fuller restoration of original, natural drainage patterns. It also permitted the retrieval and application of fertile topsoil that was buried in the road-building process, thus allowing for more effective revegetation of rehabilitated sites.[35]

As these early projects were underway and staffing levels increased, the Resource Management and Research Division added several new positions that dealt expressly with the geology and hydrology of the Redwood Creek basin. With two seasons behind them, staff used fall and winter 1978-1979 to inventory erosion problems and develop prescriptions for several new areas. The long wet season also provided time to establish a field operations center in Orick, to procure equipment and supplies, nail down logistics, and negotiate contracts. Such preparation was reflected in both the scale and the scope of the work for the 1979 season, which included treatment of 970 acres and 10.4 miles of logging roads. In 1979, sixty-four haul road stream crossings were also treated (compared to seven in 1978),

as well as 57 miles of skid trail (as compared to 16 miles the previous year). The shift to greater reliance on heavy equipment also resulted in removal of 22,500 cubic yards of material from stream crossings—a nearly tenfold increase over the previous year.[36]

### REHABILITATION MATURES, 1980–1983

Fall 1978 also marked the beginning of a new period of restructuring and growth as the Resource Management and Research staff more fully "recognized the magnitude of technical and other problems faced in successfully implementing the rehabilitation program mandated by the 1978 Redwood National Park Expansion Act."[37] The process was greatly fostered by the appointment of Robert Barbee as the park's new superintendent and Lee Purkerson as associate superintendent. Barbee, who previously served as superintendent at Cape Lookout National Seashore, Cape Hatteras National Seashore, and Hawaii Volcanoes National Park, had a strong background in new program organization and resource management. Purkerson, who had a higher GS ranking than Barbee and previously worked at the NPS Research and Scientific Division in Washington, DC, was brought to Redwood expressly to supervise the organization and implementation of the rehabilitation program. A small administrative office was opened in Arcata for Purkerson and staff involved in the early development of the watershed program. Located 75 miles south of park headquarters in Crescent City, the Arcata office was closer to the expansion area near Orick, gave staff more ready access to the middle and upper watershed by way of Highway 299, which brought them closer to faculty at nearby Humboldt State University and staff at the USGS office in Eureka, with whom they often conferred.[38]

Within a year, Resource Management and Research was reorganized into "two distinct functional entities . . . to most effectively conduct the program. As park staff subsequently explained the changes, a Resources Management Division was formed "to carry out watershed rehabilitation projects." A second and much larger Technical Services

Division was created to handle a host of responsibilities related to the rehabilitation program. These included “erosion studies, timber harvest plan reviews, rehabilitation technique development and evaluation (both physical and biological) and environmental monitoring for both rehabilitation program support and park resource protection.” The new division also assumed responsibility for “environmental law and policy compliance, [as well as] archaeological clearances.[39] Within Technical Services, these responsibilities were further broken down into several key branches: Geologic Services determined the site selection and treatment strategies for land restoration and road removal; reviewed and developed strategies for long-term erosion control; reviewed THPs on private lands; and monitored erosion rates on cutover and recently rehabilitated lands. Hydrology was charged with studying and monitoring major sources of sediment in the Redwood Creek basin, assumed responsibility for continued monitoring of the long-term USGS channel stability studies, assisted the USGS in monitoring the streamflow of Redwood Creek during higher flow events rehabilitation, and collaborated with other Technical Services staff in the development and evaluation of various management alternatives for resource protection.[40] Aquatic Resources was responsible for studying and monitoring aquatic resources to help guide the efficacy and impact of rehabilitation projects on aquatic environments. And Revegetation developed effective and economical techniques for replanting cutover and rehabilitated sites.[41]

Complementing the efforts of their colleagues in Technical Services, the geologists, hydrologists, ecologists, and various technicians and workers in Resource Management were primarily responsible for implementing the rehabilitation and revegetation projects in Redwood Creek basin. These basic responsibilities were in turn broken down into three main programs: Road Maintenance and Heavy Equipment Operation, which involved the maintenance and stabilization of old logging roads to prevent erosion as well as the operation of heavy equipment for rehabilitation projects; Site Specific Watershed

Rehabilitation, which was managed by five management geologists or hydrologists who were responsible for one to two projects each year from mapping to implementation and follow-up; and Vegetation Rehabilitation, which was supervised by a management ecologist who worked closely with one of the division's management geologists to direct projects in planting, second-growth forest thinning, and removing exotics.[42]

During the preliminary development of the watershed restoration program, most staff worked out of the Southern Operating Center (SOC), which between 1977 and 1980 consisted of a few trailers near the confluence of Prairie Creek and May Creek. In early 1980, however, Technical Services and Resources Management moved into new and separate facilities: Associate Superintendent Purkerson and Technical Services staff moved to a group of offices in the old Jacoby Storehouse building in downtown Arcata while most Resource Management personnel moved to the relocated SOC that was sited near an existing trailer park at the north end of Orick.[43] The physical separation of the two divisions reflected their different orientations: Technical Services was more focused on the upper watershed and collaboration with agencies and academics south of the park while Resource Management mostly operated in the park expansion area upstream from Orick. Yet it also correlated to the tremendous size of the two related divisions, which could not easily be colocated in a single facility. Once fully staffed, the two divisions comprised 73 positions—9 permanent full-time, 18 permanent but less than full-time, 19 term, 16 temporary or seasonal employees, and 11 student positions. This staffing, which grew from just a handful of positions in 1978, took up a full quarter of the fiscal year (FY) 1980 park budget of $4 million. Along with the letting-out of various contracts for heavy equipment, materials, and labor—which added to the total number of people working in rehabilitation—the budget for the watershed restoration program averaged $2.1 million in the first three years after the park's administrative reorganization.[44]

Along with the scale and scope of the watershed rehabilitation program, the professional composition of these two divisions also proved remarkable. New staff positions at Redwood included a geomorphologist (Harvey Kelsey), four geologists (Bill Weaver, Mary Ann Madej, Danny Hagans, and Robert Brakenridge), three management geologists (Terry Spreiter, Ken Utley, and Patrick Teti), and two management hydrologists (Greg Bundros and Edward Wosika, which together comprised the highest number of geology-related positions of any unit within the national park system.[45] By contrast, the park had just one position devoted to the study of redwood ecology (the park's research scientist, Steve Veirs). This apparent imbalance did not imply a neglect of the park's namesake resource; rather, it reflected the dynamic geology and land-use history of the Redwood Creek basin. The composition of the watershed rehabilitation program also confirmed the significance of the USGS work in the basin over the previous decade. As Richard Janda and his colleagues had made clear in the lead-up to expansion, eroding hillsides prevented forest regrowth and threatened old-growth forests downstream. Contrary to popular assumptions about what it might have taken to "save the redwoods," rehabilitation and protection of RNP's primary resource ultimately required the expertise of geologists and hydrologists more than forest ecologists.

By summer 1980, the flurry of planning, hiring, training, testing, experimentation, and relocation that had marked the first years of watershed rehabilitation had given way to a full-fledged program. Formalized in a comprehensive *Watershed Rehabilitation Plan* that was developed through 1980 and approved in March 1981, the program set forth with clear goals, strategies, and techniques. As summarized in the *Plan*,

> The most important objectives of the overall effort include the rehabilitation of logged hillslopes, the restoration of ephemeral, intermittent, and perennial stream channels, and the revegetation and restoration of denuded forestland. These objectives will be accomplished by controlling gully, rill, and slope erosion; by rediverting streams back

> into their natural, prelogging channels, by excavating fills placed in road and skid trail stream crossings, by removing organic debris and stored sediment in natural stream channels where necessary; and by stabilizing mass movement features where feasible. Vegetation will be planted to directly control erosion, to reestablish forest vegetation, and to restore disturbed prairie vegetation. Additional projects include the removal of unnecessary roads and the maintenance of roads considered to be essential. Monitoring for effectiveness of treatment techniques will assist in evaluating the relative success of efforts. A basinwide inventory of sediment sources and the habitat quality of tributaries will provide information relative to the rehabilitation of aquatic communities and streamside vegetation.[46]

Spearheaded by Kelsey and Weaver, and developed with park administration, staff, and a team from the Denver Service Center, the *Plan* presented a five-year strategy focused on "treating the most critical erosion-prone and high-sediment-yield areas from FY 1980 through FY 1984." The *Plan* called for the program's budget to reach $4.9 million by FY 1983 in a push to finish work on the most erosion prone areas within the park. With most of the critical areas expected to be treated by 1984, "the primary emphasis of the rehabilitation program" would then shift to removing unused roads and the program's budget would taper off about 10 percent a year until the expected twelve- to fifteen-year program had run its course.[47]

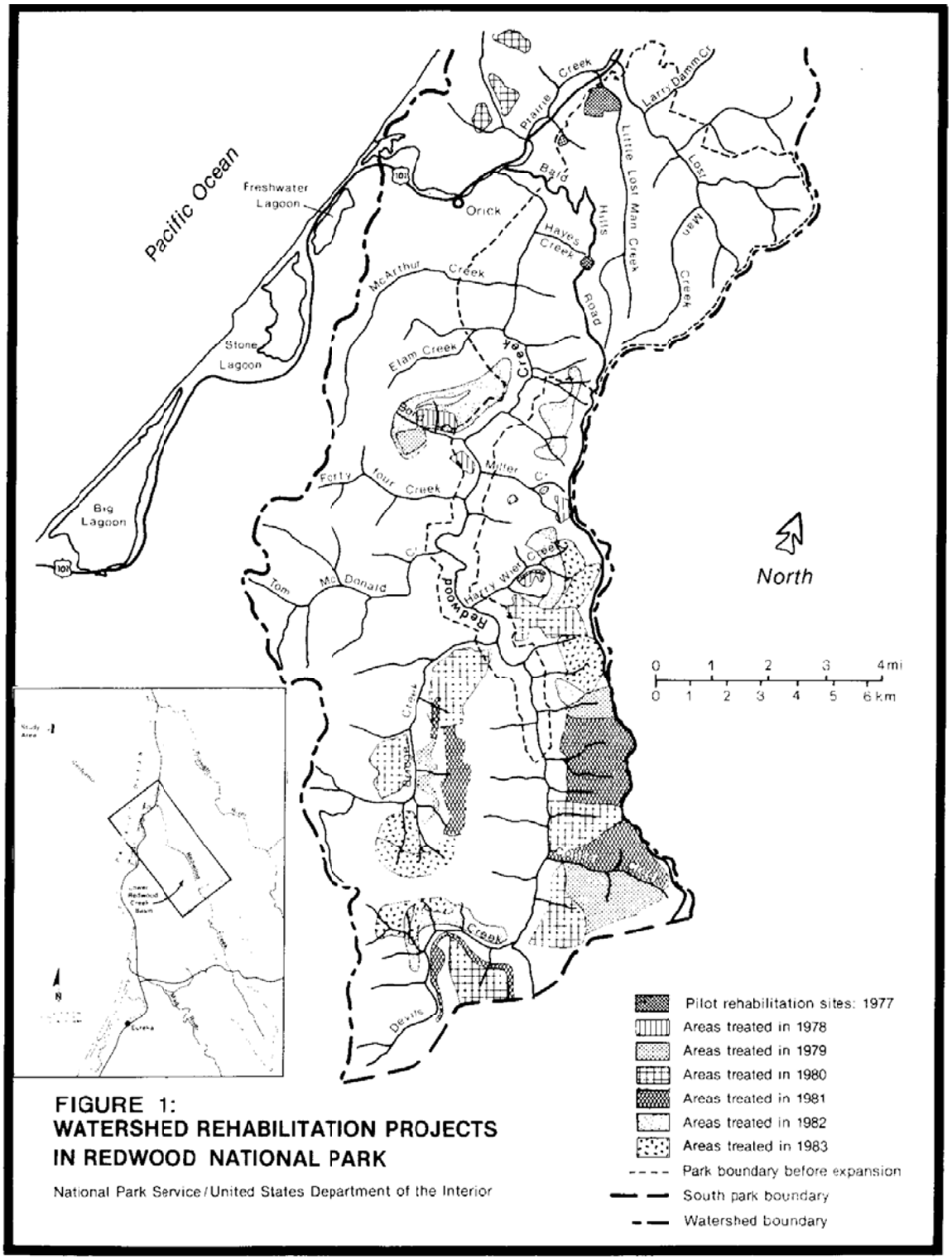


**Figure 5.1 Watershed rehabilitation projects, 1977–1983.** Reprinted from *The Redwood National Park Watershed Rehabilitation Program: A Progress Report and Plan for the Future* ([Crescent City, CA]: Redwood National Park, National Park Service, 1984), 8.

Although budgets did not increase as expected (they essentially held at $2 million per year), and only 40 percent of the original five-year plan was accomplished by the end of the1983 work season, the achievements and prospects of the watershed rehabilitation program were still considerable. Despite the amount of time given to planning, hiring, initial gearing up, and adjusting methods in the early stages of the program, within five years about 70 out of a then estimated 300 miles of logging roads had been treated for stabilization, and a third of the 36,000 acres of logged over lands acquired in the 1978 expansion had been treated. The benefits to the watershed included the prevention of an estimated 2.2 million cubic yards of sediment from entering the stream system. As careful monitoring and study led to greater understanding of the basin's hydrology and geomorphology, and as field techniques adjusted and improved, park staff had every expectation that the number of road miles and acres treated per year would increase.[48]

The development of the rehabilitation program through these early years essentially covered two distinct projects. The costliest and most dramatic part of the program related directly to the physical effort of keeping soil on the slopes and out of the streams through erosion control, road removal, recontourlng disturbed slopes, and revegetation. The second part of the program, which became a major responsibility of Technical Services, centered on the development of an overall "assessment of sediment sources, in-channel storage and sediment output from the Redwood Creek basin."[49] Developing this sediment budget equation was the primary scientific endeavor on which all other tasks relied, and it directly addressed the expansion act's requirement that park staff undertake and publish advanced scientific "studies on erosion and sedimentation originating with the hydrographic basin of Redwood Creek with particular effort to identify sources and causes, including differentiation between natural and man-aggravated conditions."[50] Building on the wealth of data already generated by the USGS studies, Technical Services staff measured streambeds and sediment loads, and using aerial, historical, and field analyses, identified the major sites of

recent, current, and likely future erosion events. These studies became the basis for understanding and predicting the source and amount of sediment that might result from a particular erosion problem and thus became central to determining site selection and effective techniques for specific rehabilitation projects.[51]

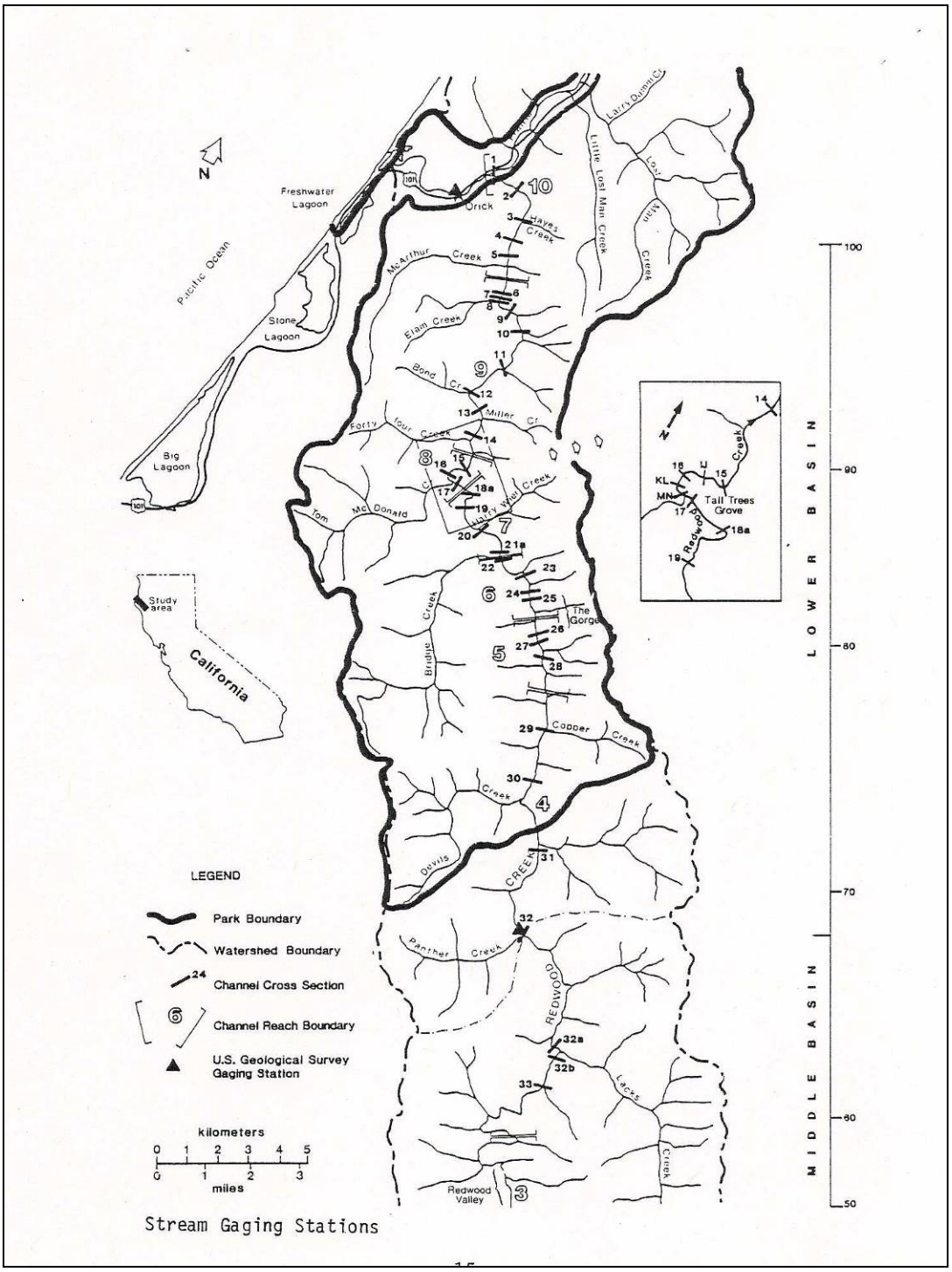


**Figure 5.2 Stream gauging and monitoring stations in the Redwood Creek Basin.** As implied by the geographic scope of this map, the sediment budget also proved critical for assessing, prescribing and monitoring improved timber harvest practices in the upper watershed. Reprinted from *Tenth Annual Report to the Congress on the Status of Implementation of the Redwood National Park Expansion Act of March 27, 1978* (Crescent City, CA: Redwood National Park, 1988), 15.

Close analysis of the overall sediment load in the Redwood Creek basin also provided important information about the cumulative effects of past erosion events and how best to mitigate their long-term effects. By measuring streambed elevations and pool depths throughout the drainage, park staff was able to monitor the volume and movement of the waves of silt, sand, and gravel associated with years of logging outwash as they slowly moved through the park streamscape. Different types of materials moved through the park's hydrological system at different rates. Fine sediment became suspended in the stream current with every rainstorm were carried to the sea in a matter of hours, while sand, gravel, and cobbles deposited during past storm and erosion events might take decades to pass through the park. On the far end of the spectrum are the coarse sediments deposited on alluvial terraces by extreme flood events—the kinds that could smother the root systems of ancient streamside groves. These can remain in place for 1,000 years or more. Understanding the long-term consequences of erosion only made it more imperative that sources of human-caused sediment be eliminated as promptly and fully as possible. As park geologist Mary Ann Madej noted in 1984, "One thing we found was that once the sediment gets into the creeks, it's basically a lost cause. It's too difficult and expensive to remove the excess material. The only effective remedy is to prevent more sediment from washing into the creek."[52]

### CHARTING A NEW FUTURE FOR REHABILITATION, 1984–1989

The fourth year of the initial five-year plan for watershed rehabilitation in Redwood National Park was marked by the arrival of a new management team, which brought a new administrative approach to the park and a significant reevaluation of its signature natural resource program. Douglas Warnock left the Alaska Regional Office in early 1983 to replace Barbee while Don Spalding, who oversaw the "park genesis" at Redwood in 1967 and 1968, transferred from his position as Chief of Operations Evaluation in the Western Regional

Office to assume the position of assistant superintendent for the southern portion of the park.[53] "The expressed intent of the new management regime was to complete and phase out the watershed rehabilitation program as soon as possible." Toward these ends, Technical Services and Resource Management staff were directed to prepare a progress report on the Rehabilitation Program "as soon as possible."[54] The result was the *Redwood National Park Watershed Rehabilitation Program: A Progress Report and Plan for the Future* (June 1984), which gave an overview of past program accomplishments, identified and prioritized remaining work, provided future staffing and organization needs, and set a goal of phasing out the program by 1991.

Although the program had spent less than a third of its original $33 million appropriation, and would not come anywhere near using up these funds in six or seven years, much of the impetus for the 1984 *Watershed Rehabilitation Program* came from concerns in the Western Regional Office about the seemingly open-ended nature of the project. As Warnock noted in 1984,

> We're faced with very real limits of time and money, . . . [and] it is vitally important that we keep in clear focus the [terminal] mission and nature of the rehab program. The landscape and habitat manipulations inherent to this program comprise a radical departure from the basic preservation and protection mission of the Park Service. To be sure, such a departure is justifiable by its final goal of restoring to the greatest degree possible a self-sustaining redwood forest within a national park. But as the program succeeds, emphasis and organization must inevitably shift [back to standard budgets and standard resource management concerns].[55]

Through the late 1980s, when the last annual report to Congress was completed, the *Watershed Rehabilitation Program* guided the program during a period of stable progress. In a sense, the 1984 report took pressure off the program from the NPS regional level and brought a degree of predictability and regimentation to watershed rehabilitation in Redwood

Creek. For the most part, the staples of the program remained the same, with a three-part emphasis on erosion control, landscape restoration, and revegetation. Experience gained in the field, as well as a regular program of peer review between Technical Services and Resource Management staff helped establish a more systematic and routine approach to watershed rehabilitation. As a result, the effectiveness of erosion control [increased while] . . . the unit costs . . . dropped to a relatively low level."[56]

Given heightened concerns about the overall costs and duration of the rehabilitation program, "greater emphasis [was] placed on treating only those potential and existing sources of erosion that could otherwise result in unacceptable damage to other park resources." As Bill Weaver put it, "proximity to the stream channels [was] the alarm bell," and the most cost-effective erosion treatment involved prevention or correction of stream channel diversions by roads.[57] At the most critical sites, a stream channel would be completely excavated and the original channel restored. While this comprehensive but costlier approach had a high success rate in terms of preventing erosion, it was "largely restricted to sites where there [was] greater likelihood that failure would introduce material directly to perennial streams or damage undisturbed old growth forest."[58] At less critical sites, in terms of potential sediment discharges, treatments were less extensive and less concerned with environmental restoration than in supporting functional drainage systems.

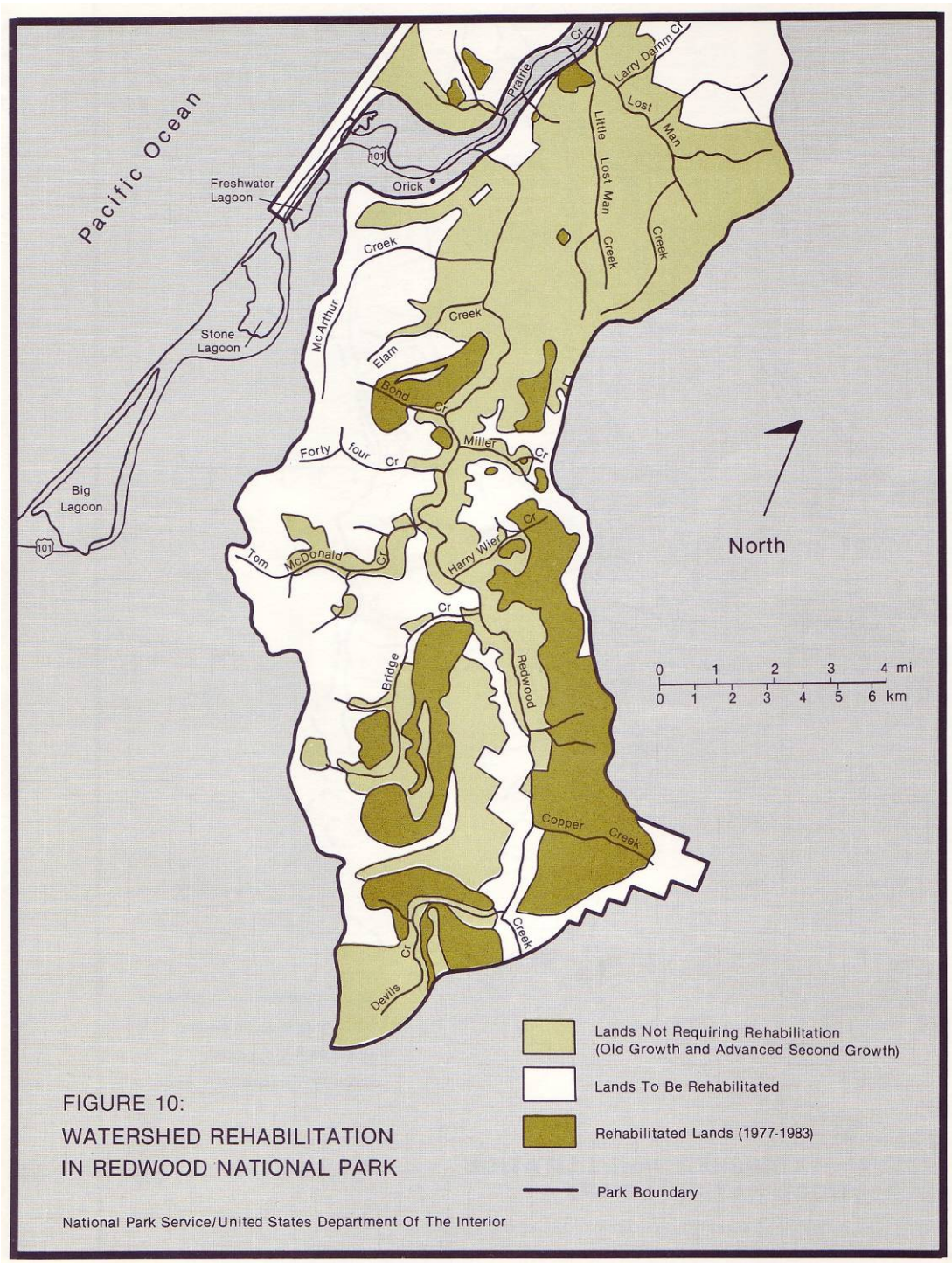


**Figure 5.3 Proposed watershed rehabilitation schedule, 1984–1991.** Reprinted from *The Redwood National Park Watershed Rehabilitation Program: A Progress Report and Plan for the Future* ([Crescent City, CA]: Redwood National Park, National Park Service, 1984), 60.

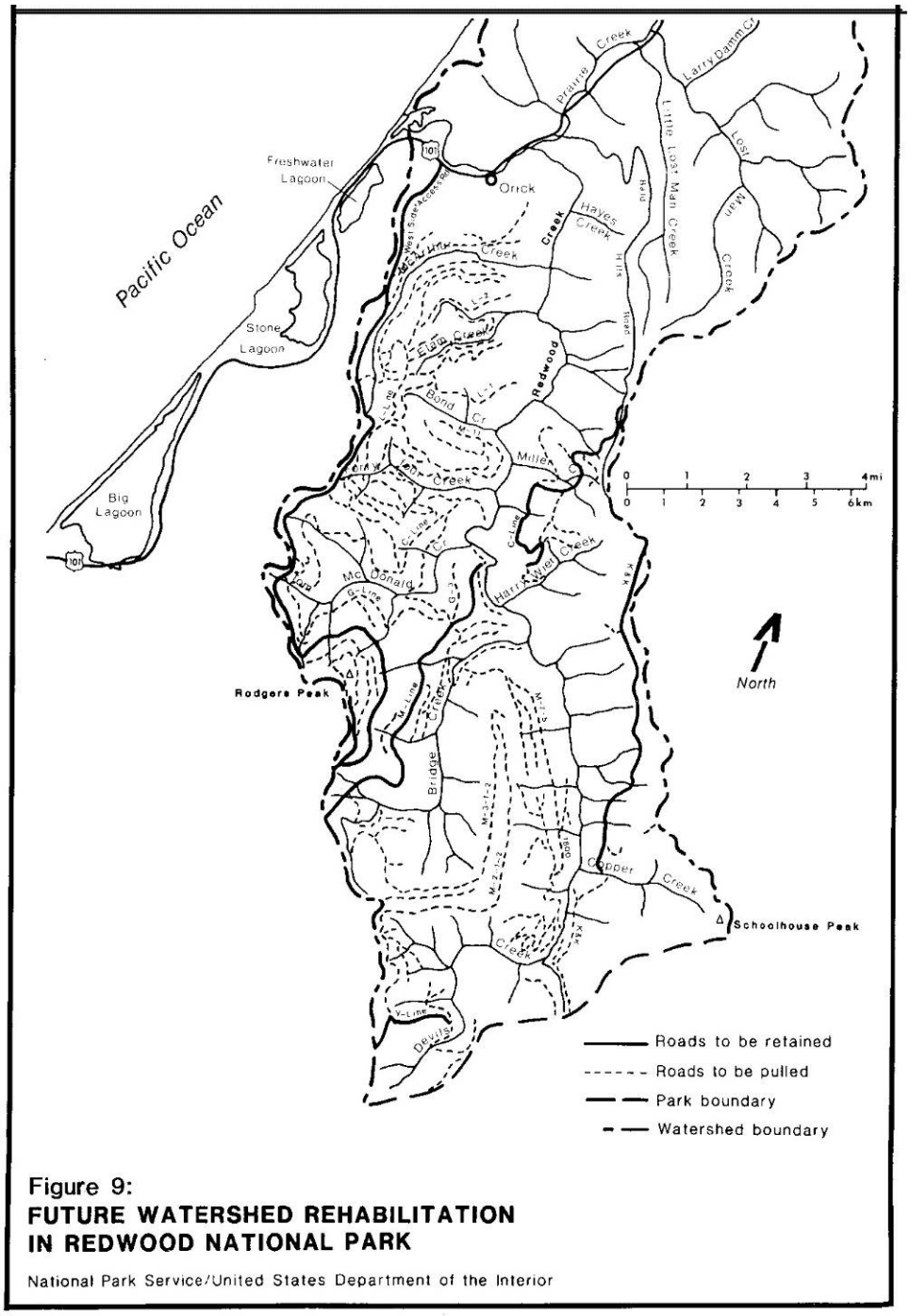


Figure 9:
**FUTURE WATERSHED REHABILITATION IN REDWOOD NATIONAL PARK**

National Park Service/United States Department of the Interior

**Figure 5.4 Proposed road removal schedule, 1984–1991.** Reprinted from *The Redwood National Park Watershed Rehabilitation Program: A Progress Report and Plan for the Future* ([Crescent City, CA]: Redwood National Park, National Park Service, 1984), 61.

Road treatments underwent a similar kind of prioritization. Along steep slopes or in particularly unstable areas, the prescription was outsloping, which entailed excavation of

sidecast fill and buried topsoil and then using the material to cover and recontour a road cut to match the natural relief or slope of the surrounding area. If necessary, the reestablished topsoil would be planted with nursery-grown redwoods or other native plants, but staff increasingly recognized that reestablished topsoil usually supported a vigorous growth of plants, shrubs, and tree seeds that were dormant within the soil or blown in by the wind. In areas where erosion or slope failure was not a particular threat, “rip and drain” was a common approach. While this technique, which essentially involved breaking up old road beds and log landings and then allowing them to revegetate naturally, did not restore natural topography or foster the complete recovery of native plant communities, it answered better to concerns about arresting erosion problems within a particular financial and chronological schedule—and before the coming of a major flood event.[59]

The prioritization that occurred within the watershed rehabilitation program stemmed from heightened concerns about budgets, timelines, and the possibility of future flood events; yet it mostly augmented, rather than modified, the primary emphasis on minimizing and correcting “man-induced erosion within Redwood National Park” that was called for in the 1981 *Watershed Rehabilitation Plan*.[60] However, the administrative and fiscal changes of the mid-1980s that led to the 1984 *Watershed Rehabilitation Program* did undermine an alternative set of priorities that were being advocated by park geologists Terry Spreiter and Louise Johnson. In the early experimental phase of watershed rehabilitation, when a variety of approaches were being tested at several different sites, Spreiter and Johnson endeavored to achieve full restoration of the W-Line road through Dolason Prairie in 1980. Their efforts proved a remarkable success, and both women began to consider full restoration as the most appropriate goal for watershed rehabilitation. By 1983, these two young geologists began to develop a fuller sense of the NPS ethos of protecting, managing, and perpetuating conditions that the 1963 *Leopold Report* had called a “vignette of primitive America.”[61] In particular, they noticed a line in the 1981 *Plan* that had previously escaped their attention:

“Ultimately the efforts should result in the restoration of natural ecosystems to a condition similar to what would have existed without disturbance by man.”[62]

Spreiter later recalled that the line about restoring natural ecosystems “was never part of the discussion” in the early years of the watershed rehabilitation program. Nevertheless, she and Johnson “consistently did more recontouring than any of the other geologists,” with an eye toward full restoration. Both women received “a lot of flak [from other staff] about” the additional time and costs associated with their approach, but gained some conditional support from Bill Weaver. “If you can justify it erosionally,” Weaver told them, then they could advocate for their objectives. Before they could effectively act on this goad, and develop a plan for evaluating the short- and long-term effectiveness of full restoration, the new management team of Warnock and Spalding had arrived. Once the watershed program was charged with developing the new watershed plan, with an eye toward an accelerated timeline and a reduced budget, Spreiter’s and Johnson’s concerns fell by the wayside. Spreiter would again raise the issue in the late 1980s, but received no backing. It would be another decade before the early interest in full restoration—as a preferred technique for erosion control, ecological recovery, and landscape aesthetics—would again receive consideration.[63]

## TRANSITIONS IN THE REHABILITATION PROGRAM, 1988–1989

By the end of the congressional reporting period (fiscal year 1988), approximately $10 million had been spent on site-specific watershed rehabilitation—which included 170 miles of road and 24,000 acres of cutover land. These figures represented an impressive accomplishment, but it was clear that the five-year plan established in 1984 was not going to conclude on the timeline that Warnock and Spalding had been tasked with implementing. Because funding had remained steady throughout the decade, instead of ramping up to a $4.9 million annual budget in 1983 then tapering back down to $2 million by the late 1980s,

the watershed rehabilitation program remained chronically behind its original schedule. Experience gained in the field brought greater efficiency, and along with an increased emphasis on cost-effective techniques, helped compensate for some of the lower funding. Yet experience also brought new knowledge, and staff recognized that some critical areas treated earlier in the program would require further rehabilitation or the application of different restoration techniques.[64]

The mixed and still open-ended accomplishments of “Rehab” coincided with a broader transition at the end of the program’s first decade. On the one hand, watershed restoration had matured significantly over the course of ten years: the program had become a featured component of park interpretation; many of the techniques developed in the Redwood Creek basin became models for other restoration projects in the United States and abroad; and park staff had developed an extraordinary degree of camaraderie and professionalization that earned the admiration of many in and out of the Park Service. Indeed, park staff who worked in the watershed restoration program in the 1980s regard the era as something of a golden age in which a remarkable group of people created and accomplished a wondrous achievement.[65] Yet a number of key figures left the park in 1988, and their departures seemed to mark the closing of an era. Bill Weaver left to start Pacific Watershed Associates, a private company involved in watershed restoration that Danny Hagans would later join, and Don Reeser, whom Barbee had hired as chief of Resource Management in 1980, became superintendent of Haleakala National Park.

These personnel moves certainly attest to the success of the watershed restoration program, but they also marked a desire on the part of these principal players to apply their know-how in new places and different contexts. By this time, too, watershed restoration had become somewhat routinized, and others deserved the chance to determine the future course of the program. Before that could happen, however, Superintendent Warnock also retired in December 1988. His departurecoincided with a significant reduction in the

watershed rehabilitation budget that would shape the course of the program over the next decade.

During his tenure at RNP, Warnock developed a clear understanding of the fiscal and environmental challenges of watershed restoration and no longer viewed his overall goal as ending the program. Instead, he became an advocate to the Western Regional Office for continued funding and an open-ended timeline.[66] On this score, he had some success; although the program's budget did not increase, it held steady and park staff felt no obligation to shut down an unfinished program or plead for its extension. However, as soon as Warnock left, this changed. In the six-month hiatus between Warnock's retirement and the July 1989 appointment of William Ehorn as the park's new superintendent, the Western Regional Office removed $200,000 from Redwood's operating budget (an amount equal to 10 percent of the watershed rehabilitation budget) to fund a Cooperative National Park Resources Studies Unit in Arizona.[67]

This reduction in the park budget stemmed from a lingering resentment at the regional level about Redwood's relatively large funding base. The overall NPS budget had fallen off markedly during President Ronald Reagan's administration, especially during the tenure of Interior Secretary James Watt (1981–1983), and Redwood's $4 million operating budget dwarfed that of other parks of similar size. Within the NPS at least, RNP had started to look like a large slice in a shrinking pie. It could even be argued that the extraordinary cost of the park's expansion partly caused the deep cuts in the NPS budget during the 1980s. Moreover, the areas in RNP that received all this money--paying for talent and staff time--had absolutely no scenic or recreational virtues. In short, a new and expensive park that did not "look" like other parks appeared to be taking substantial resource management dollars from other projects—and other more celebrated NPS units—in the West.[68]

Regardless of the reasons, the loss of the $200,000 affected watershed rehabilitation in the years to come. When Ehorn came to Redwood in July 1989, he inherited a program

that was suddenly underfunded. Consequently, one of his first priority assignments was the preparation of a new watershed rehabilitation plan for the coming decade. The resulting *Redwood National Park Watershed Rehabilitation Program: A Progress Report and Plan for the Decade 1990-2000* described "watershed rehabilitation work remaining, needed research and monitoring, required ongoing or new environmental monitoring and resource management activities, [and the need for] expanded information management capabilities and preparations for a park resource inventory and monitoring program."[69] The resulting set of goals both affirmed and redefined the program while allowing it to adjust to new funding realities. The new plan also put off the finish date of the in-park restoration program almost indefinitely, thus insuring that rehabilitation would remain a centerpiece of the park and its administration for years to come.

### MONITORING THE PARK PROTECTION ZONE AND UPPER WATERSHED, 1978–1983

Along with the watershed restoration program, Congress also charged the NPS with designing and implementing a strategy for mitigating the effects of timber harvesting in the upper two-thirds of the Redwood Creek basin. Because this project involved many of the same geologists and technicians who were engaged in the watershed rehabilitation program, work in the upper basin closely paralleled developments inside the park. Not surprisingly, both projects achieved important successes and struggled through similar budgetary and administrative setbacks, and both entered a period of transition and reduction in the late 1980s.

In many respects, the similar trajectories of these two programs stem from their common significance in the expansion legislation; like the watershed restoration program, addressing the effects of logging upstream from the park became a critical and unprecedented component of the 1978 Redwood National Park Expansion Act. In hearings on the expansion bill, it became clear by early 1977 that Congress intended "a significant

portion of the legislation [to address] the problem of protecting both the lands acquired on October 2, 1968, and . . . the additional lands proposed to be acquired by this bill within the Redwood Creek Basin" from land-use practices outside the park's boundaries. As Secretary of the Interior Cecil Andrus testified, the proposed 48,000-acre expansion area could be sufficiently protected "as long as timbering activities throughout the remainder of the watershed [were] regulated by the State of California in concert with the National Park Service." In October 1977, as the bill reached final form, the Senate Committee on Energy and Natural Resources expressed similar concerns and convictions. Referencing the "Redwood Agreements" negotiated the previous year, the committee recommended these as a successful model that "should be continued" for protection of areas upstream from the expansion area.[70]

The results of these concerns led Congress to authorize a 30,000-acre Park Protection Zone (PPZ) immediately upstream from the expanded park's southern boundary. In combination with the 48,000-acre expansion, the PPZ essentially took in the entire 77,000 acres that had previously been covered under the 1976 Redwood Agreements. Although not strictly part of the park, where all timber harvesting was banned and old logging areas were designated for rehabilitation, the PPZ gave the Park Service a unique statutory authority to subject timber harvest and road construction plans to stringent guidelines that went beyond the requirements of existing state regulations and exceeded the voluntary conditions of the Redwood Agreements.

Because the PPZ was also designated as an area for potential future expansion of the park, if "lands may be acquired from a willing seller or upon a finding by the Secretary that failure to acquire all or a portion of such lands could result in physical damage to park resources," recalcitrant landowners had a special incentive to comply with the new NPS guidelines for fear that their harvesting and road-building practices might trigger further park expansion. In the rest of the watershed upstream from the PPZ, Congress authorized the

Park Service to enter into contracts or cooperative agreements along the lines of the 1976 Redwood Agreements to mitigate the effects of timber harvests in the upper watershed on in-park resources. This new authorization augmented and enhanced the potential benefits of the Redwood Agreements and extended their application to the rest of the 179,151-acre Redwood Creek basin.[71]

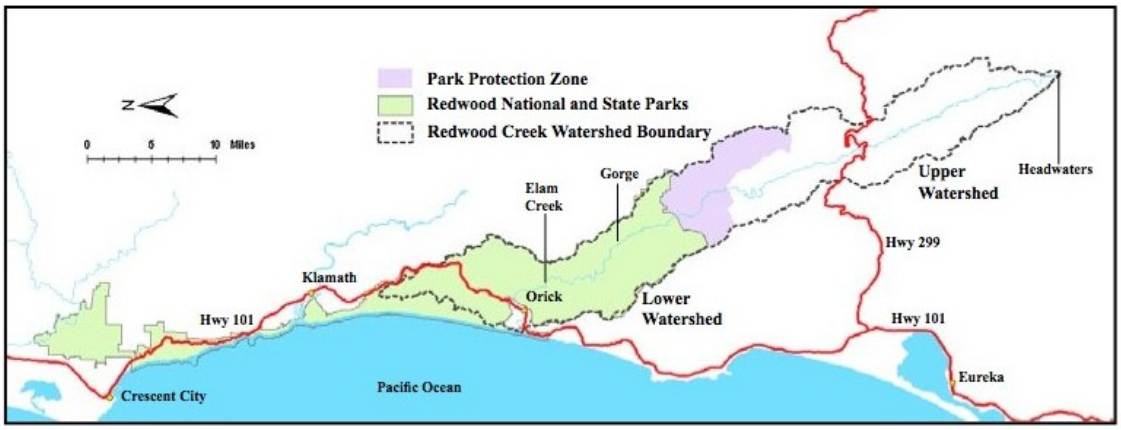


**Figure 5.5 Redwood Creek Watershed, showing boundaries of expanded park and the Park Protection Zone.** Reprinted from *Redwood National and State Parks: Watershed Restoration* brochure, published by the Redwood Park Association in cooperation with Redwood National and State Parks, National Park Service, 2007), 6 .

To assess and guarantee the effectiveness of these new land-use management tools in the PPZ and the upper watershed, Congress directed the Park Service to develop guidelines for land use in both areas "within 5 years from the date of enactment of this legislation as a part of the general [annual] reporting requirements" to Congress.[72] The first step in meeting this stipulation came just a few weeks after the expansion act's passage, when Deputy Regional Director (and former RNP superintendent) Jack Davis concluded an agreement between the Western Regional Office and the California Department of Forestry (CDF) "whereby 1) the Park Service would be notified of all proposed Timber Harvest Plans (THP) in the Redwood Creek watershed, and 2) Redwood National Park would participate in the State THP review process by attending [CDF committee meetings] and providing

recommended mitigation measures on all preharvest inspections within the Congressionally designated Park Protection Zone (PPZ) and on selected preharvest inspections upstream from the PPZ."[73]

Although California's regulation of timber harvesting on private lands was the most stringent in the nation, state officials agreed with the Park Service that timber harvests in the geologically unstable and heavily logged Redwood Creek basin required additional monitoring and review. Having supported efforts to expand the national park and further protect the resources within the Redwood Creek basin, the Brown administration welcomed the additional participation of the NPS geologists in a review process that also came to include contributions from the California Department of Fish and Game, California Division of Mines and Geology, and Regional Water Quality Control Board.[74]

The agreement with CDF initially proved more than satisfactory to the NPS, and for the next five years, park geologists conducted office and field reviews on all but two of the sixty-eight THPs within the PPZ and on nineteen of forty-eight plans in the upper basin. The small staff led by park geologist Danny Hagans did not have the time or feel the need to inspect and review every site, but instead focused their attentions to the most critical areas in terms of the potential erosion and sediment discharge that might occur from road building and loss of forest cover. This somewhat limited strategy still allowed the park to examine and comment on plans for 7,996 acres or 78 percent of the 10,209 acres submitted to the CDF for review.[75] Along with these on-the-ground assessments, RNP—in the person of Bill Weaver—was regularly represented at CDF subcommittee meetings in Sacramento. Through Weaver's efforts, the board often required the adoption of harvesting and road construction practices that reduced the potential for erosion and sedimentation in the Redwood Creek basin.[76]

From the Park Service perspective, the first five annual reports to Congress described the "actions taken regarding land use practices" upstream of the park as an

unmitigated success. Besides a large number of completed THP reviews, park staff was on schedule for submitting to Congress and the Secretary of the Interior a final set of guidelines for harvesting practices on lands upstream of the park boundary. Moreover, RNP expected to see these efforts furthered by the recent formation of the California Forest Improvement Program (CFIP). This new state program offered technical and financial assistance to timber-land owners to improve the quality of their lands in terms of timber productivity, soil retention, and wildlife habitat. Working with private landowners in the Redwood Creek basin, park geologist Ron Sonnevil helped craft CFIP plans that focused primarily on erosion control projects.

### SETBACKS AND SLOWDOWNS IN THE PPZ AND UPPER BASIN, 1983–1990

All of these efforts were further supported by the CDF's decision to compensate landowners in the Redwood Creek basin for 90 percent (instead of the usual 75 percent) of the costs associated with developing an approved plan, and the Park Service agreed to kick in the additional 10 percent. By 1983, however, a number of expected participants opted out of the process (in part as a response to a rebounding timber market) and the program faltered. With little buy-in from private landholders and concerns about budget allocations, the park cancelled its contribution to the CFIP. For similar reasons California reduced its reimbursement to the standard 75 percent and the program virtually ended in the Redwood Creek watershed.[77]

The year 1983 also marked an important downward shift in how closely park geologists were able to monitor and review THPs in the upper watershed of Redwood Creek. The new administration of Republican Governor George Deukmejian brought a very different political agenda to Sacramento, one that largely rejected the environmental and social programs of the Brown administration and sought to address concerns about taxation and economic recession with a program that the new governor widely touted as "pro-business."

This led to a host of new appointments to the California State Board of Forestry, which immediately sought to “ease the regulatory burden” on the timber industry and, in the words of new board member and timber company executive Stephen L. DeMaria, promote a “favorable progression in policy, from the industry being largely defensive to taking the initiative in achieving a more progressive business climate for the forest products industry in California.”[78]

One of the newly constituted board’s first acts was to change the administrative procedures of the CDF to effectively nullify a key provision of the May 1978 agreement between the NPS Western Regional Office and CDF. Whereas RNP staff participation in the field review of proposed timber harvests and road-building plans in the lands upstream from the PPZ had come through an open invitation from the CDF, a new set of regulations made these reviews contingent on the permission of the landowner. This change led to an immediate and dramatic reduction in the number and scale of THP reviews conducted in the upper basin. Instead of conducting field assessments on four out of every five THPs in the upper Redwood Creek drainage, the percentage of plans reviewed by park staff suddenly dropped to just over 30 percent in 1984 and then averaged just 45 percent of the total over the next few years. In terms of affected acreage, however, the numbers were even smaller. In 1984, NPS staff reviewed only 20 percent of the total harvest area. Those numbers would improve somewhat in the coming years, but with the end of the recession in the timber industry by the late 1980s and the rebound in the market for Douglas fir, which was the dominant conifer in the upper basin, the percentage of area reviewed by park staff dropped once again.[79]

As noted in the 1984 annual report to Congress, “not all areas upstream from the PPZ require inspection.”[80] Yet lack of access to proposed harvest areas made it difficult to determine which sites might be most susceptible to erosion. Aerial photographs and office review of the harvest plans submitted to the CDF allowed park staff to formulate some level

of input during the THP review process, but their inability to participate in the field reviews blunted their effectiveness. Limitations imposed by this policy change led to a dual concern. On the one hand, the effects of harvests and road building in the upper basin became less predictable; yet park staff could often glean enough information about the THP to know that it would not implement the kind of mitigating practices the site might otherwise deserve.

While private landowners "regularly and routinely refuse[d] access to park professionals for either pre- or post- harvest inspections," relations with the CDF were little better. The state continued to notify the NPS of all harvest plan inspections in the PPZ, but as park staff reported, "many harvest plans for lands upstream from the PPZ [were] field reviewed and approved by the State without notification to the National Park Service." Moreover, on the few occasions "when park professionals participate[d] in on-the-ground preharvest field inspections [in the upper basin] and provide[d] written recommendations to the CDF, there [was] no assurance that all or any of the suggestions . . . [or] enforceable mitigations [would] be incorporated into the approved timber harvest plan."[81] In the 1987 RNP *Statement for Management*, "lack of access to lands upstream of the park" was listed as the first "Major Issue" of concern.[82] However, it remained unaddressed for several more years. As the impasse continued, road building proceeded at a rate in the upper basin that exceeded the pace of rehabilitation and road decommissioning on national park lands downstream, and RNP geologists feared that sediment discharge in the upper basin may well have exceeded the reductions that were occurring inside the park.[83]

These setbacks and their potential long-term consequences for the park and the Redwood Creek drainage were partly offset by a 1985 interagency agreement between the NPS and Bureau of Land Management (BLM) to achieve "mutually beneficial resource planning and management objectives" in the PPZ and upper watershed. The park agreed to assist "the BLM with erosion and sedimentation studies, stream monitoring, land use and management planning and exchange technical information. In addition the park offered to

help the BLM evaluate and map erosion hazards, prescribe erosion control treatments, conduct archaeological surveys and fulfill environmental compliance requirements." In short, Technical Services staff would extend many of the tasks associated with the rehabilitation program and the monitoring of the PPZ to the 4,400 acres of BLM land in the Redwood Creek basin.[84]

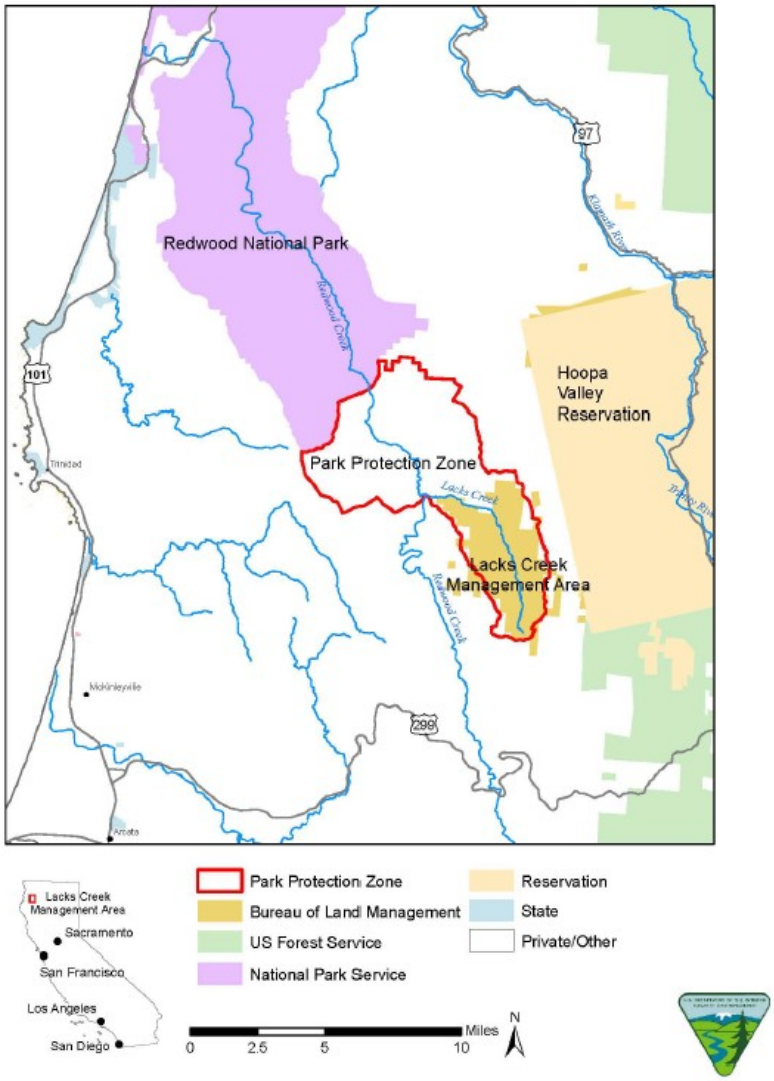


**Figure 5.6 Lack's Creek drainage within the Park Protection Zone.** Reprinted from *Lacks Creek Management Area: Preliminary Management Plan; Preliminary Environmental Assessment* (Arcata: Bureau of Land Management, Arcata Field Office, August 2008).

Over the next five years, little was "accomplished under the agreement other than information exchange and [the] BLM providing the park with opportunities to view and comment on land management plans." This general lack of activity partly reflected the low number of harvesting permits the BLM granted during this period, but it also stemmed from the central component of the NPS-BLM agreement. In exchange for technical assistance from park staff, the BLM embarked on a plan to consolidate its scattered holdings in the upper Redwood Creek watershed and (through swaps and other incentives) to concentrate them in the Lacks Creek drainage, which was situated in the uppermost portion of the PPZ. As this was accomplished, BLM foresters would "coordinate land use planning with the park and . . . cooperate with the park in seeking funds for the rehabilitation" of public lands in the Lacks Creek subbasin.[85]

Subsequently designated the Lacks Creek Area of Critical Environmental Concern, the area represented "a golden opportunity" for mitigating for past and current logging, and for protecting downstream park resources.[86] A long history of active timber harvesting and road building, coupled with a very steep and geologically unstable inner gorge that runs along a seismic fault, made the subbasin an especially significant contributor to the overall sediment load in Redwood Creek. As park geologist Greg Bundros explained in 2005, a density of 3 miles of logging roads per square mile of an area like the Lacks Creek drainage would be dangerous—but the density in this critical area often doubled that threshold. This made the Lacks Creek Area of Critical Environmental Concern especially vulnerable to a major landslide event that could wreak havoc on the downstream park environment and bury important salmon and steelhead habitat, laying waste to spawning beds and clouding for years to come the clear, nutrient rich waters essential for the development of young fish. Because, as Bundros put it, the area "contains some loaded guns that are pointing at the salmon and at the Park downstream," the agreement with the BLM was critical for both RNP and the watershed as a whole.[87]

It would take more than a decade for the Bureau to finish its program of land consolidation, and it was not until the Save-the-Redwoods League acquired and donated 4,500 acres in 2005 that the subbasin came almost entirely under BLM management. Nevertheless, the NPS-BLM interagency agreement always held eventual promise and represented an opportunity to carefully manage a critical area upstream from the park as well as extend the in-park watershed restoration program into the PPZ.[88] As will be discussed in a subsequent chapter, this promise—and the park's growing concern about the effects of upstream logging—would inspire a successful renewal of the effort to work with landowners in the upper basin in the 1990s.

### U.S. HIGHWAY 101 BYPASS, 1980–1992

Although unrelated to matters in the PPZ and the upper watershed—and largely separate from other key elements of the expansion act related to economic development or resource management—the U.S. Highway 101 bypass nevertheless had important consequences for park management. And like the promise of the Lacks Creek Area of Critical Environmental Concern, the environmental and fiscal consequences of building the bypass would shape the direction of resources management for decades to come. Much of this followed from the enormous expenses involved with highway construction and the necessary environmental mitigation that such a massive project required. Yet the true significance of the U.S. Highway 101 project, and its long-term consequences for RNP, stemmed from the central importance that the question of converting the highway to a freeway had in the establishment and subsequent administration of the park.

Like the growing number of clear-cuts spreading up and down the North Coast, the widening and upgrading of U.S. Highway 101 that occurred in the 1950s and 1960s was an important catalyst for the national park movement. Establishment of RNP did not end concerns about CalTrans' desire to expand to four lanes the stretch of highway that ran

through state and national park lands. Indeed, U.S. Highway 101 remained a symbolic reminder of and ongoing threat to the fundamental purposes of RNP and the larger processes it was supposed to combat. Resolution of the issue was thus an important milestone for the park, for the visitor experience, and for the region as a whole.

Even before RNP was established, the Park Service advocated routing the freeway around the east side of Prairie Creek Redwoods State Park for three related reasons: to protect the spectacular old-growth forest that lined the edge of the existing two-lane highway; to remove the heavy commercial and long-distance traffic that barreled through that otherwise quiet stretch of park; and to convert the old two-lane stretch of road into a scenic byway. These views remained consistent through the first decade of park management, and the resolution of the U.S. 101 freeway issue was viewed as a cornerstone of future park development. Consistent with the rest of the expansion act, Congress sought to resolve competing concerns about regional development, which would come from improved transportation infrastructure, and redwood protection. The bypass represented a perfect opportunity to achieve both, and like the still unfinished matter of state parks and national park integration, it promised to make RNP into a "meaningful park."

Congress made construction of the bypass contingent on the state of California's designation of "a right-of way . . . around the eastern boundary of Prairie Creek Redwood State Park prior to October 1, 1984." Once this had occurred, "the Secretary [of the Interior was] authorized and directed to acquire such lands or interests in lands as may be necessary for such a highway and . . . [to] donate the designated right-of-way to the State of California for a new bypass highway."[89] The highway bypass also received authorization in the Federal Aid Highway Act of 1978 and by early 1980, the project was placed into the five-year California State Transportation Improvement Program, thus ensuring that it would be prioritized within the California Department of Transportation (CalTrans) planning and design process. Landownership surveys along the proposed right-of-way and price negotiations with

sellers proved more difficult than originally expected, but construction on the bypass began before the October 1984 deadline set by Congress. Originally expected to take six years to complete at a cost of $115 million, the bypass project ultimately required eight years of work at a cost of $120 million.[90]

The first phase of construction, which began in July 1984 and lasted until November 1985, involved clearing and grubbing 470 acres of forest. The second phase of the project, which lasted from fall 1985 until fall 1990 and cost $90 million, was at the time the largest federal construction project ever awarded in the state. Over the course of these five years, contractors moved approximately fourteen million cubic yards of earth to grade the highway, pulled 770,000 tons of gravel from the Klamath River and Redwood Creek to stabilize trenches, and built several major structures: including 4 bridges, 2 interchanges, 2 truck escape routes, 127 culverts, and a 500-foot channel to reroute part of Prairie Creek around a construction site. The most spectacular feature was the 1,200-foot-long viaduct that soared 100 feet above the headwaters of Boyes Creek and included a remote-sensing system to detect icing conditions. The third and final phase of the project took from June 1990 until early fall 1992, and involved laying roadbed and surfacing the 12-mile bypass.[91]

When completed in 1992, the U.S. Highway 101 bypass had an immediate and welcome effect on Prairie Creek Redwoods State Park, as the near constant roar of highway traffic was finally silenced. Long-distance travelers and truckers also gained by the higher speeds and safer conditions of the new roadway, though many tourists no doubt became even more confused about their trip to Redwood National Park if they missed the turnoff to Prairie Creek Redwoods State Park and suddenly found themselves racing past clear-cuts and second-growth forest instead of amid old-growth redwoods. In the end, however, the eight-year U.S. Highway 101 project put to rest most of the concerns about freeway development and park management that had bedeviled public agencies and private interest groups since the early 1960s.[92]

## THE REDWOOD CREEK ESTUARY: RESTORATION, ENGINEERING, AND COOPERATION, 1980–1988

A project as extensive and costly as the U.S. Highway 101 bypass necessarily affected resource management in the park in new and permanent ways. Perhaps the most important and direct impact occurred in the experimental effort to engineer an improvement of the water quality in the Redwood Creek estuary. During the environmental impact review of the bypass project, it became apparent that erosion and sediment discharge resulting from the massive construction process would have an adverse impact on downstream fish-spawning and -rearing habitat. Based on an assessment of how much productive habitat might be lost, the expected reduction in salmon numbers, and the ecological and commercial costs associated with this loss, RNP, California Department of Fish and Game (CDFG), and CalTrans staff developed a plan and budget for mitigating the expected impacts of the bypass construction project. The result was a wide-ranging program that included upgrading or adding hatchery facilities on the Klamath River and replacing "in-kind wetland and riparian resources lost by the project" in the Klamath River and Redwood Creek watersheds.[93] By far the most expensive and comprehensive component of this broader mitigation program was the construction of a large culvert with manually operated floodgates that could regulate water flows in the Redwood Creek estuary.

During the early planning for the Redwood Creek watershed rehabilitation program, the estuary was identified as a critical part of the basin's future ecological integrity and health. However, to become a functional part of a restored hydrological system, the estuary would also require significant rehabilitation. Following the flood of 1964—an event that greatly energized the movement for the establishment of the national park—the U.S. Army Corps of Engineers (USACE) finally gained budgetary approval for a long-planned flood control project on the lower 3 miles of Redwood Creek.[94] Typical of most USACE projects on other coastal streams, engineers straightened the final meanders of the creek and

constructed a high levee on both sides of the new channel to prevent flooding and to direct high flows straight to the ocean. While the project reduced the risk of future flood events, it also compromised one of the most critical habitats in the life cycle of salmon. In the summer months when stream flows diminished and wave action pushed a sand berm across the mouth of the stream, a relatively deep and broad embayment or lagoon filled in the final meander of Redwood Creek. Such nutrient-rich areas of calm water are where juvenile salmon mature and develop into ocean-going fish. When fall rains push the stream through the sand berm, the fish are fully ready to spend the next three to five years in the open sea before returning to their natal stream.[95]

**Figures 5.7, 5.8, and 5.9. Eight decades of change in the Redwood Creek Estuary.** The first image shows a Yurok fishing village beside the Redwood Creek Lagoon, ca. early twentieth century (unknown photographer; source: Phoebe Hearst Museum of Anthropology, University of California, Berkeley). In the second image, ca. 1948, Redwood Creek retains the broad meanders of its lowest reach and continues to fill the North and South Slough. Extensive riparian forest clearing in the lower Orick Valley, as well as a steep clear-cut behind the town of Orick, make the area vulnerable to increased flood damage and erosion (source: Army Corps of Engineers). The third image, from 1988, shows the straightened Redwood Creek channel. Rip-rapped banks and levees direct the flows through the former lagoon site while heavy sediment deposits have cut off the sloughs from the ocean and the stream. Source: RNSP Archives.

By significantly limiting the size and volume of the summer embayment to the immediate vicinity of the levee and by converting the old meander into two stagnant and unproductive sloughs on either side of the smaller lagoon, the channel straightening and levee building project severely reduced the amount of summer habitat available to juvenile Chinook salmon. Because juvenile Chinook emerge from upstream gravels and migrate in the spring down to the estuary, where they mature through the summer before running out to the ocean in the fall, the loss of this one critical habitat in the life cycle of the fish threatened the entire population of Chinook throughout the Redwood Creek drainage, even those in the most pristine spawning areas.

The reduced and degraded environment also affected other salmonids, including steelhead and cutthroat trout. These anadromous fish mature in other parts of the Redwood Creek basin, but all need to spend time acclimating to brackish estuarine waters as they undergo the final transformation from freshwater to saltwater fish. The altered environment of the estuary meant that many fish migrated to the ocean before they had fully matured, which likely diminished their long-term survival at sea. The estuary was thus made even less viable for all salmonids whenever nearby landowners cut a breach in the sand berm to prevent flooding on nearby pasturelands, a problem that occurred in part because the smaller summer embayment could not hold as much streamflow as it did in its preengineered conditions, causing water to more readily flood private property. When the berm was breached, immature salmon would be flushed into the ocean and adult salmon, sensing the sudden rush of freshwater into the ocean, might begin their spawning runs when streamflow and pool depths were not yet sufficient.[96]

Given the mandate to restore park lands to a naturally functioning, self-sustaining ecological condition, the conditions in the Redwood Creek estuary were unacceptable. Yet efforts to correct them could very well lead to unwanted and unpopular conflict with local residents. While taking a “no action” approach to management of the estuary was simply not an option, full restoration was ruled out as well. Even if funding could be found, the acquisition of surrounding private lands would have created a firestorm of local protest, and any attempt to remove or adjust the USACE levees would have raised the specter of future flooding in the town of Orick. With these very real concerns in mind, park staff initiated a program of controlled breaching of the berm to prevent flooding of private property while maintaining a significant level of productive habitat within the summer embayment. In the process, they dealt directly with private landowners and conducted public forums to explain the importance of maintaining salmon-rearing habitat at the mouth of the creek.[97]

Although successful in terms of respecting community concerns and providing the best technique to maintain estuary water levels within the summer embayment, controlled breaching was only a temporary measure. Fisheries biologists soon proposed an innovative and more “long-term restoration alternative”: constructing a culvert in one or both of the levees with a manual gate to allow regulated flows through the sloughs and thus improve circulation and water quality through an area approximating the preengineered embayment. Although hardly ideal, and very expensive, such a plan had the potential to satisfy the concerns of property owners as well as to fit within existing USACE, county, and state programs adjacent to the narrow strip of park land at the mouth of Redwood Creek.[98]

This approach became possible in late 1983 when CalTrans and Federal Highway Administration (FHA) funds were made available to mitigate environmental damage caused by construction of the U.S. Highway 101 bypass. With the estuary restoration plan already in place, and with the promise of increasing salmon viability in the watershed, the culvert became a preferred beneficiary of the newly available funding source. Before construction could begin, however, a five-part agreement had to be negotiated and signed by the National Park Service, Humboldt County, CalTrans, U.S. Fish and Wildlife Service (USFWS), and the FHA for release of the funds and for determining “responsibilities for implementing and maintaining the culvert project.” In the end, the park was responsible for obtaining “all necessary permits and maintain[ing] and operat[ing] the culvert, CalTrans obtained rights-of-way from private landowners and Humboldt County (which owned the levees), and the USACE agreed to design and oversee the construction for the culvert.[99] The project was completed in January 1988 and initial results seemed promising. Problems with loss of estuary volume, water quality, and insufficient flows remained, but the mitigation project was an improvement over simply continuing controlled breaching. While a culvert in a USACE levee cannot be regarded as a typical national park feature, and the estuary project was limited in its ecological benefits, it serves as a prime example of the level of scientific

research, planning, and creativity that characterized resource management solutions in RNP. Culvert construction also reflected the special conditions of the park landscape, which came with a host of "ownership, land use, political, and jurisdictional problems" that required an engineered—as opposed to a preservationist—solution.

### THE U.S. HIGHWAY 101 BYPASS "DEBACLE" AND NEW DIRECTIONS FOR REDWOOD NATIONAL PARK

The Redwood Creek estuary project represented a positive—if qualified—outcome of the U.S. Highway 101 bypass, but the project also created a massive problem for park staff in what geologist Greg Bundros would later refer to simply as the "debacle." In fall 1989, as the project reached the conclusion of its sixth year, contractors pushed to finish the roadbed in preparation for surfacing the following year. Against the warnings of Bundros and fellow geologist Ron Sonnevil, work on final grading went beyond the usual shutdown date of October 15, and CalTrans engineers announced that they would continue work on the project until mid-November—leaving bare roadbed and fresh roadcuts vulnerable to an early fall storm. With drainage structures and winterization materials still not in place, a moderate storm totaling 4.3 inches of rain occurred between October 20 and 25, "that caused severe erosion at the project site and sent extreme sediment concentrations into downstream park tributaries of Prairie Creek." Both state and national park officials treated the situation as an emergency and immediately offered to assist CalTrans in a rapid effort to design and construct sediment containment structures. Work began within a week and continued through mid-December, with RNP geologists identifying and prioritizing work-site locations and providing technical guidance and supervision to work crews from CalTrans and the contractor.[100]

The short-term consequences of the U.S. Highway 101 bypass "debacle" were significant. Along with a loss of important spawning habitat in one of the few pristine streams

along the North Coast, the U.S. Highway 101 project was set back a full year. The subsequent monitoring and mitigation programs in the areas affected by the erosion from the Bypass also pulled park staff away from ongoing rehabilitation projects and forced a slowdown and rescheduling of the watershed rehabilitation program. This only compounded a previous shift in the program that occurred when highway construction in the Boyes Creek area forced the program to focus on cutover areas that would no longer be accessible once the highway was completed.[101]

The “debacle,” which had a significant impact on a number of streams in the Prairie Creek subbasin, also had a long-term effect on the park’s resource management program.[102] The devastation that occurred from just one moderate storm event intensified general concern about the heavily cutover lands in the Lost Man Creek drainage (a tributary of Prairie Creek), which subsequently became a key focus of watershed rehabilitation in the following years. The dramatic failure of the exposed U.S. Highway 101 project also illustrated the danger that remained to still-untreated roadbeds upstream of the park and led to some rethinking about the long-term stability of already completed projects.[103] All of these concerns, coupled with a general decline in park budgets and the pending termination of the congressional appropriation for watershed restoration, also fostered a sense of urgency among many working in watershed rehabilitation that treating critical erosion sites needed to take even more precedence over restoration of logged-over areas. All of these matters would become critical to the future direction of watershed rehabilitation and resources management, and to the ways in which the park interacted with private interests and public agencies in the 1990s and early twenty-first century.

# Chapter Six

## ADMINISTERING A MORE MEANINGFUL PARK, 1980–1993

The years after expansion were about more than just following the will of Congress and implementing legislated programs. The expansion act addressed many of the problems associated with the first Redwood National Park Act, and set the course for how they should be corrected, but park administrators did not simply operate in direct dialogue with Capitol Hill. Even as Redwood embarked on what Superintendent Robert Barbee called "the beginning of a new era," the old and inherent necessity of adapting to changing conditions within the park and outside its boundaries remained the guiding principle of park management.[104]

Barbee made his comment at the opening of his first monthly "squad meeting" of division heads and supervisors in February 1980, in which he listed the fundamental accomplishments that were allowing the park's "new era" to begin: "The planning process will be completed; staffing is nearing completion and the watershed rehabilitation program has solid direction and momentum. These are exciting times for this park."[105] This sense of excitement and expectation was widely shared, and there was a certain headiness among park staff as they set out to design and implement a series of projects that were "unique and without precedent."[106] Yet everyone was well aware that this new era came with significant challenges. Some stemmed from the size and scale of the programs spelled out in the expansion act, and the many staffing and planning issues they entailed, while others reflected the very same concerns that had bedeviled the park in the pre-expansion era—namely, integration of the national and state parks, difficult community relations, a fragmented visitor experience, the effects of land-use practices outside the park, and the

ongoing concerns of environmentalists, local commercial groups, and different federal and state agencies about the course and purpose of park management.

Over the next decade and more, the primary goal of park administrators would be to combine this mixed set of new and old challenges and to formulate programs that could address multiple concerns. The expansion act made clear that resource protection and management was a priority, but park officials knew that long-term success in these matters required them to address many of the same problems that had plagued their predecessors—from the need for greater cooperation and integration with public agencies and private organizations to more effective dealings with surrounding communities and landowners. Whether conducting a road removal project, planning a new information center, improving salmon habitat in the Redwood Creek estuary, managing elk populations, or interpreting the rehabilitation program, that meant operating in a way that was "out front and high profile," as Barbee once put it, and directly addressed "the expectations of our interested 'publics.'"[107] In short, successfully administering the expanded park meant actively engaging the dynamic ecological, political, and social conditions in which it was situated.

Some of the issues that park staff contended with in the post-expansion era would have been quite familiar to Redwood's first superintendents. Despite the considerable new acreage in Redwood Creek, the configuration of the long narrow park still presented significant administrative challenges. Maintenance facilities, visitor information areas, temporary-staff housing, and resource management offices stretched along most of the 50-mile length of the park. With headquarters in Crescent City and the new watershed rehabilitation program offices in Arcata, the two administrative centers were not only outside the park's boundaries, they were more than 75 miles apart. This situation was only exacerbated by the continued irresolution of the state parks issue, which resulted in the duplication of services and kept national park lands divided into smaller, discontiguous units.

The park also continued to confound visitors, who did not find the kinds of amenities or interpretive facilities that many expected in a national park.

New issues and opportunities arose as well. Organizing and integrating a large staff of new employees that "represent[ed] more diversity in operations than most parks" was an immediate concern in early 1980, as was the need to orient a large number of people to the expectations and traditions of the National Park Service (NPS). The park's unique relationship with key state agencies also required a number of the new staff to gain a firm understanding of policies in the California departments of Parks and Recreation (CDPR), Transportation (CalTrans), Forestry (CDF) and Fish and Game (CDFG). Park superintendents needed to navigate a changing set of administrative and resource management directives from the NPS as well as adjust to budget restrictions during President Ronald Reagan's administration (1981–1989), which often seemed to challenge what NPS director Russell Dickenson called "every operating principle established throughout our working lifetime."[108]

The broader social and economic context in which the park operated also changed in the decade and a half after expansion. Except for a brief recovery in the mid-1980s, the North Coast timber economy continued to falter and the expected transition to tourism or some other service-based industry never occurred. While this provided fodder for continued local criticism of the park, changing demographics eventually muted old complaints. As exurban migration to the area grew in the early 1990s, new residents expressed a stronger interest in outdoor recreation and environmental quality and became increasingly interested in the park and the rehabilitation program.[109] One of the most significant new developments in the immediate park area was federal recognition of the Yurok Tribe in 1988. With tribal headquarters in the small town of Klamath and reservation boundaries that overlapped with Redwood National Park (RNP), the Yurok possessed a distinct cultural and legal interest in

the national park that would only increase in the coming years, especially as their population grew in the Klamath area.

Amid all these changing contexts, park administrators sought to make RNP into a "more meaningful park" that could meet visitor expectations, play a significant role in the regional economy, positively affect timber harvest practices, protect and restore a large swath of redwood forest and associated coastal areas, and provide a model for restoration-based natural resource management within the Park Service. All three of Redwood's superintendents in the 1980s and early 1990s pursued this common set of goals, and all recognized that success in these matters depended on cooperation with other agencies and interested parties, yet each man brought a different management style and agenda to the position. As Terry Hofstra, chief of Resources Management and Science, later recalled, this diversity of approaches served the park well. To the good fortune of RNP, each superintendent operated with a unique style and emphasis that fit the particular conditions of his tenure; in Hofstra's words, they all "just seemed to be the right person for the particular time" they were at the park."[110]

Bob Barbee (1978–1983), who supervised the organization and staffing of a talented cadre of scientists and technicians, recognized that success depended on the "essential" need to "make the extra effort to be understanding and supportive of each others' programs." As he told staff early in his tenure, his job was essentially to foster this process and "to ensure that you get the support you need to the greatest degree possible."[111] Doug Warnock (1983–1988) sought to stabilize park management amid budgetary limitations and to initiate a reorienting of "the park staff from one geared to rehabilitation to one able properly to manage and protect the renewing forest when the time and money run out."[112] When Bill Ehorn (1989–1995) first arrived at the park, he praised the "unparalleled progress in resource management and the restoration of logged lands." But he saw it as his special duty "to fulfill the promise of Redwood to the visiting public in terms of access and services."[113]

The combined result of these three relatively long tenures was a park that—through adaptations to changing conditions and the application of new management styles—largely fulfilled the unique conditions of the expansion act and saw Redwood mature into a more prominent unit of the national park system.

### ADMINISTRATION, ORGANIZATION, AND MANAGEMENT FACILITIES

The administrative template for much of the post expansion era was set in 1980 with the organization and staffing of new management divisions and the final review of the *General Management Plan*, which was officially authorized in 1981. The heavy staffing and task specialization of the watershed rehabilitation program led to significant restructuring of the park's administrative organization, which increased from four to six divisions. While this change addressed the new multiplicity of tasks that came with the expansion act, it also reflected the more separate and discrete responsibilities they entailed. The growth and reformulation of the old division of Resource Management and Research into Technical Services and Resources Management, for instance, did more than create a division of labor within the rehabilitation program. Because they were based in Orick and Arcata—and jointly fell under the direction of an associate superintendent who was duty stationed at the south end of the park—staff working in watershed rehabilitation operated almost as a separate unit.

The old division of Interpretation and Protection also underwent a notable change. Like Resource Management and Research, it too was reconstituted into two divisions: Interpretation and Visitor Protection. While this corresponded with further specialization of the NPS Ranger Corps as a whole, which included a growing emphasis on law enforcement and visitor protection, it also reflected particular needs at RNP. Because park lands were located along two major highways (U.S. Highway 101 and U.S. Highway 199), which created safety issues as well as provided quick entrance and exit for potential thieves, and because problems with vandalism, poaching, and trespass were especially acute at Redwood in the

years following expansion, the park required close monitoring by staff specifically trained in public safety. Additionally, the novelty of the rehabilitation program, the peculiar nature of the park's administrative boundaries, and the diversity of resources within RNP also required staff with a high degree of expertise in public relations, interpretation, and visitor contact.[114]

The only division that remained relatively unchanged by the 1980 reorganization was Administration. While the overall responsibilities of the superintendent and Administration grew with park expansion, direct management of the new staffing and projects associated with Technical Services and Resources Management was delegated to Associate Superintendent L. Lee Purkerson and Resources Management Division chief Don Reeser, who both worked out of the Arcata office. Consequently, the size and structure of the Administration Division, which was housed in the Crescent City headquarters building, did not change significantly in the years following expansion.[115]

Maintenance, like Administration, remained a distinct division within the new organizational structure. However, it did receive a considerable increase in staffing to assist with watershed rehabilitation projects and to handle the construction or upgrading of facilities throughout the park. Split into three subdivisions (Roads and Trails, Utilities and Grounds, and Buildings and Structures), Maintenance staff were now charged with a host of new duties: removal of nonconforming buildings within the expansion area; stabilizing and rehabilitating historic structures; moving trailers onto or remodeling existing facilities at the property that became the South Operations Center on Hilton Road in Orick; improving the work spaces at the old Jacoby building in Arcata where Technical Services and other South Area operations were housed; upgrading water and sewage systems; bringing former county-owned roads up to NPS standards as they were turned over to the federal government; constructing several new turnouts and interpretive sites; and assisting with a variety of projects in the watershed rehabilitation program. All of these were in addition to the steady stream of work orders that already existed before the park's expansion, and of

course, all of these new projects created their own subsequent maintenance and improvement schedules.

While increased staffing and a new organizational structure created demand for additional facilities, three criteria restricted the location and construction of new administrative sites, maintenance centers, and visitor areas. First, because RNP was narrow and relatively small, and because the expansion act clearly emphasized resource protection over development, the park simply did not have many suitable locations for new facilities. Second, the *General Management Plan* (*GMP*) and past policies committed the park to locating suitable sites within surrounding communities to encourage economic development and foster better community relations as well as preserve in-park natural resources. Last, budgetary and legislative directives encouraged the leasing of existing facilities or the acquisition of other publicly owned properties. All of these matters were further complicated by the continued irresolution of the state parks issue. Administrators and planners had to account for the siting of existing state park facilities both to prevent an overconcentration of services in one area (for example, closely sited visitor information facilities) as well as to plan for an eventual integration of maintenance, interpretation, fire protection, and other services.

### RESOURCE PROTECTION, COMMUNITY RELATIONS, VISITOR USE, COOPERATION, AND ADAPTIVE MANAGEMENT: A BRIEF HISTORY OF THE REQUA MAINTENANCE FACILITY, 1980–2000S

These criteria and the open-ended question of combining RNP with the state parks presented a series of challenges and opportunities in the first decade and a half after expansion. For the most part, these were dealt with in an adaptive manner that sought to match the changing environmental, social, political, and economic contexts of the park with the clear directives set out in the expansion act and the *GMP*, and whenever possible, with an eye toward protecting the park's resources in a way that could also improve community relations, clarify the visitor experience, and address the concerns of outside interests and

agencies. A brief history of the maintenance facility at the former Klamath Air Force Station serves as a good illustration.

In the early1980s, RNP had two maintenance facilities in the Klamath area—the K-2 Maintenance Facility on Klamath Beach Road and a shop at the old U.S. Forest Service (USFS) complex north of Klamath, which now served as the Redwood Ranger Station and housed seasonal employees. Because the Klamath Air Force Station above Requa no longer served military or civilian purposes and was slated for disposal, park planners saw an opportunity to share an already developed site (the Air Force had constructed sixty-four buildings and twenty-seven housing units between the 1950s and 1970s on the forty-three-acre site) with the California Conservation Corps (CCC) to achieve several related goals: consolidate the NPS maintenance facilities at one large site; cooperate more readily with the CCC on RNP projects; incorporate maintenance services currently located at Jedediah Smith and Prairie Creek Redwoods state parks; redevelop the Jedediah Smith maintenance area as part of a larger visitor facility at Hiouchi; remove the maintenance facility at Prairie Creek and restore the site back to native prairie; move the Klamath-area ranger services to other existing and planned sites within the national park; and return the Redwood Ranger Station back to the USFS for management of the recently established Yurok Redwood Natural Area.[116]

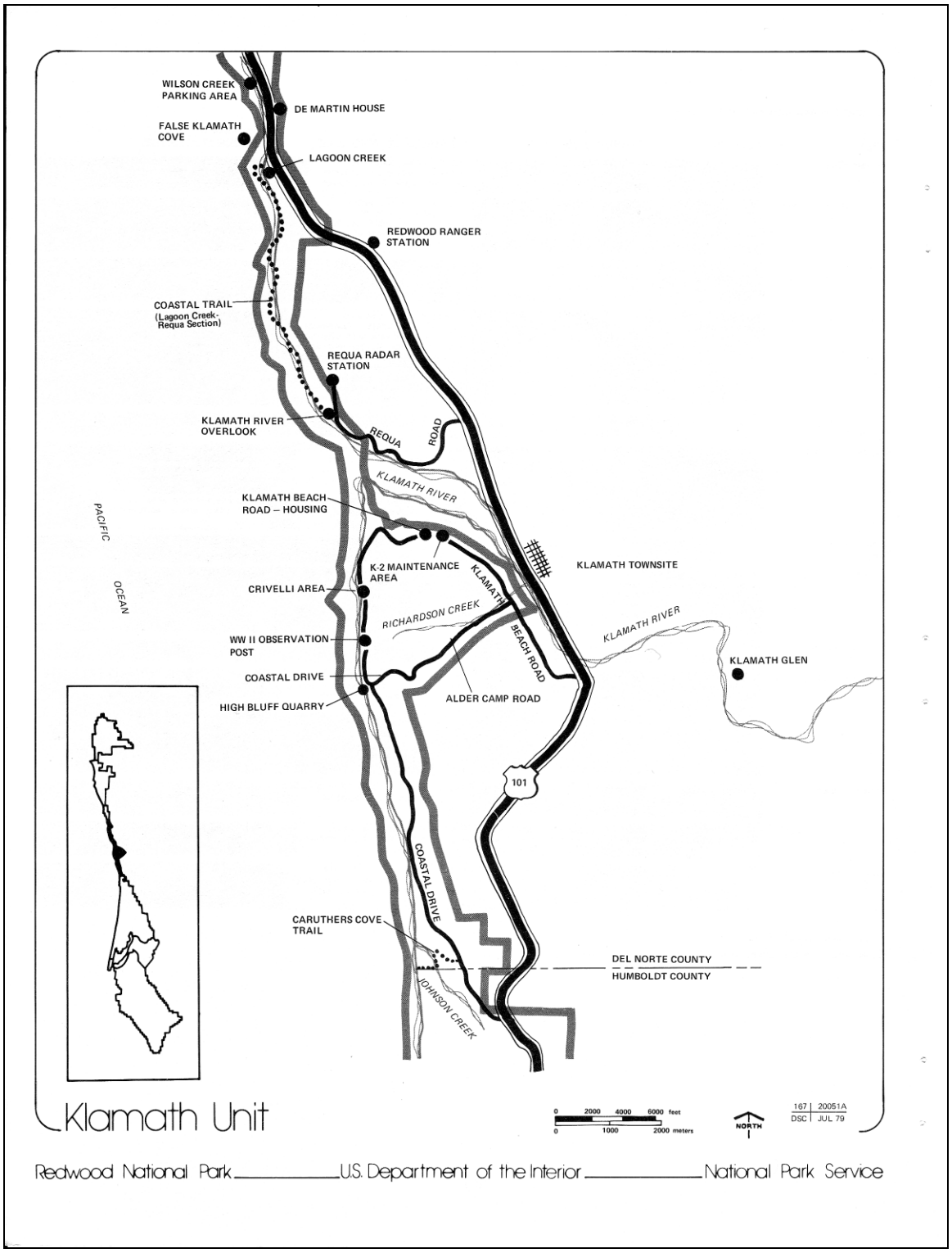


**Figure 6.1 Klamath Management Unit, ca. 1980.** The map shows the locations of the K-2 Maintenance Area, a national park housing complex on Klamath Beach Road, the Redwood Ranger Station, and the U.S. Air Force's Requa Radar Station. Reprinted from *Draft Environmental Statement: General Management Plan for Redwood National Park* (Crescent City, CA: Redwood National Park, 1979), 24.

The Requa site was transferred to the NPS in 1983 and subsequently renovated for the Maintenance Division and the CCC, but changing circumstances and continued irresolution of the state parks issue soon led to further adaptations of the original goals. When the Yurok Tribe received federal recognition in 1988, for instance, the fact that the Requa site was within the historical boundaries of the newly recognized tribe's reservation became a matter of special concern. While this new situation did not directly or immediately affect the maintenance facility at Requa, a request by the Yurok Tribe to turn the site over to them did play a part in subsequent discussions about moving operations to a new locale. Other reasons for moving from the old Klamath Air Force Station site had also become apparent by this time. Accessed by a steep narrow road that was susceptible to winter floods and located some distance from U.S. Highway 101, the location was not conveniently located in relation to other parts of the park. The site also proved to be geologically unstable, creating a new set of costly maintenance problems as parking areas, Cold War–era structures, and underground utilities cracked or shifted.[117]

By 1990, park administrators had decided that Redwood would need to plan for a new maintenance facility, an issue that coincided with a new push to consolidate the state parks with the national park. In time, many of the goals associated with the original move to the Klamath Air Force Station found resolution, but changed circumstances led to different results. In consultation with the Yurok Tribe, for instance, a plan was developed for returning the Requa site to natural conditions (as had once been considered for the maintenance facility at Prairie Creek). And instead of integrating the state park facilities into a single national park maintenance area, the NPS and CDPR agreed to develop a new facility on state park lands near Crescent City. This latter development resulted from the 1994 Cooperative Management Agreement between NPS and CDPR that will be discussed in the next chapter, but it also stemmed from the loss of the maintenance facility at Jedediah Smith Redwoods State Park in a fire. The resulting plan for a joint facility on Aubell Road, where

the two agencies had already consolidated protection operations for the northern part of the parks complex, was less a compromise with new circumstances than a manifestation of the kinds of adaptive management strategy that guided the park toward evolving, long-term goals in the post-expansion era.[118]

### OPERATING ON A NORTH-SOUTH AXIS

Except for a few position changes or adjustments within a subdivision, RNP did not undergo any significant administrative reorganization between 1980 and 1991. Along with this relative stability, park administration also retained its basic geographic and managerial divide. The superintendent and the division chiefs for Maintenance, Protection, and Interpretation all worked out of Crescent City, while the two divisions associated with the watershed rehabilitation program remained in the south end of the park: Technical Services operated first out of the Jacoby Building in downtown Arcata before moving to the old Stewart School, where park offices adjoined those of other federal agencies working along the North Coast and in the upper Redwood Creek basin (namely, U.S. Geological Survey, Bureau of Land Management, and U.S. Fish and Wildlife Service); and most Resources Management staff worked out of the Southern Operating Center, which in 1983 moved from the cluster of trailers near U.S. Highway 101 just north of Orick to the old Antonioli property—affectionately known as the "Ant Farm"—on Hilton's Road.[119] The Arcata office also served as a sort of adjunct park headquarters, especially between 1979 and 1986 when Associate Superintendent Purkerson and Assistant Superintendent Spalding were both duty stationed in Arcata. From there, they administered the watershed rehabilitation program (which comprised approximately half of the park's entire budget and staffing) and often represented the park in dealings with other state and federal agencies. In the late 1970s and early 1980s, when the rehabilitation program was rapidly forming, the Arcata office also warranted its own contracting officer and procurement specialist. While Purkerson's and Spalding's duties

primarily related to operations in the southern end of the park, at times the Arcata office also served as a purchasing center for the entire park because of its proximity to larger shipping centers to the south.[120]

Much as the associate and assistant superintendents operated in tandem with the superintendent, the Arcata office also served as something of a branch operation for the division of Interpretation. In the early 1980s, Interpretation was effectively split between two GS-11 positions, with the chief based in Crescent City and an “affiliate” in the Arcata office who also served as “the south area interpreter, and the media relations coordinator for the rehabilitation program.” This arrangement changed through the mid-1980s, when the southern portion of the park fell under the direction of a designated park ranger position (GS-9) that was then upgraded to supervisory ranger (GS-11/12), but the basic north-south arrangement between Crescent City and the south end of the park remained.[121]

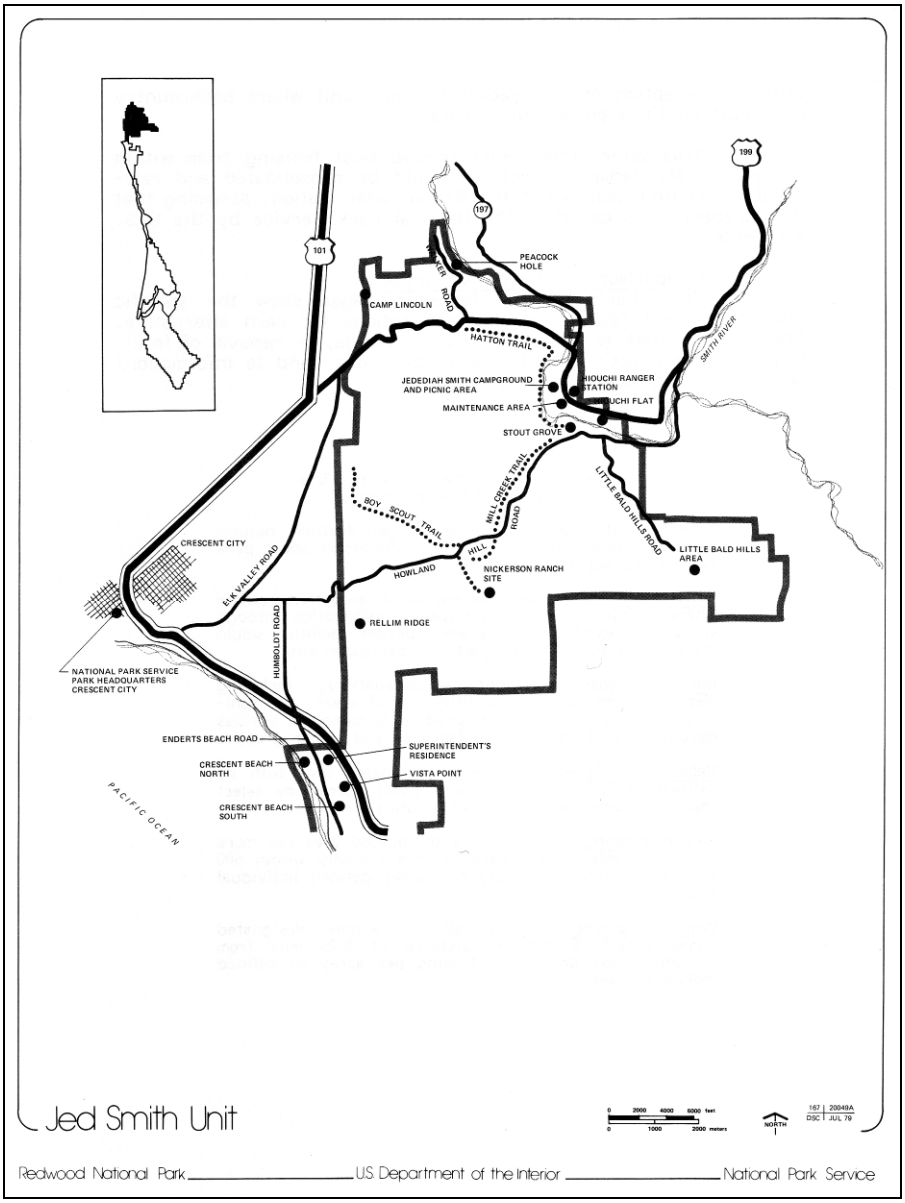


**Figure 6.2 North Administrative Area, ca. 1980s.** Reprinted from *Draft Environmental Statement: General Management Plan for Redwood National Park* (Crescent City, CA: Redwood National Park, 1979), 20.

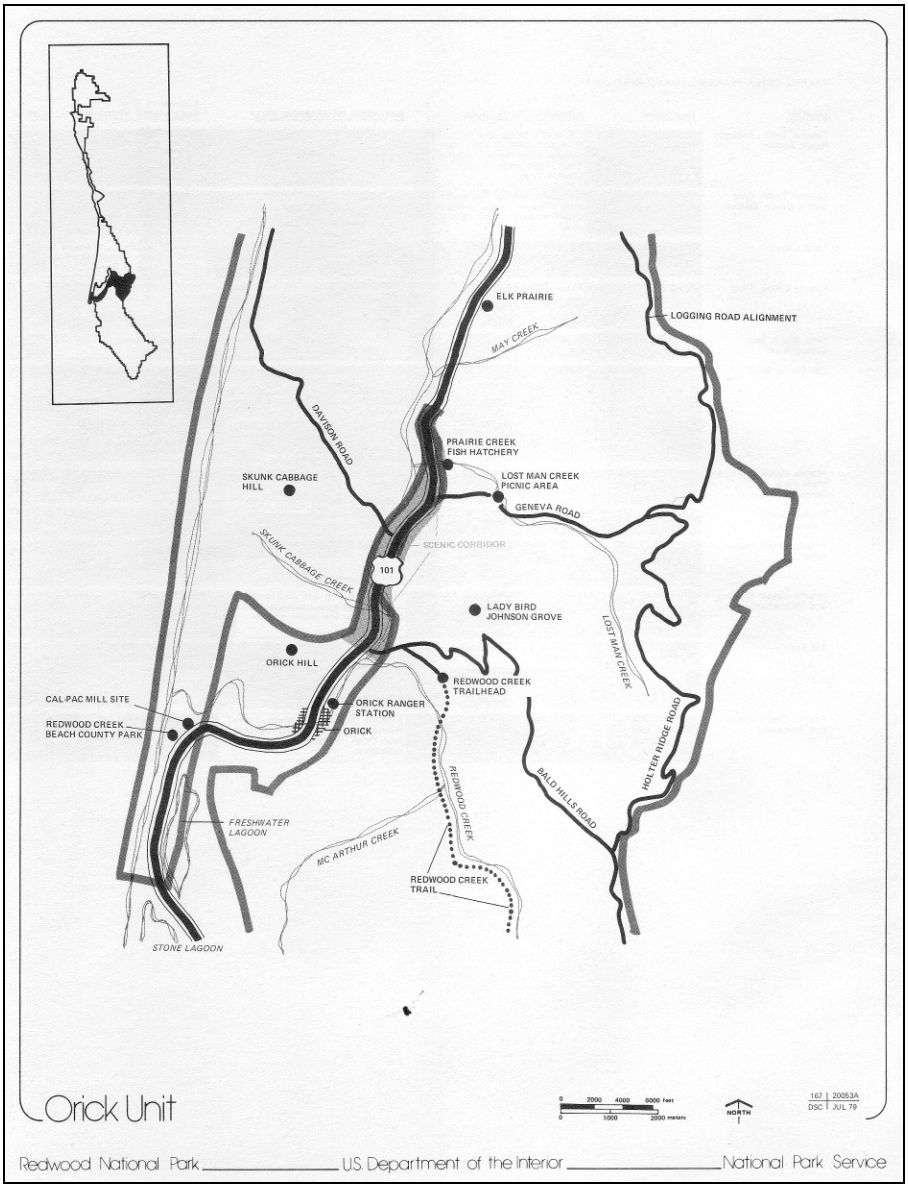


**Figure 6.3 South Administrative Area, ca. 1980s.** Reprinted from *Draft Environmental Statement: General Management Plan for Redwood National Park* (Crescent City, CA: Redwood National Park, 1979), 28.

As Superintendent Doug Warnock later recalled, managing Redwood National Park from Crescent City "was kind of like being at the wagging end of a dog." In terms of budget, personnel, and public interest, most of the action centered on Redwood Creek in the south end of the park. Likewise, most of the economic and employment programs associated with the expansion act occurred in Humboldt County, which only further tilted matters toward the

south. There also was not much to directly administer in the northern half of the park, since most of the land within the park's congressionally defined boundaries remained in the state park system. These conditions "made management slightly dysfunctional," Warnock noted, but not impossible.[122]

Redwood's parallel administrative arrangement, which began with Barbee as superintendent and Purkerson as associate superintendent, first originated with NPS director William Whalen in 1978. Whalen knew of Purkerson's work with the NPS Research and Scientific Division in Washington, DC, and was impressed by his evaluation of Redwood's initial rehabilitation plan in early 1978. When selecting a new superintendent for Redwood later that year, Whalen also made it clear that he wanted Purkerson to head up the park's resource management program. Such a decision was generally left to a new superintendent, and Regional Director Howard Chapman tried to dissuade Whalen—noting that it was not appropriate for a person with Purkerson's GS-15 pay grade to serve under a superintendent who, like Barbee, was generally a GS-14.[123] Whalen prevailed, but also deferred to part of Chapman's objection: Purkerson would hold the title of associate superintendent, with authority over the watershed rehabilitation program.[124]

This was an unusual arrangement within the NPS, and it did not come together without a bit of tension. For instance, there was some butting of heads when Barbee insisted on appointing Don Reeser as the division chief for Resources Management, a decision Purkerson felt should have been his. Despite occasional friction and adjustments along these lines, Whalen's novel appointments made logistical sense,and remained a basic fixture of RNP administration for the better part of a decade. As Warnock recalled about his working relationship with Spalding in the 1980s, "it was a strange set-up" but there was simply no way for one person to run the park and the rehabilitation program at the same time. Too many "on-the-ground and in-the-moment decisions" had to be made out of the Arcata office.[125]

## THE MANAGEMENT ASSISTANT AND COMMUNITY RELATIONS, 1980–1984

Purkerson's primary administrative responsibility, as well as that of Assistant Superintendent Spalding and later Deputy Superintendent Arthur Eck, essentially boiled down to making sure the watershed rehabilitation program remained on track and fulfilled congressional intent. Of course, the superintendent had ultimate responsibility for the progress of watershed rehabilitation, as he did for other key elements of the expansion act that involved employment programs, economic development, the U.S. Highway 101 bypass, and cooperation with other federal and state agencies. Amid these broader concerns, however, the superintendent also maintained direct responsibility for budgets, personnel, organization, coordination among divisions, compliance with NPS directives, and representing the park to various constituencies.

How each superintendent approached this wide array of responsibilities, set priorities and goals, and exercised leadership for a complicated park from the "wagging" tail of Crescent City is perhaps best illustrated in the position of management assistant. Generally a catch-all position with no set job description, management assistants can run the gamut from nonessential personnel who simply need a designated position title for payroll purposes to someone whose responsibilities are so critical to the specific needs of the park and its administration that no standard job category exists. The latter was especially true at Redwood National Park through the first decade of the post-expansion era, where superintendents Barbee and Warnock both utilized this loosely defined position to achieve important management goals.[126]

The first person to serve in this capacity was Ray Peart, whom Barbee designated the park's "ombudsman" for community relations—especially in the south end of the park among the people most directly affected by expansion. A former Humboldt County Supervisor, Peart was well respected along the North Coast and was one of the few people

who could bridge two often-antagonistic worlds. On good terms with just about every business, labor, and social interest group in Humboldt County, Peart was also an avid outdoorsman who championed a host of environmentalist causes from Wild and Scenic River designations and RNP expansion to pollution control and stricter timber harvest policies. In short, Peart knew everyone and, as Barbee recalled, "he was the guy that *everybody* liked."[127]

Duty stationed in Arcata, near his home and close to the communities where he would most actively represent the park, Peart reported directly to Barbee on a variety of projects. In representing the park within the local area, Peart worked with Humboldt County officials on land-use planning around the park, gave tours of the rehabilitation area to local officials, developed close relations with a number of "disgruntled" timber workers affected by expansion, worked with civic, business, and government bodies in Orick, McKinleyville, Arcata, and Eureka on efforts to coordinate commercial development with park planning, and generally helped ease hard feelings against the park. As Barbee recalled, Peart's connections with the locals around the south end of Redwood "were absolutely critical" to achieving one of the park's top management priorities: establishing effective, collaborative, and mutually beneficial relationships with surrounding communities. This work could not have been done from the Crescent City headquarters, nor could it have been accomplished by Barbee or anyone else in the Park Service.

Peart also represented the park in a wider arena that extended well beyond Humboldt and Del Norte counties. He served as Redwood's lead contact in discussions with the California Secretary of Resources, the director of State Parks, CalTrans, and a host of other state officials, he was the park's liaison with a number of the organizations associated with the economic development packages that came from the expansion act—including the Redwood Region Economic Development Commission (which handled federal economic development funds) and Redwoods United, Inc. (a nonprofit employment service for

developmentally disabled adults that was identified in the expansion act)—and he served as the park's main contact person for tourism and travel boards, environmental organizations, and the news media. In conjunction with these duties, he also was responsible for producing short public information pieces for television broadcast and writing the required annual report to Congress. This last responsibility became an entire administrative responsibility in itself; Greg Ryken, an aide to Assistant Secretary of the Interior Bob Mendelsohn, counseled Peart to approach the annual reports as an opportunity for identifying and resolving any "bureaucratic blocks" to implementing the economic and employment programs stipulated in the expansion act.[128]

Peart's position was "one-of-a-kind," and central to Barbee's effort to demonstrate to park neighbors that RNP was, and would remain, an important and permanent fixture along the North Coast. Unfortunately, Peart's unique status could not be converted into a career, full-time position with the National Park Service, and he left the park shortly before Barbee was appointed superintendent of Yellowstone National Park in January 1983.[129] The management assistant's duties had grown and changed so much by that time, however, that many of the tasks associated with the original need for an ombudsman had become the responsibility of Jean Swearingen, who served as the "affiliate" chief of Interpretation for the south end of the park. Based in Arcata, like Peart, Swearingen reported directly to Barbee (rather than the chief of Interpretation or associate superintendent) and became the park's liaison to the communities of Orick and Arcata as well as to the staff and administration at Prairie Creek Redwoods State Park.

Swearingen first came to Redwood as part of the *GMP* planning team from the Denver Service Center and was subsequently recruited by Barbee in June 1979. As she later recalled, her position involved three distinct tasks: to help guide implementation of the park's new *GMP*, with special emphasis on developing a park interpretation plan; supervise interpretation in the south end of the park; and represent the park to communities in northern

Humboldt County. She quickly allied with Peart, and together they wrote the proposal for Redwood's 1980 designation as a United Nations World Heritage Site. This proved an important public relations boon for the park and when Redwood also became a featured element in the United Nations Educational, Scientific, and Cultural Organization's (UNESCO) California Coast Ranges Biosphere Reserve in 1983, provided international confirmation of the park's significance.[130]

Between 1980 and 1983, Swearingen increasingly assumed more of the liaison or ombudsperson role originally designated for the management assistant. As she later recalled, this proved the most challenging but ultimately most rewarding part of her job at Redwood National Park. Among her many duties, she gave public talks "to anyone and everyone," organized "town meetings" from Orick to Eureka to report on plans and developments at the park, and became a fixture at Orick Chamber of Commerce meetings, where her "Redwood Reports" were a regular agenda item. Swearingen's activities in Orick were especially significant, and are perhaps best illustrated by her service as the secretary for the Orick Chamber of Commerce and in her spearheading the effort to set up a nonprofit Community Development Council.[131]

By the time Doug Warnock became superintendent in March 1983, the efforts of Peart and Swearingen had born considerable fruit. The *Superintendent's Annual Report* for that year opened with the observation that "1983 was marked by quiet and steady progress in park management and building of sound rapport with local communities and various interest groups."[132] In subsequent years, the assessment only improved—with the 1986 report producing this glowing statement:

> Throughout the year 1986 there was measurable evidence of continuing uptrend in sound community relations on both local and regional levels. Efforts by park managers and staff to meet and discuss with various interest groups the park's ongoing programs and activities have resulted in a marked decline in controversy

> and isolation that characterized the period of park expansion eight years ago. . . . Park representatives are now offered repeat invitation to join or address civic, business, professional and governmental organizations.[133]

For Warnock this was all very good news, since it met one of Regional Director Howard Chapman's main concerns about Redwood. As Warnock recalled, Chapman gave him very direct and brief marching orders in January 1983: "I want you to keep a lid on stuff up there." Chapman worried that any resurgence of the old controversies that accompanied the park's expansion would undermine the "park-building mission" at Redwood. While he did not want to see the regional office invest new energy into what was hopefully becoming a dying controversy, Chapman's simple order also served to underscore the fundamental importance that good community relations held for park administration—and served as a backhanded compliment for the accomplishments of Peart and Swearingen.[134]

All of these concerns had special resonance for Warnock. Before coming to Redwood, he served as deputy director for the Alaska Region, where there was strong public sentiment against the Park Service in the wake of the Alaska National Interest Lands Conservation Act (1980) and its creation or expansion of fifteen NPS units. Warnock, Regional Director John Cook, and Cook's special assistant Robert Belous worked to improve relations throughout the state as they developed the administrative framework for the new region, but all three ran into trouble with the Alaskan congressional delegation. The "lid" came off, to use Chapman's phrasing, and the state's two senators and one congressman demanded that Secretary Watt have Warnock, Cook, and Belous transferred to the Lower 48. Warnock quickly landed at Redwood and Cook became superintendent of Great Smoky National Park. Before leaving Alaska, both men made a pact that one or the other would find a position for Belous at the first opportunity. Warnock soon made good on the promise when he placed his friend in the open management assistant position.[135]

Belous essentially took on many of the duties that had belonged to Peart and Swearingen, though he became more involved in public relations for the entire park than had either of his predecessors. This distinction partly stemmed from the successful groundwork that had been laid between 1980 and 1983 (and continued by Swearingen until her transfer to the Alaska Regional Office in fall 1984), which made Belous's activities around the southern end of the park more about continuing—rather than establishing and cultivating—relations with surrounding communities. It also reflected Belous's background as a writer and photographer, and Warnock's preference for Belous to represent the park more energetically in "electronic and print media [through] regular contact with all major media source[s] germane to park activities and operations."[136]

### THE ROLE OF ASSISTANT AND DEPUTY SUPERINTENDENTS, 1984–1990

The changed nature of the management assistant position also reflected a significant administrative change at Redwood. Warnock was not simply Barbee's replacement, he was part of a new management team that included an assistant superintendent position, which went to Don Spalding, who superseded Associate Superintendent Lee Purkerson. Warnock suspected that Spalding, who had recently been the Western Region's associate director for Administration, was Chapman's original choice for the RNP superintendent slot before the political fallout from Alaska suddenly created two priority candidates for any high-level openings in the NPS. Whether this was actually the case, Spalding was primarily tasked with pushing the rehabilitation program toward a more clearly defined budgetary and chronological schedule.

In the 1980s, the defined role of an assistant superintendent was area or project specific; instead of assisting the superintendent with overall park management, the assistant superintendent was responsible for a critical part of park administration. In the case of Redwood that meant Spalding had a high degree of autonomy over the Arcata Office, with

direct supervision over both Purkerson, previous associate superintendent and now chief of Technical Services, and Don Reeser, chief of Resources Management.[137]

This north-south management arrangement changed again in June 1986 with Spalding's retirement. The position of assistant superintendent was left unfilled and Warnock assumed Spalding's former duties, a situation that more directly extended his authority into management of the rehabilitation program and, because he continued to work mostly from Crescent City, fostered greater self-sufficiency within the Resources Management and Technical Services. By the time RNP received clearance from Regional Director Stanley Albright to advertise for Spalding's replacement in November 1987, the position had been changed to a new title, deputy superintendent, and redefined to better fit the new management conditions that had developed over the previous year and a half.[138]

As Warnock explained to Art Eck during the interview process in summer 1988, the deputy superintendent was not tethered to the watershed rehabilitation program. Instead, the deputy superintendent would divide his time between Arcata and Crescent City and work closely with the superintendent on all aspects of park management. In his introduction of Eck to park staff in September, Warnock was even more explicit: "There is a difference between a Deputy Superintendent and an Assistant Superintendent. The authority that the Assistant exercises comes from the Superintendent and he acts in lieu of. In the case of Deputy Superintendent, he has the same authority as the Superintendent and can act in that capacity. This is not an 'in lieu' type of situation. If you cannot get hold of the Superintendent, contact Art."[139]

When he offered Eck the job, Warnock let go two other significant pieces of information: Eck would first have to serve in Arcata as acting chief of Resources Management, and by the time that position was filled, he would become the deputy to a new superintendent since Warnock planned to announce his retirement in the next few

months.[140] Thus, the newly evolved management arrangement for RNP did not fully develop until William Ehorn became the park's seventh superintendent on July 2, 1989.

While Warnock, along with Spalding, brought a kind of joint "command-and-control" approach to managing RNP, Ehorn and Eck were different from each other and their predecessors. Ehorn had a "sociable" leadership style that focused more on relations with others than administrative details, while Eck had a penchant for handling the day-to-day specifics of park management. Together, they created a sort of two-person team of co-administrators; their strengths complemented each other while their combined emphases on the entire park oriented them away from any special focus on Technical Services and Resources Management. Watershed rehabilitation remained a central purpose of the park, as evidenced in the new ten-year plan that Ehorn authorized soon after his arrival at Redwood, but the program had matured to the point where it did not require the kind of attention or oversight of an assistant superintendent. The completed *Redwood National Park Watershed Rehabilitation Program: Progress Report and Plan for the Decade 1990-2000* essentially set the program's course (from an administrative perspective) for the rest of Ehorn's tenure and beyond, and allowed the new management team to more directly take on other issues that remained unresolved or unaddressed.

Shortly before Ehorn's arrival at RNP, Eck directed Ricardo Portillo—the park's administrative officer—to develop a list of top-ten concerns and a narrative of major initiatives to be included in an orientation packet for the new superintendent. As Portillo noted, the park had reached a critical juncture and many employees were asking: "Where is the park headed? We had the initial thrust of establishing the park followed by the expansion and the rehabilitation. What's next?"[141] Ehorn essentially answered these questions during an introductory meeting with all park employees in which he shared "his vision of the park's future. In brief terms, he stated his view that RNP was 'the greatest national park in the

world' [and] . . . that becoming superintendent of Redwood had been a life-long career ambition."[142]

Although he recognized the accomplishments of the past twenty-one years, most of Ehorn's enthusiasm was directed toward a vision of RNP's future. "While the park had made unparalleled progress in resource management and the restoration of logged lands," Ehorn believed that "much more needed to be done to fulfill the promise of Redwood to the visiting public in terms of access and services." Doing so would also lead to more "effective relations with the various communities, groups and individuals that shape and influence park programs," since placing more emphasis "on better service and access for the public [would serve] as a major bridge of understanding with local interests."[143]

In making these concerns central to his superintendency, Ehorn took on and expanded many of the tasks that had once belonged to his predecessor's management assistants. With Eck responsible for most of the details of park administration (in his first squad meeting with the park's division chiefs, Ehorn referred to Eck as their "supervisor"), Ehorn pursued his vision for the park. This started with "invitations to elected officials, their field staffs, local agency directors, news personnel, members of the environmental community, and civic leaders. Special attention was given to the town of Orick," where he "actively engaged community leaders about his vision for Redwood National Park . . . [and] extended an open-invitation to all community residents to join him in a tour of the park. He also took up active participation in the Orick Chamber of Commerce." These efforts were generally well received and much appreciated, especially in the communities around the southern end of the park where controversy over expansion had been the greatest.[144]

Distance from the park headquarters in Crescent City, and the stationing of the associate and assistant superintendents in Arcata, meant that previous superintendents tended not to work much in the southern end of the park or its surrounding communities. Ehorn's conscious effort to establish personal relations with Redwood's southern neighbors

thus marked a new era. Likewise, Deputy Superintendent Eck's responsibilities throughout the entire length of the park augmented and further institutionalized this aspect of Redwood's administration. Jokingly known as the park's "Roads Scholar," Eck spent many hours traveling between Arcata and Crescent City—and points in-between—meeting with different division chiefs and supervisors, community members, and personnel from other land-management agencies. The new arrangement that Ehorn and Eck worked out—of superintendent and deputy superintendent—thus diffused and extended the authority of their predecessors and allowed for more direct engagement with the outside interests and concerns that had long shaped the park.[145]

### ADMINISTERING NATURAL RESOURCE MANAGEMENT, 1980–1993

Because of Redwood's particular administrative arrangement, the kinds of programs that would typically be classified under Natural Resource Management came under the purview of both Technical Services and Resources Management. This arrangement lasted until 1990 and stemmed from several conditions unique to RNP, namely, the size and significance of the watershed rehabilitation program, the involvement of NPS director Whalen in determining the two-person arrangement of the park's management team in the post-expansion era, and the long list of congressionally funded mandates that set the parameters for the program. Taking up more than half of the park's budget and personnel, resource management might at times have seemed to operate as if it was a separate unit of the national park system. Yet resource management was closely aligned with the basic goals of park administration and its three-part emphasis on protecting and restoring precontact environmental conditions, improving the visitor experience, and addressing difficult community relations.

The relative significance of these three concerns and how they manifested in natural resource management, changed along with the different priorities and conditions that shaped

the administrations of Barbee, Warnock, and Ehorn. Across each administration, however, they were always viewed as part of an integrated whole. Whenever possible, the best natural resource management strategy was deemed the one that could achieve three objectives beyond environmental protection or restoration: demonstrate goodwill toward local communities; augment the visitor experience through increased interpretive or recreational opportunities; and build connections among the park and outside interests and agencies. These concerns were part and parcel of the unique challenges that had shaped the establishment, expansion, and management of RNP, and efforts to address them often involved unique or creative solutions.

In many respects, the inventiveness of the watershed restoration program—and its effort to incorporate local workers and their expertise—was a model for the rest of natural resource management at RNP. The discovery that heavy machinery proved the best instrument for "naturalizing" cutover and roaded landscapes was contrary to initial expectations but soon became a hallmark of the park's approach to resource management: to restore or create the kinds of conditions that national parks traditionally protected could require the use of seemingly destructive management tools and strategies. The same inventiveness was applied to the park's other unique challenges. For instance, in order to manage growing elk populations and address the concerns of neighboring landowners about too many park animals grazing on their property, park staff developed a management plan between 1984 and 1990 that eventually involved constructing fences near Orick Valley to prevent elk depredation on private lands.

This otherwise "unnatural" and nonconforming solution was strongly championed by Superintendent Ehorn, who wanted a natural resource management project to demonstrate the park's responsiveness to local concerns and complaints. The project was "choreographed" with the California Department of Fish and Game (CDFG) to make it appear that fencing was really the state's desired approach to the problem. As Ehorn conceived of

the situation, the “request” from CDFG protected the NPS from possible criticism about “caging” animals. Yet the park’s willingness to construct the fence, and thus “help” the CDFG, showed that Redwood was an active participant in the effort to resolve a long-standing local concern.[146]

### REHABILITATION IN AN EVOLVING RESOURCE MANAGEMENT CONTEXT

Finding creative solutions to the unique resource management challenges at RNP had been a staple of park administration since 1968. To a lesser extent, the same was also true of the effort to craft resource management projects that could also meet what Barbee called the “expectations of our interested ‘publics.’” Although this ideal was sometimes met, other times, it was simply unattainable. In certain cases, however, it was not even considered, let alone attempted. This was especially the case with the watershed rehabilitation program through the first half of the 1980s. Aside from efforts to hire former timber workers, watershed rehabilitation was largely insulated from broader administrative concerns about community relations, visitor experiences, or outside interests. With a substantial, congressionally mandated budget and a large cadre of talented young scientists, technicians, and specialists, the watershed rehabilitation program in the early years operated as a semiautonomous unit of the park that at times even seemed independent of the NPS.

Much of this stemmed from the experimental, even revolutionary nature of the rehabilitation program. No one had ever designed or implemented a sustained restoration project of this scope since the New Deal programs of the 1930s, and never in the history of the Park Service had a natural resource program been so heavily rooted in scientific research and so thoroughly devoted to reconstructing rather than protecting a landscape. The staff hired to carry out this unique program were generally young (for many it was their first career position), idealistic, and excited by the prospect of helping create—and not simply work on—a new and potentially very influential form of environmental management. And

since almost none of the staff in Technical Services or Resources Management had previously worked within the NPS, few identified their work with a larger Park Service ethos. Their work was new, it was urgent, it was terminal, and it was in response to a broad public concern about the environment; if anything, they worked more for Congress than the NPS, since it was Congress that defined the intent and scope of the watershed restoration program.[147]

The separate nature of watershed rehabilitation program was also physical and logistic. Based out of Orick and Arcata, the people working in the watershed restoration program had very little contact with park administrators or personnel in other divisions. While most of the Resources Management staff worked in the park expansion area, when Technical Services staff went into the field they often worked entirely outside the park—in the Park Protection Zone (PPZ) and, at least until 1983, the upper watershed, or in consultation with colleagues at the U.S. Geological Survey (USGS) and Humboldt State University in Arcata. The physical landscape of the Redwood Creek basin that lay within RNP also contributed to the insularity of the watershed rehabilitation program. Unlike the state parks, which remained outside the purview of all but a few resource management projects, the heavily cutover lands in the lower Redwood Creek drainage looked more like a battlefield in a “celestial war,” as Barbee once put it, than a national park. And also like the state parks and most of the rest of the national park, the cutover lands where watershed rehabilitation projects took place were mostly off-limits or inaccessible to the public.[148] For all of these reasons, Redwood in the early 1980s did “not really [feel like] a national park,” as longtime park geologist Vicki Ozaki recalled. At times, it seemed as if “it was just a bunch of scientists running around studying the resource.”[149]

### WATERSHED REHABILITATION: PROGRAMMATIC MATURITY AND RESTRUCTURING

With a substantial budget, a clear sense of purpose, and a talented, young, and inventive staff, the early years of watershed rehabilitation might be characterized as a time of "golden youth," as Art Eck phrased it.[150] This changed somewhat in the mid-1980s, however. Political shifts in Sacramento dampened efforts to monitor and affect timber harvest practices in the upper watershed while budget concerns at the federal level prevented an expected short-term increase in the watershed rehabilitation budget. The arrival of Warnock and Spalding, and their joint emphasis on controlling costs and beginning the transition toward making Redwood operate like a more traditional national park, also curbed some of the enthusiasm in the watershed rehabilitation program. Spalding's strict and often acerbic management style did not help matters. Park staff that came of age in the more relaxed environment of the early 1980s bitterly resented what seemed like a frequent, spite-filled barrage of random regulations. Spalding and Purkerson, who had equally strong personalities, also clashed over how the rehabilitation program should proceed. As Mary Ann Madej later recalled, morale plummeted during Spalding's tenure.[151] Yet this period, which Eck later described as a kind of late adolescence, marked an important—if perhaps unnecessarily difficult—transition for natural resource management at RNP: moving from the "golden youth" of the Barbee era through a few "rebellious teen years" with Spalding, the combined staff of Technical Services and Resources Management eventually matured into a more integrated natural resource management program in the late 1980s.

In the *1984 Redwood National Park Watershed Rehabilitation Program: Progress Report and Plan for the Future*, park staff described a process where the program would achieve most of its primary goals by 1991. "Thereafter, activity levels [would] begin to diminish, and staffing levels [would] show corresponding declines. . . . Reduced staffing [would lead to] eventual consolidation of Technical Services and Resources Management Division functions [into a single] Resources Management organization," and program staff

would turn increasingly toward managing fish and wildlife populations and second-growth forest.[152] All of these sentiments were echoed in a 1986 operations evaluation of RNP, which encouraged "management at [Redwood to] watch for opportunities to move in that general direction as positions become vacant in the next few years."[153] The first step had already occurred in 1982, when the vegetation research conducted within both divisions was merged into a new Vegetation Management branch in Resources Management. A similar merging happened in 1988 when the Fish and Wildlife branch of Resources Management was combined with existing programs in Technical Services. In October 1989, when Bill Weaver left Redwood to pursue a career in the private sector, the Geology branch of Technical Services that he headed was combined with Geomorphology and the two fell under the direction of Mary Ann Madej.

Weaver's departure came amid great transition for the resource management programs at Redwood. Resources Management chief Don Reeser left the year before, and his position was variously filled by Bob Belous for a few months, Art Eck from September 1988 to June 1989, Supervisory Botanist Mary Hektner from July to September 1989, and Supervisory Geologist Terry Spreiter from October through December1989.[154]

Throughout this transitional year, however—and as staff worked on the *Redwood National Park Watershed Rehabilitation Program: Progress Report and Plan for the Decade 1990-2000*—it had become clear that the time was ripe for finally merging Technical Services and Resources Management. By January 1990, Ehorn and Eck submitted a new position description to the Western Regional Office for the vacant chief of Resources Management position that combined the two divisions under one chief of Research and Resources Management. (Environmental Specialist Lee Purkerson, who was effectively serving as the acting chief of Technical Services, was slated to become a management assistant once the new division had been created and a chief named.[155]) To facilitate fuller integration of the two divisions and to locate them wholly within the park, a decision was also made to phase

out the Arcata Office by 1995 and relocate Research and Resources Management staff to the South Operations Center (SOC) in Orick.[156]

The proposed reorganization of Technical Services and Resources Management quickly became a reality, with Terry Hofstra—branch chief of Fisheries and Wildlife within Technical Services—becoming chief of Research and Resources Management in September 1990. The planned phase-out of the Arcata Office was modified in 1994, with some functions and personnel slated to remain in facilities shared with USFWS, and the proposed move of most Reseach and Resources Management staff to SOC was not completed until after a new facility was built in Orick in 2003. Regardless of timeframes and facility changes, and despite the loss of longtime leaders in watershed rehabilitation like Weaver and Hagans, natural resource management at Redwood achieved what Eck later described as full "maturation" in the early 1990s.[157]

During this "mature" period, watershed rehabilitation increased its interaction, and gained fuller recognition, from its "interested 'publics.'" As reported in the superintendent's annual report for 1988, ten years of developing and monitoring an extensive watershed rehabilitation program, as well as producing a number of professional publications, brought RNP staff "growing recognition and utilization [throughout the NPS] of its expertise in stabilization, rehabilitation and restoration of severely disturbed lands."[158] Besides providing technical assistance for redwood forest work at Muir Woods National Monument, park staff also contributed to restoration projects in very different environments, including Golden Gate National Recreation Area, Channel Islands National Park, and Yosemite National Park. Several park staff also went to Yellowstone in the wake of the 1988 fires, "to assist in vegetation mapping and advise in rehabilitation of fire lines and other suppression disturbances."[159]

The reputation of Redwood's innovative rehabilitation program extended well beyond the NPS, and staff provided training and assistance for Siskiyou National Forest and

consulted with a number of state and local government entities including the California Board of Forestry, California Coastal Commission, and California North Coast Regional Water Quality Control Board. The audience, or public, for watershed rehabilitation also extended into academic and scientific communities as park staff continued to author professional publications and presentations, and collaborated with scholars from Humboldt State University, University of California at Davis, University of California at Berkeley, Oregon State University, and the University of Washington. Perhaps most significant, the program attracted attention from overseas and out of state, with park staff frequently entertaining visiting scientists and land managers making professional pilgrimages to Redwood Creek to learn firsthand about watershed rehabilitation and environmental restoration.[160]

### RESOURCES MANAGEMENT: BEYOND WATERSHED REHABILITATION

During the 1980s and beyond, most Natural Resource Management projects operated within, or in support of, the watershed rehabilitation program. At times, however, natural resource projects could serve as the prime mover of the larger park enterprise. This was certainly the case with studies related to salmon. Although watershed rehabilitation was originally intended to prevent flood damage to vulnerable stands of old-growth redwood, significant changes in the health or stability of an ancient streamside grove could only be measured in the wake of a 25-, 50-, or 100-year flood event. Short-term and continual assessment of the program's success had to be measured in terms of sediment loads and the overall health of the aquatic environment. Because of their ecological significance as an indicator species for assessing temperature, biological productivity, water clarity, pool formation, and other measures of in-stream habitat, salmon became more important than trees for assessing the effects of the watershed rehabilitation program. As populations of these commercially valuable fish noticeably dropped through the 1980s, and as some runs

were eventually listed as threatened or endangered, the purpose and efficacy of watershed restoration soon became as much or more about salmon than redwoods.[161]

One of the first scientific studies undertaken and completed in the newly expanded park involved a survey of aquatic invertebrates, which provide the major food source for juvenile anadromous fish. Building on work conducted by the USGS between 1973 and 1975, the surveys provided a list of invertebrate species and a measure of their relative abundance at different times of year and in different stream systems. Besides evaluating the viability of potential and actual salmonid habitat, these studies also helped guide watershed restoration. In summer 1981, for instance, the practice of diverting streamflow around road-crossing excavations was deemed unnecessary when it was found that sediment produced by this work settled quickly and had no significant effect on aquatic invertebrate populations.[162]

Fisheries staff also commenced studies on other key elements of salmonid habitat in the 1980s, which had similar consequences for watershed rehabilitation and promised to improve the health of commercial fish populations. Among these was a study of salmonid nursery areas where juvenile fish could develop in sufficiently cool, clear, and nutrient-rich waters in the Redwood Creek basin. A survey of existing and potential salmon habitat was also undertaken to establish the viability of spawning sites and rearing areas as well as to assess the shade and cover along stream banks, pool and stream flow dynamics, and obstructions to upstream migration. As a consequence of these studies, rehabilitation projects were directed toward streams with viable, threatened, or potential salmon habitat.[163]

Staff in Resources Management also implemented the kinds of terrestrial wildlife management programs typical of other national parks.[164] At Redwood, these were shaped by the park's administrative and budgetary emphasis on rehabilitation, but they also reflected concerns about visitors in the state parks. This was certainly true of the park's black bear (*Ursus americanus*) management plan. Bears have long been a staple of most national park

resource management programs, particularly in regards to the impacts that visitors might have on bear populations and diets around campgrounds or other high-use recreational areas visitor use areas. . At Redwood, however, concerns about bears largely stemmed from conditions in the park's large expanse of cutover lands where visitors rarely if ever tread. As the cutover lands in the park underwent vegetative succession and converted to a dense forest habitat, the food sources that bears utilized on once-open slopes were expected to diminish.

With a relatively large bear population and a steady reduction of spring and summer forage, park staff predicted that human-bear encounters would increase in the state park campgrounds. Park researchers learned through radio-telemetry that females with cubs tended to utilize cutover areas for forage but often denned in old-growth forests. Younger and less established animals, however, used cutover lands almost exclusively. As those lands returned to forest, these animals would be increasingly drawn to visitor-use areas. Budgetary concerns in the mid-1980s ended studies of bear populations and movements, but many of the earlier predictions about an increase in human-bear encounters came true. Without a clear understanding of changing bear movements, the potential for problems became harder to plan for. In 1989, a common tragedy in most national parks occurred for the first time in Redwood when two bears were euthanized near the Prairie Creek campground.[165]

Like bears, Roosevelt elk (*Cervus elaphus Roosevelt*) found more food sources in cutover lands than they did in old-growth forests. And as these areas converted to dense second-growth, the range and distribution of the animals shifted accordingly. Studies of elk movements, habitat use, and browsing preferences were used to guide restoration efforts in upland prairies like the Bald Hills as well as to make predictions about the animals' future needs and ranges. As the Redwood Creek basin reforested, elk depredation on private property in and around the Orick area became an even more chronic problem. While this led

to the fencing program discussed earlier, park staff also took a more traditional approach to the problem in joint efforts with the California Department of Fish and Game to remove animals and repopulate other parts of their historical range.[166]

Elk and bears were certainly poster animals for the NPS, and Roosevelt elk had long been an important attraction of the North Coast redwoods. Yet for all the associations with visitor use, the study and management of these two species was part of a much larger program of inventorying, monitoring, and analyzing the biotic resources in what was the best-funded natural science research program in the NPS. In *State of the Parks—1980: A Report to Congress*, the Park Service as a whole was chastised for paying too little attention to science-based resource management. As the report's authors noted, the entire NPS employed "fewer than 100 scientists; this is an average of less than one researcher for each three units of the System and represents only 1.1 percent of the total Park Service staff. Similarly, there are fewer than 200 personnel in the Service who have resource management training." At Redwood, the numbers were altogether different, with approximately half of park staffing devoted to scientific research and resource management. Through the 1980s and early 1990s, as the NPS addressed the needs spelled out in *State of the Parks*, Redwood remained at the leading edge of a new NPS-wide trend toward more science-based assessment and management of park resources.[167]

In this last respect, RNP's resource management program—apart from watershed rehabilitation—became an influential player beyond the park and the Park Service. In 1989 and 1990, park staff became involved in the formation of the California Regional Strategy to Conserve Biological Diversity, which sought to integrate various land-management agencies within particular bioregions both to coordinate funding and expertise as well as to develop more concerted efforts to protect and foster biodiversity across a large area. The effort soon produced an "Agreement on Biological Diversity" memorandum of understanding in September 1991, which included eight state and federal agencies, the University of

California, and the Secretary of the California Resources Agency. Members of the resulting California Biodiversity Council agreed to "pursue the development of local and regional institutions and practices necessary to conserve biological diversity; . . . develop procedures and guidelines to facilitate public education, dialogue and participation; . . . minimize the disruption of human communities and expectations; [and] . . . pursue the establishment of [scientific] means for conserving biological resources over time."[168]

Redwood was included in the large Klamath Bioregion Province (one of nine such provinces designated for the state), which extended along the coast from the southern Mendocino County line to the Oregon border and eastward to Mount Shasta and the edge of the northern Sacramento Valley. In January 1992, RNP staff participated in the formation of a subregional group called the Northern Klamath Bioregional Council, which focused on the North Coast. Working in a smaller council not only reduced travel time and costs, but allowed for greater "focus on locally unique concerns. In addition, it was thought working in smaller groups would promote a sense of community in resolving common problems."[169]

Along the North Coast, the most pressing common issue related to the 1990 listing of the northern spotted owl (*Strix occidentalis caurina*) and the 1992 listing of the marbled murrelet (*Brachyramphus marmoratus*) as threatened species. Both birds required old-growth or mature second-growth forested habitat, and their threatened status effectively served as an indicator for the overall health of the subregion's forests. Since this was central to the purpose of the Northern Klamath Bioregional Council, and the Endangered Species Act obligated the various members of the council to develop plans that stabilized and promoted the long-term health of these bird populations, RNP staff became part of a much broader program to improve the forest environments with which these birds were associated. While the overall management of RNP was already oriented toward these objectives, the official listing of these species more closely aligned programs at RNP with similar efforts outside the park. As will be discussed in a subsequent section, these trends would only

continue in coming decades, especially in regards to biological inventory and monitoring within RNSP as well as in conjunction with other public lands agencies.[170]

### CULTURAL RESOURCES MANAGEMENT

Cultural Resources Management followed a similar trajectory as most other natural resource management programs at RNP in the decade and a half after expansion. The route toward more collaboration with outside agencies, tribes, and land-management areas followed a different set of imperatives, however. It also began with a more explicit connection to the watershed rehabilitation program. The park had contracted out a number of archeological studies in the decade after its establishment, and even hired an outside academic (Polly McW. Bickel) to serve as the park's "Indian liaison" in 1978, but expansion made necessary the services of a permanent, full-time NPS employee. In November 1979, just as the watershed rehabilitation program was underway, Redwood hired Patti Bell as the park's first Cultural Resources manager. Bell's tenure at Redwood was brief, however, and the position was filled again just nine months later by Ann King Smith, who had already been working in the expansion area as a contracting archeologist.[171]

Over the next several years, the bulk of Smith's time would center on archeological studies in areas designated for rehabilitation. Her primary responsibilities were to ensure that each project complied "with pertinent Federal laws, executive orders, rules and regulations and Service policies regarding the location, evaluation and protection of prehistoric, historic, and contemporary Native American cultural resources." With completion and approval of the 1980 *General Management Plan* and the release of funding for development projects it allowed, Smith was also responsible for "providing archaeological clearance for park undertakings" in compliance with the suite of related federal regulations that included the National Historic Preservation Act (NHPA), National Environmental Policy Act, the Archaeological Resources Protection Act of 1979, and the Antiquities Act.[172]

In addition to conducting archeological clearances for watershed rehabilitation and park development projects, Smith also managed a host of other responsibilities, including maintaining and increasing "the cultural resources data base," developing an ethnographic overview of the park, assessment, preparing nominations for resources to the National Register of Historic Places (NRHP) and preserving historic structures (when funding permitted), coordinating "with park, region and Western Archaeological and Conservation Center staff, [communicating] with state, federal and local agencies and with professionals about the park cultural resources management program . . . , [working] with the Division of Interpretation to disseminate cultural heritage information"; and training maintenance crews, trail crews, and rangers in the identification of archeological resources.[173]

Given this full slate of tasks, and the number of archeological surveys required for the watershed rehabilitation program, Smith and Janet Eidsness (who held a temporary, part-time GS-9 archeologist position) had "made substantial accomplishments" by the mid-1980s; "almost all of the surveyable lands in the Redwood Creek basin [had] been subjected to thorough field reconnaissance," and all watershed rehabilitation and other construction projects that had no significant impact on cultural resources received clearance. Outside any specific watershed rehabilitation or development project sites, park areas were surveyed in accordance with professional archeological standards of the time and many prehistoric and historic archeological sites were recorded. The most substantial work occurred in the Bald Hills, which led to the listing of the Bald Hills Archeological District on the NRHP.[174]

As new archeological surveys became less frequent and more routinized, however, Smith and Eidsness were tasked by the Western Regional Office with the Cultural Resources Management responsibilities for Whiskeytown National Recreation Area, Lava Beds National Monument and Lassen Volcanic National Park.[175] While these new obligations slowed their work at Redwood, by decade's end, Cultural Resources Management could still list a ten-year tally of nearly three hundred reports in compliance with the NHPA for RNP projects.[176]

Moreover, most of the park's historical and cultural sites and structures that had been found by this time were eligible for listing on the NRHP had been listed by 1990; these included twenty-six prehistoric sites in the specially designated Bald Hills Archeological District, three coastal archeological sites, and three historic structures.[177]New Federal Rulings and the Yurok Tribe

In terms of overall park administration, one of the most significant and lasting accomplishments of Cultural Resources Management was the working relationship that developed between the park and local Native American communities through the 1980s and beyond. To appreciate the nature of the achievement, however, requires some explication of its earliest stages. Formal contact among park administrators and Native American leaders first occurred in 1977, when an autumn storm exposed a burial site. Consultations on this matter among park staff and members of local and regional organizations like the Native American Heritage Commission, the Tri-County Indian Development Council, and the Northwest Indian Cemetery Protective Association led to a common desire among all parties to formalize a cooperative relationship between the NPS and local Indian communities. From the Park Service perspective, such an endeavor also complied with the American Indian Religious Freedom Act's (1976) stipulation "to protect and preserve for American Indians their inherent right of freedom to believe, express and exercise [their] traditional religions . . . , including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites."[178]

With the knowledge that park expansion was imminent and that a new *General Management Plan* was in the works, Native American leaders made it clear that their concerns needed to be incorporated into the park's planning process.[179] The park represented a protected reservoir of cultural sites and resources, and as Indians began to use the Lower Klamath more frequently, the portions of the park that bordered the river had become an area of special concern. Superintendent George Von der Lippe concurred, and

worked to align the park's planning process with Secretary of Interior Cecil Andrus's new directive to "develop and execute [Redwood's] programs in a manner that reflects informed awareness, sensitivity, and serious concern for the traditions, cultural values and religious beliefs of Native Americans who have ancestral ties to such lands."[180]

As noted in chapter 4, the meetings, conferences, and consultations between NPS personnel and Native American representatives that occurred in 1977 and 1978 largely came at the instigation of the North Coast's Indian communities, which were in the midst of a very active cultural revitalization. Redwood officials, like most federal public lands managers across the nation, did not fully appreciate how a dramatic increase in the exercise of Native American rights would involve the park, nor did they know how to respond effectively, or collaboratively, to these developments. The NPS, in particular, had a long history of excluding Indians from parks, and engaging Native American concerns was simply not a part of the agency's institutional culture. In the case of Redwood, at least, making good on a commitment to work with the North Coast's American Indian communities meant relying on the expertise of someone from outside the Park Service.[181]

In March 1978, the Western Regional Office contracted with Polly McW. Bickel to serve as the first director of the Redwood National Park Cultural Resources Project. A recent PhD. graduate from the University of California, Berkeley, and an assistant professor at San Francisco State University, Bickel, "working closely with the Park Superintendent" was tasked with collecting "information from appropriate Native American peoples of Northwestern California concerning traditional use areas, ceremonial locations, and sacred places within Redwood National Park as now defined by the United States Congress [in the American Indian Religious Freedom Act] and President Carter [in Secretary Andrus's Special Directive 78-1]." While this work would eventually involve consultations with more than fifty individuals, along with field surveys, reviews and updates of previous archeological studies, and organizing, holding, and attending meetings related to Indian concerns and park policies,

the ultimate purpose of the contract was “to accurately reflect the important cultural Native American values contained within the park area in formulating the General Management Plan.”[182]

Bickel’s original contract ran just six months, but her duties were soon extended and paired with Sally Salzman, another outside contractor, to include archeological clearances for the first rehabilitation projects in the expansion area.[183] Bickel’s ongoing work with North Coast Indian communities and organizations and her connection to the formulation of the new *GMP*, also garnered Bickel a new designation as the park’s “Indian liaison,” a job title that would carry over to subsequent heads of Cultural Resources Management.

As Bickel described it, her professional obligation as an anthropologist was to be a “mediator or advocate, working between a public agency and a Native American group, pushing for the interests of one or the other, or serving as an advisor when policy is formulated which affects relations between the two.” The focus of these efforts primarily “related to explicit Native American concerns, such as control over lands or access to them, cultural preservation of various sorts, and the exercise of traditional practices.” Because her employer, as a consequence of recent federal legislation and agency policy, had clear “responsibilities *to* Native Americans,” her position as Indian liaison often meant conveying and advocating Native American concerns to park administrators.[184]

This was clearly the case during initial efforts to seek Native American input on the *General Management Plan*. Park Service planners from the Denver Service Center and Superintendent Von der Lippe advocated a two-part process whereby Native American groups would identify places and resources of special importance and then, during the public comment phase of the planning process, “give recommendations regarding use of cultural resources.” Native American leaders balked, and insisted that their thoughts about particular sites and resources were integral to the identification process and needed to be incorporated into the early stages (in other words, during the pre-public comment period) of the planning

process. Bickel agreed, and encouraged the NPS to adopt this approach.[185] The result was a sort of hybrid process that involved significant input from Native American people prior to the public comment period, but also left the adoption of Indian recommendations regarding cultural use of park resources to a time after the *General Management Plan* was complete.

Mediating between the park and local Native American communities was no simple task. As an associate solicitor for the Department of the Interior explained in September 1978, there was an inherent "clash between the exercise of traditional American Indian [practices] and the enforcement of statutory, administrative or programmatic constraints" on the part of the Park Service.[186] These "constraints" often seemed a mystery to NPS employees, but it was even harder to explain to the broader public why park officials could not make what seemed like simple and reasonable policy decisions if they broke with agency-wide rules or countered congressional statutes. When the audience was a distrustful Native American community, still living the issues that defined the so-called "Salmon Wars," mutual understanding was a thin hope at best. To many North Coast Indians, it did not matter if the reason was policy constraints, indifference, or an overfull plate of responsibilities for a contract employee; the inability of Redwood officials to directly address concerns about Native American hunting and gathering in the park was indistinguishable from U.S. Fish and Wildlife regulations about fishing. Patti Bell, who during her brief tenure at Redwood served as contracting officer for Bickel, Salzman, and a small team of archeologists from Sonoma State University, found the situation extremely stressful. As a Park Service employee based in Arcata, she was something of a double pariah who felt the brunt of two frustrated communities: "the controversy about the newly acquired lands included angry, displaced loggers as well as the Native American community who felt the park was not doing enough to protect their traditional sites and their traditional use of the park area." These conditions, more than anything else, caused her to leave the park after just nine months.[187]

The fact that meaningful contact between the park and local Native American communities continued and improved over the next few years is testimony to the efforts of members of the five Native American Heritage Advisory Committees affiliated with the park area, Bickel, and the North Coast Indians who worked with the RNP Interpretation Program.. The 1980 appointment of Ann King Smith as Cultural Resources Management manager and Indian liaison also helped matters considerably. Native American representatives preferred to work directly with a park employee, rather than a contracted mediator, and her more than twenty-year tenure in the position would foster trust and stability among communities with a permanent interest in the park area.[188]

By 1985, Smith had dealt with a number of key issues. Among these were ongoing projects that had begun in 1978: "park developments, inventory and protection of places of importance to Native Americans, [and] archaeological projects." Beginning in the early 1980s, Redwood staff and local Native American communities also began to address more explicit concerns about "Indian use of park resources and access to park lands for traditional ceremonies." Much of this came in the midst of North Coast Indians actively participating in, and making significant contributions to, the "formulation of [Park Service-wide] policies concerning Native Americans."[189] Among other things, the resulting Native American Relationships Policy that was published in the Federal Register in 1987 made Native American consultation a formal part of the *GMP* planning process—something that had first been pioneered at Redwood. It also formalized a number of the policies regarding access to the park and use of traditional mineral and plant resources that North Coast Indians had wanted to see incorporated into Redwood's 1980 *General Management Plan*.[190]

An issue of special concern to the Park Service and the Yuroks was the boundary overlap along the lower stretches of the Klamath River, especially after 1988 when the Yurok separated from the Hupa and established their own tribal government in the town of Klamath. The issue also proved the most difficult to resolve. After the 1978 conference with North

Coast Indians, in which the Yurok made special note of the overlap, Redwood sought legal clarification from the Department of the Interior's Office of the Solicitor. The matter required years of research on the sale or transfer of tribal lands and individual Yurok allotments to non-Indian owners, whose title was then subsequently acquired by various parties including timber corporations, the Department of Defense, and the National Park Service. While all agreed that Indian lands were originally acquired through coercive and often fraudulent means, the matter of repatriating lands to the Yurok Tribe remains an open and unresolved issue that all parties agree can only be resolved by congressional legislation.[191]

Nevertheless, Yuroks and park administrators developed some cooperative arrangements beginning in the early 1980s regarding Native American use of sites within the area known as the "reservation-Park overlap zone."[192] Most notably, park officials and the Rek-woi Indian Community Association worked out an agreement to build a Brush Dance structure on a traditional ceremonial site on the south side of the mouth of the Klamath River. Superintendent Bob Barbee authorized the delivery of park-milled redwood lumber for the structure, which came from downed timber acquired in the park expansion, and agreed to provide access and parking to the area as well as to construct a locked gate to restrict visitors from the site. Additional timber was also sent further north, to be used in the construction of the Tolowas' Howonquet Health Center at Smith River[193]

**Figure 6.4 Mouth of Klamath River, with river bar extending southward from the north (Requa) side.** The Brush Dance site (Weyhl-Kwel) is in the middle-right of the photograph. Source: U.S. Army Corps of Engineers.

While substantive issues over boundaries, tribal jurisdictions, and allowable traditional-use practices remain unresolved to this day, the park and surrounding Native American communities have sustained a commitment to the consultation process that was first established in 1978. Through the 1980s and into the 1990s, the number of issues continued to grow, and involved a host of planning documents and Park Service policies affecting American Indians. These included Native American review of and participation in archeological projects; discussion of proposed facility, visitor-use, and interpretive developments; Native American use of park resources like redwood planks and logs for traditional structures and canoes, and the gathering of plants for basket making, food preparation, and medicines; use of ceremonial grounds within the park; Native American participation in the interpretation and representation of traditional lifeways; and NPS employment of local Indians. Most of the responsibility for handling these issues fell on the

shoulders of the Cultural Resources Management director—and from the park perspective, most of the credit goes to the person in that position. Yet, as Smith noted in 1985, successful relationships have always required the efforts of administrators as well as staff in various management branches who "understand and respect" the concerns of local Indians and "are willing to be flexible in the interpretation of regulations and policies."[194]

### INTERPRETATION AND THE *REDWOOD RENAISSANCE*

While all of RNP's administrative divisions shared the same goals of protecting park resources, improving community relations, clarifying the visitor experience, and addressing the concerns of outside interests and agencies, none brought these together more seamlessly than the Interpretation Division. Over the course of the 1980s and into the early 1990s, work in Interpretation mirrored the basic trends that defined the park's administration. Under Superintendent Barbee, the division established many of the programs and themes that would remain central to park interpretation for decades to come, including presentations and activities that dealt with redwood ecosystems, coastal and marine environments, elk, bears, Native American lifeways, geology, history, and the park's unique restoration program. During the early 1980s, Interpretation was also closely associated with efforts to improve community relations in the southern end of the park, especially through the efforts of Jean Swearingen. By the middle of the decade, the division retained many of its original programs, but moved toward curbing nonconforming uses of park areas and improving visitor facilities and waysides. All of these trends continued through Warnock's tenure, then received an energetic new push when Superintendent Ehorn worked to bring new recreational opportunities to the park.

Like the watershed rehabilitation program, which had mostly developed in the two years following expansion, 1980 marked a sort of culmination and new beginning for Interpretation—which became a separate administrative division in January. Highlights of

that new year included the expansion of interpretive programs into spring and fall, the development of close cooperation with California Department of Parks and Recreation (CDPR) staff at a joint interpretive techniques workshop held in May at Prairie Creek Redwoods State Park, and a much-needed upgrade and remodel of the Hiouchi Ranger Station to make it into the main orientation center for visitors coming from the northeast. A new "Statement for Interpretation and Visitor Services" for the expanded park was also completed, and material for a handbook to be used by seasonal interpreters was compiled. While much of this early work was first undertaken in anticipation of the national park and state parks integration that was planned to occur in summer 1979, it was still relevant after that agreement fell apart and became the basis for future work within and among the different parks.[195]

In 1980, the park also released the first issue of a widely distributed brochure called the *Redwood Renaissance: The Story of Stabilizing and Reforesting Logged-over Lands in Redwood National Park*, which briefly discussed recent logging in Redwood Creek as well as the purposes of the 1978 Redwood National Park Expansion Act. *Redwood Renaissance* also introduced visitors to various facets of the park's rehabilitation program, from road treatments and revegetation to protection of the Tall Trees Grove and cooperative efforts in the Park Protection Zone. Revised in 1984 and issued for at least another decade, *Redwood Renaissance* presented a heroic but practical lesson with a hopeful promise: the conditions of ancient redwood forests would return and the watershed rehabilitation skills learned in RNP were applicable to other blighted or compromised environments around the region, the nation, and the world.[196]

**Figure 6.5 Part of Brochure entitled *Redwood Renaissance: The Story of Stabilizing and Reforesting Logged-Over Lands in Redwood National Park* (ca. 1984). Source: RNSP Archives.**

While elements of the *Redwood Renaissance* were repeated in wayside exhibits around the southern end of the park, the *Story of Stabilizing and Reforesting Logged-over Lands* was a featured part of RNP's most innovative and popular visitor activities: the Tall Trees shuttle bus. In its first year of operation (1980), the shuttle bus carried 8,175 passengers, all of whom received a presentation on logging, the expansion act, and the rehabilitation program during the trip from the visitor center in downtown Orick to the Tall Trees grove. In the first years of the shuttle presentations, park rangers quickly developed a very neutral assessment of the area's logging history, since a number of bus passengers were ex-loggers who felt inclined to "check-up" on the park and protested loudly if they felt criticized or slighted in any way. This neutral tone was soon incorporated into other forums and helped foster a kind of rapprochement among park staff and local residents.[197]

The Tall Trees shuttle bus, which ran until 1992, fit within a broader approach to park management that promoted alternative or novel approaches to experiencing national parks and understanding environmental issues. This was true of the watershed rehabilitation program as a whole, of the curriculum at the outdoor schools, and even of matters as mundane as the proposed menu for the Sunshine Café. It was certainly true of the shuttle bus, which was intended to limit private automobile traffic, encourage visitor interaction, and provide a focused opportunity for education and interpretation. Adopted at RNP several years after a brief period of experimentation with similar transportation options in other national parks had ended, the Tall Trees shuttle bus lasted much longer than any other comparable program in the NPS.[198] This "alternative" ethic also influenced the development of a number of unique interpretive programs that appealed to visitors in other areas of the park. Among these were presentations on solar energy at the Hiouchi Ranger Station and composting at the Wolf Creek Outdoor School. Other interpretive programs developed in the 1980s and early 1990s included redwood ecology walks, a multiday backpacking trip and

field seminar along the coastal trail, kayaking as well as snorkeling on the Smith River, and a Redwood estuary walk that focused on the life cycle of salmonids.[199]

Public programs in surrounding communities and campfire talks in the state parks also presented information on topics that visitors might expect at any national park: coastal and marine environments, elk, bears, Native American lifeways, geology, and area history.[200] Although only 5 to 10 percent of all recreational visitors to RNP participated in some kind of ranger-led event in a given year, tourists and outside audiences were reached in other ways as well. From the exhibits and information provided in pamphlets, at waysides, and at the park's information centers, to off-site school programs, public service announcements, and collaborations with journalists and authors of popular works the essential themes of the *Redwood Renaissance* reached large numbers of people.[201]

### VISITOR USE

The broad and growing reach of RNP's interpretive programs was mirrored in visitor-use statistics. Between 1979 and 1988, recreational visits to Redwood National Park grew more than 60 percent, from 413,917 in the year after park expansion to 677,135 in the last year of the congressional reports. The nature of sampling and survey changed over the years, and these numbers cannot be pegged to a constant statistical base, but the upward trend was undeniable. Perhaps more significant in terms of the public's appreciation of the park and Redwood's effect on the local economy was the growth in overnight visitor stays. These increased more than three-fold and comprised some 25 percent of the total number of park visitors by the late 1980s. Most of these stayed in motels near the park or in state park campgrounds, but in-park stays also became possible in the backcountry along the Tall Trees Trail and, beginning in 1987, at the American Youth Hostels (AYH) facility in the old DeMartin farmhouse.[202]

According to surveys in 1979, 1987-1988, and 1993, the nature of park visitation remained steady throughout the 1980s. Some 60 percent of recreational use occurred during the summer season, with most visits occurring in July and August. Most visitors came with families (71 percent); 66 percent were first-time visitors; foreign tourists—mostly Canadian—comprised 15 percent of all visitors; and a substantial portion of the people visiting the park came from California (34 percent) and Oregon (8.5 percent). In descending order, the most visited sites in the park were Crescent Beach, Elk Prairie Parkway, Lady Bird Johnson Grove, Klamath Overlook, the coastal drive, and the Tall Trees Grove. Almost all visitors cited scenery and outdoor activities as the primary purpose of their visit, with walking or hiking, wildlife viewing, picnicking, and beachcombing as the most common pursuits.[203]

Besides a basic commitment to limit development of visitor facilities, as spelled-out in the *GMP*, two other factors restricted park planners: state park lands—which continued to attract the lion's share of visitors to the North Coast—were outside the purview of NPS planners; and most of the expansion area was essentially closed to visitors. Within these tight parameters, however, the effort to meet the expectations of national park visitors and surrounding community groups had some marked success. For instance, a 12-mile horse trail to the Tall Trees grove was jointly constructed by park crews and local equestrian enthusiasts in 1981. The trail attracted a good deal of local users, and also allowed for the development of a small horseback-riding concession. With the help of California Conservation Corps and Youth Conservation Corps work crews, the park also built the Coastal Trail. The project ultimately linked national park lands with Prairie Creek and Del Norte Redwoods state parks, and included two backcountry camping areas along the trail, one at Flint Ridge and the other at Nickel Creek. Along with the backcountry campground near the Tall Trees Grove, these presented visitors with an alternative to the more developed campsites in the state parks and provided the only established backpacking areas along the entire North Coast.[204]

By far the most significant development related to overnight visitor accommodation at RNP involved the conversion of the old DeMartin farmhouse into a hostel run by the Golden Gate Council of the AYH. Having recently worked with the NPS in repurposing a building at Fort Mason in the Golden Gate National Recreation Area, the council made a similar proposal for Redwood in 1981. The park agreed to "provide [the] house, water, sewer, roads, [parking areas], and maintain the exterior of the building," and helped secure $118,000 in grants and loans from the California Coastal Conservancy for modifying and updating the interior.[205] The project received a good deal of support both locally and statewide, and the hostel opened in June 1987. One of just a few hostels within the national park system, the Redwood National Park Hostel helped meet a need for overnight accommodations on national park lands while complying with the park's basic commitment to maintain and utilize existing structures as well as keep new development and construction to a minimum.

### OUTDOOR EDUCATION

Redwood also met the needs of local visitors and continued to build relations with surrounding communities through its commitment to environmental education. While outdoor school programs in other national parks had faded or fallen victim to budget cuts, the facilities at Wolf Creek and Howland Hill continued to attract growing numbers of students from Orick, Crescent City, and other communities along the North Coast. This was partly the result of the park's early participation in the environmental education movement, and the well-established presence it held within North Coast school districts. The persistence and growth of the two outdoor schools also reflected the importance that park administrators placed on cultivating good community relations—a commitment that found clearest expression in the energy and conviction of the staff and volunteers working in the Interpretation Division. Last, the outdoor school facilities directly served park needs—as a site for conducting workshops on watershed rehabilitation with personnel from other

agencies or parks, as a location for staff meetings, and as a housing and instruction area for Redwood's field seminars.[206]

Through the 1980s, Howland Hill and Wolf Creek experienced remarkable growth, both in terms of users and in the quality of the facilities. In 1980, Howland Hill and Wolf Creek Outdoor Schools hosted more than 1,400 students from forty-nine different classes. These numbers jumped considerably in 1981, when Howland Hill added a summer day-camp program: that year alone the camp had 2,535 day users and 969 participants in overnight programs; Wolf Creek accommodated a total of 2,000 day and overnight users, and the two facilities together hosted 5,504 children. Use of the two facilities continued to grow through the decade, reaching a high of around 8,500 user days per year by 1986. While most of the attendees were fifth and sixth graders from area schools, many of the weeklong campers came from further afield. The Outdoor School facilities also hosted adult groups that used the sites for teacher workshops as well as field seminars and natural resource management workshops.[207]

In 1981, when the Howland Hill Outdoor School began its summer day-camp programs, Redwood began to implement a plan for the long-term renovation and development of the site. Over the next several years, park maintenance staff worked in concert with the California Conservation Corps, the Youth Conservation Corps, and volunteers to fund and execute a series of projects that included construction of a water and sewer system, a kitchen and dining area, and new sleeping facilities that replaced five temporary A-frame structures built in 1979.[208] Redwood made an even fuller commitment to outdoor education in fall 1985, when park staff assumed responsibility for operating Wolf Creek Outdoor School. The original arrangement, in which the Humboldt County Department of Education operated the park-owned facility through a special-use permit, no longer seemed appropriate to park administrators and interpretive staff. "Groups using the outdoor school received minimal assistance and there was little interpretation of park values." With

the park taking direct responsibility for Wolf Creek, “park interpreters [could] properly orient each group and provide guidance to prevent bear incidents and misuse of the facility and the surrounding area.”[209]

The park’s management of Wolf Creek, and the long-range plan to upgrade the facility, received a significant boost in 1991 with a $120,000 grant from the Bach Foundation. Redwood soon embarked on a major improvement of the Wolf Creek Outdoor School facility that centered on construction of a new activity center/classroom building to replace older structures that had been moved to the site in the 1970s. Along with this new central building and the recently completed restroom-shower facility, RNP also committed to building two sleeping structures to augment the four that already existed at the site, thus allowing groups as large as sixty to stay overnight. When finally completed in 1995, the “modern, yet rustic, facility,” in Superintendent Ehorn words, was “essentially a facility reborn.”[210]

Another development that sought to improve the visitor experience, augment the park’s environmental education programs, and engage local communities began with the conversion of the superintendent’s residence at Crescent Beach into a new information center and small suite of offices. Work on the McNamara House—a craftsman-style farmhouse with sweeping views of the Pacific—commenced in fall 1990. By the following June, the house was formally reopened as the Crescent Beach Information Center (CBIC), which was intended to serve park visitors at the north end of the park and, in time, take the place of the visitor center at the park headquarters building in Crescent City.[211]

The upstairs offices for the North District ranger and interpreter were a welcome addition to the park’s efforts to address visitor needs more directly, but the information center did not meet expectations. The original plan was to develop the facility in conjunction with a campground and picnic area at Crescent Beach. Funding for the latter projects did not come through, however, and CBIC remained too out of the way and too far from other visitor activity areas to attract much use. Superintendent Ehorn still wanted to make the old

McNamara House augment the park's visitor-use programs, however, and its proximity to Crescent City had the potential to further improve community relations in Del Norte County. Toward these ends, the house was converted to the Crescent Beach Education Center in 1994. While it still contained park offices and a small library for staff use, the new center saw increased visitor use through scheduled public and school programs on the ecology and history of the area.[212]

### SETTLING ON A VISITOR INFORMATION CENTER

By far the most significant development in the effort to address visitor needs and interpret the park landscape came with the opening of the Redwood Information Center in June 1985. As park administrators had noted on many occasions through the 1970s, RNP sorely lacked a facility that fostered a coherent visitor experience. Park expansion did nothing to alter this condition. The addition of cutover lands and the emphasis on their rehabilitation did not invite visitor use to the new areas, nor did these new lands and projects fit within visitor expectations of how a national park looked and operated. Moreover, the longer the issue of state and national park integration remained unresolved the more permanently disjointed the park seemed.

In the development of Redwood's *GMP*, park planners sought to address these matters with a substantial visitor information center near the southern boundary of the park that would serve as a cornerstone of park interpretation and become the first "acceptable, effective facility for providing orientation/information/interpretation to northbound park visitors."[213] A southern location had a number of virtues: most visitors approached the park from the south; most national park lands—including the Lady Bird Johnson and the Tall Trees groves—were in the southern end of the park; and the Park Service had made a commitment to build facilities that would offset the loss of mill jobs, bolster a nascent tourism-based economy, and contribute to the transformation of Orick into a gateway community.

While it offered what seemed an obvious solution to these general concerns, the current Kuchel Visitor Center—on the old California Pacific Mill site near the mouth of Redwood Creek—was not even considered as a remote option in the 1980 *GMP*. It only became one when Cal-Pac chose to close the mill in 1980 rather than in 1994, as originally negotiated with the NPS, and after the collapse of the May Creek plan sent park planners scrambling for an alternative. On the one hand, while the Cal-Pac site was close to Orick and the park lands in the Redwood Creek basin, it did not have the same appeal as the May Creek location on the edge of an old-growth forest and a prairie favored by significant numbers of elk. On the other hand, it was very accessible to U.S. Highway 101, had no potential impact on wildlife, required no cutting or building around trees, and was already laid out for construction and parking. Developing the mill site, which had been in use for decades, also offered an opportunity to bring back—rather than build over—natural habitat through restoration of wetlands, dune environments, and coastal prairie. Perhaps most important of all, however, the Cal-Pac site was favored by Congressman Don Clausen, who made his preference—and his ability to secure any necessary approvals and funding—very clear to Superintendent Barbee.[214]

**Figure 6.6 California Pacific Mill at the mouth of Redwood Creek, photographed by Katie Boyle (1966).** Source: Boyle Photograph Collection, Humboldt State University Library, Special Collections.

Whatever its political, fiscal, or administrative virtues, the Redwood Information Center was not in the redwoods and so could not offer an on-site introduction to the primary natural feature that most attracted visitors to the park. Instead, the facility was located just off a major highway, in the midst of the same coastal scenery that northbound visitors had passed for several miles along U.S. Highway 101, and within sight of dairy lands and a bare river levee. For these reasons, the facility was primarily designed as an information and visitor orientation center rather than an "activity center"—as the *GMP* intended—where visitor information services would have been integrated with on-site learning, recreation, and relaxation.

Besides these shortcomings, when the $1.4 million, 4,300-square-foot facility was completed in 1985 it was a tremendous improvement over the old visitor contact station in Orick, and it was far more comprehensive than the visitor facilities at the Hiouchi Ranger

Station or the Crescent City headquarters building. Besides exhibits on the park, sales publications, shuttle-bus tickets to the Tall Trees, and information on the surrounding area, the facility also offered on-site interpretation of the estuary and dune environment. In its first season of operation, the Redwood Information Center helped increase overall visitor contacts within the park by 24 percent over the previous year. Besides providing more people with information on the park and surrounding communities, the information center also brought a welcome, albeit temporary, boost to the town of Orick through a contract with the Orick Community Services District to construct a waterline and storage tank for the facility that would tie into the municipal water system.[215]

### SEEKING A SOUTHERN GATEWAY

Because it was located outside the primary natural resource of the park, and away from immediate recreational and educational experiences, the new Redwood Information Center did not fully address the "disorientation" of travelers who were often unclear or unaware of "the existence of the national park."[216] To combat these shortcomings and help "visitors . . . realize that they are within the park" as they approached Orick from the south, park planners sought to develop the Freshwater Lagoon Spit area just south of the information center to create a well-defined and intensively utilized "southern gateway to Redwood National Park."[217] While the plan failed, the effort to create this southern gateway area provides an important window on a number of dynamics that shaped park administration through the 1980s and subsequent decades. Among these were the conflict between local concerns, established visitor uses, and long-term park objectives; the necessary involvement of multiple agencies; the broader challenges of the park's orientation along U.S. Highway 101; the peculiar nature of its administrative boundaries; and a willingness on the part of park staff to accept a certain level of noncompatible uses of NPS lands in order to achieve some functional resolution of these difficult issues.

The Freshwater Lagoon Spit is essentially a sandbar approximately 1.25 miles long that divides Freshwater Lagoon from the Pacific Ocean. In 1950, CalTrans stabilized the bar and routed U.S. Highway 101 along its length, which first opened the area to a motoring public. In anticipation of a major project to widen the highway to four lanes, CalTrans extended the west side of the road embankment in 1965, effectively creating a 65-foot-wide, one-mile-long camping and parking area with beachfront access. The area was already heavily used by the time the national park was established in 1968 and only grew in popularity in the 1970s. During the summer, as many as three hundred vehicles parked for the night on the Freshwater Lagoon Spit wayside, lined up two or three deep along the entire length. Although it was one of the most popular and heavily visited parts of the park—an estimated one-third of all visitors utilized the area at some time during their stay in Redwood—it was also the most dangerous and unsanitary area within the national park. "Random entrances from US 101 and exits from the congested road shoulder camping area present hazards to highway travelers as well as visitors parked on the spit. With only a few chemical toilets and garbage cans, the lack of sanitation facilities results in indiscriminate human waste disposal."[218]

**Figure 6.7 Freshwater Lagoon Spit looking south, ca. 1950s.** Image taken during the survey for the construction of a new freeway section for U.S. Highway 101 along this stretch in 1950. Source: California Department of Transportation.

**Figure 6.8 Campers along Freshwater Lagoon Spit, looking north, 1986.** Source: G. Donald Bain (photographer); Geo-Images Project, Department of Geography, University of California, Berkeley.

Although little about the Freshwater Lagoon Spit conformed with NPS use guidelines, park administrators were not intent on eliminating established visitor-use patterns. For starters, the Park Service did not actually manage or have outright jurisdiction over the area. Even though it lay within the park boundaries first established in 1968, CalTrans controlled the U.S. Highway 101 right-of-way from the lagoon to the mean high-tide line; the California Department of Fish and Game regulated fish-and-game codes; and the State Lands Commission administered all state lands including the lagoon. It was not until 1980, when Humboldt County transferred the fifty-acre Redwood Beach County Park just north of the spit, that the Park Service owned any of the lands or facilities used by visitors—yet even then the transfer of the county park lands came with a stipulation that they remain open for picnicking, beach access, and fishing. Besides these preexisting restrictions, park planners were aware that any project that seemed like a possible curtailment of established use patterns would create an enormous public backlash. Campers and visitors at Freshwater

Lagoon Spit contributed to the Orick business community, and many locals and repeat visitors felt a proprietary interest in the usage of this site that predated the park's establishment.

In an effort to bring order to a chaotic, unsanitary, and potentially dangerous situation, as well as to support local business concerns and established visitor-use patterns, the Park Service in cooperation with CalTrans embarked on a planning process in 1982 that could accommodate "the current level of use and . . . improve the visual dynamics of the area," "provide access to the beach and Freshwater Lagoon," "provide for uses that are compatible and complementary with those at the Redwood Information Center," and "reduce potential health hazards, . . . truck/automobile hazards," and "environmental impacts."[219] The resulting plan concentrated on "development along the northern half of the spit, providing facilities for day and overnight use and parking for 188 vehicles. A new activity site in the former county park area would include a comfort station, a telephone, exhibits, and a viewing structure for programs, information, and interpretation."[220]

As Superintendent Warnock reported in 1985, the plan received "a wide array of support from sectors of the local public that not long ago would have been unalterably negative—foremost toward the Service, and secondarily toward the issue, through association." Support for the park's effort to regulate and reconfigure the area partly stemmed from local exasperation with the area's popularity among homeless campers, who made up the bulk of long-term users during the off-season but contributed very little to the local economy. Efforts to regulate lengths of stay and to more directly bring the camping area under park supervision, thus found a welcome reception in Orick. Even beyond this issue, as Ehorn put it, "open and active channels of communication with various interest groups (both pro and con) brought the issue and solution to light in a balanced and even-handed manner." In sum, "the park's forthright approach to the problem has gained positive ground in community relations."[221]

Much to the chagrin of Warnock and park planners, the proposed visitor-use project at the Freshwater Lagoon Spit came to naught in 1985. The park was ultimately constrained by two insurmountable factors: reduced NPS budgets made effective development of the area unlikely; and the California Coastal Commission's prohibition against any project on Freshwater Spit that resulted in a net loss of existing natural landscape. The result was a "no action" decision and (except for improvements to existing sanitary facilities) a continuation of the area's unregulated use.[222] The planning and public review process may have been part of what Warnock called "a clear trendline toward a more balanced relationship with various public interest groups, local communities, and organizations related to recreation and tourism along California's north coast," but the result clearly diminished the potential of the Redwood Information Center.[223]

### PROPERTY ACQUISITION AND FUTURE DEVELOPMENT

The acquisition and use of the Cal-Pac Mill site may not have resulted in an ideal solution to the park's need for a primary visitor center, but it illustrates a signature feature of RNP's administration and subsequent development, particularly in relation to land acquisition. For the most part, any new acreage that came to the park in the post-expansion era was the result of opportunistic, or adaptive, management decisions. This was certainly true of the Cal-Pac Mill site, which came to the park fourteen years sooner than expected, and it was especially true of other properties not touched on in the expansion act that came to RNP during Bill Ehorn's tenure as superintendent.

One of the most significant additions to RNP came about in 1991 with the acquisition of the hundred-acre dairy farm north of Orick that belonged to Dick and Winnie Davison. Superintendent Ehorn viewed the property as a potential centerpiece of his effort to make Redwood into what Congress termed a "more meaningful park" (or, as he liked to put it, "The World's Greatest National Park"). For starters, the property was located within the Scenic

Corridor designated in the 1968 RNP Establishment Act, which authorized further land acquisitions to protect scenic values along U.S. Highway 101. When combined with the adjacent fifty-acre B Mill deck site the park hoped to acquire soon, the Davison property also had the potential to serve as the site for a park lodge, a new visitor center, a group campground, a horseback-riding concession, a Redwood Institute for public and academic learning, or some combination of these. In short, purchasing the Davison property could fulfill Ehorn's promise to develop "a greater level of services and facilities for visitors."[224]

Although Ehorn's vision for the property was clear, its acquisition was hardly a simple or direct process. Ehorn had made a concerted effort to develop good relations with locals around the south end of the park and had come to know the Davisons well. In the process, he had broached the idea of purchasing their property, and over time they had warmed to the idea, largely out of respect and good feelings for Ehorn. Yet none of this would have resulted in an actual purchase agreement except for Art Eck's ability to seek out and secure funding from outside the Park Service. To purchase the Davison property, Eck first turned to CalTrans, which had set aside money to mitigate against lost riparian habitat caused by the construction of the U.S. Highway 101 bypass. The Davison property had significant wetlands and some riparian habitat, and Eck made a successful proposal to CalTrans that resulted in $100,000 toward the purchase and restoration of these lands. Another $400,000 came from the Save-the-Redwoods League, and with these combined funds, the park acquired the Davison property and adjacent groves of old-growth redwoods. Three years later, again with financial support from the SRL, Ehorn successfully negotiated the purchase of the B-Mill deck site from Simpson Timber Company.[225]

A much larger but, in terms of Ehorn's concerns about improved visitor-use opportunities, less sought after addition involved the 2,300-acre Morgenroth-McKee property in the Coyote Creek drainage along the park's southeasternmost boundary. Essentially the portion of the old Lyon's Ranch that had not been included in the 1978 expansion, the

property was a substantial addition to the Bald Hills section of the park with its mixture of oak woodlands, upland prairies, and associated archeological sites. Made possible through a 1991 purchase by the Conservation Fund, which then subsequently donated the land to RNP, the property had the potential to become an extension of proposed visitor-use developments in the Bald Hills area, namely hiking trails, interpretation sites, and a primitive campground. Most of these were already proposed for areas near Dolason Prairie, however, and the Morgenroth-McKee acquisition was primarily valued as a site for correcting unmanaged sediment release into the Coyote Creek subbasin.

Another unplanned but initially unwelcomed addition came to the park late in Ehorn's tenure, when Humboldt County closed down the Prairie Creek Fish Hatchery near Orick. Comprising two small houses, a garage shop, a shed, and five water tanks built between 1936 and 1943, the hatchery produced silver and king salmon as well as cutthroat, rainbow, and steelhead trout for sport and commercial fishing. One of only three remaining California hatcheries built between 1871 and 1946, and the only county-run facility in the United States, the Prairie Creek hatchery proved too costly for the county to continue to maintain on its own after a statewide recession forced the California Department of Fish and Game (CDFG) to end its financial support. Despite its historical significance, as well as its location within the Scenic Corridor and proximity to the Davison Ranch, the Park Service had no interest in the facility due to a general policy against operating hatcheries in national parks. By year's end, the CDFG reclaimed the closed hatchery from the county and worked with the NPS toward an agreement to transfer the site to the park for operation as an interpretive facility on the life cycle and conservation of salmon and steelhead. The park acquired the property two years later and mothballed the site with the intention of converting it to a visitor-use facility when funding became available.[226]

If these three additions to the park share one common trait, it is that all resulted from opportunistic actions. The Davison property may have been desired and planned for, but it

was only acquired through what might be called “creative financing.” The addition of the Coyote Creek watershed property was certainly welcomed, but it came to the park largely through the efforts of others.[227] And the fish hatchery, which was not sought after at all, only became part of the park when acceptable terms were found. Given the relatively unplanned or adaptive manner in which these properties became part of the park, it is little wonder that none developed as initially expected.

Planning for the Davison property never panned out as Ehorn hoped, except in the ways that it met the original conditions of the CalTrans funding. The Coyote Creek watershed property, on the other hand, would become part of a new management plan for the Bald Hills that involved significant collaboration with the Yurok Tribe. And the fish hatchery, which did become moth-balled as planned, eventually attracted the interests of outside groups—namely the Yurok Tribe and a nonprofit watershed management organization—which sought an official presence within and partnership with RNP. Not all of these developments, which will be discussed more fully in the next chapter, could have been predicted in the early 1990s. How they unfolded tells a lot about the next era in park management, which was marked by increased involvement and collaboration with public agencies, private organizations, property owners, and tribes.

Each new collaborative effort stemmed from a long-standing, fundamental condition of the park; namely, the legacy of compromise and controversy that came with Redwood’s establishment and expansion, and the high degree of cooperation with outside interests that required from park managers. From the early 1990s forward, this basic legacy would be shaped by new environmental concerns and regulations, shifts in federal and state policy, the growing political strength of Indian tribes and organizations, and a collective sense among public lands managers, private property owners, community groups, environmentalists, and tribes along the North Coast that the region’s economic and ecological health depended on broad-based solutions to common issues that cut across

particular jurisdictions or ownerships. These developments, along with a general decline in park budgets, made partnering a key feature of Redwood's administration over the next decade. While this new trend could result in unexpected outcomes, as would occur with the properties acquired during Ehorn's tenure, it also provided many unforeseen opportunities. The necessity of collaboration and partnership was rarely easy, or even preferred, but it came to define the park's administration. And as had so often been the case with other definitive aspects of Redwood's history, the creative and adaptive approach that park staff brought to these new conditions would once again set important precedents within the National Park Service.

---

[1] An Act to Amend the Act of October 2, 1968, An Act to Establish a Redwood National Park in the State of California, and for other Purposes, Pub. L. No. 95-250; 16 U.S.C., 92 Stat 163-182, 95th Cong., S.1976 (March 27, 1978).
[2] Ibid.
[3] *The Redwood National Park Watershed Rehabilitation Program: A Progress Report and Plan for the Future* ([Crescent City, CA]: Redwood National Park, National Park Service, 1984), 3.
[4] Quotation from the title of following report to Congress: "Annual Report to Congress, Mandated by Section 102(a) of Pub. L. No. 95-250: Appropriate Federal Actions to Mitigate Economic Impacts Due to Expansion of Redwood National Park" (Department of the Interior, in consultation with Department of Agriculture, Department of Commerce, and Department of Labor), January 1, 1979.
[5] An Act to Amend the Act of October 2, 1968. Most of these efforts were oriented toward Humboldt County, where the expansion occurred.
[6] Robert Barbee, interview by author, April 28, 2008; and Douglas Warnock, interview by author, June 11, 2008. Stationed in Arcata, Associate Superintendent Lee Purkerson served as the "go-between" for the Department of Justice and local landowners—a role that gave him a close understanding of the issues involved; Lee Purkerson, conversation with James "Bow" O'Barr, March 6, 2009—noted in written comments on the draft of this administrative history for RNSP.
[7] Quotation is from Barry Mackintosh, *The National Parks: Shaping the System*, 3rd ed. (Washington, DC: National Park Service, Division of Publications, 2000), 68.
[8] Second Annual Report to the Congress on the Status of Implementation of the Redwood National Park Expansion Act of March 27, 1978 (Arcata: Redwood National Park, 1980), 4.
[9] Ibid.
[10] Ibid. Louisiana-Pacific removed 7,030 million board feet (MMBF) of downed timber, Simpson retrieved 300 MMBF, while Arcata did not remove any; two small landowners also filed permits to retrieve some downed timber.
[11] Ibid., 3. The Save-the-Redwoods League (SRL) also received $400,000 for lands the organization had already acquired for donation to the National Park Service (NPS).
[12] Kent W. Olson, Ronald L. Moomaw, and Richard P. Thompson, "Redwood National Park Expansion: Impact on Old Growth Redwood Stumpage Prices," *Land Economics* 64 (August 1988): 269-75.
[13] The two landowners were listed in NPS reports as Kahn and Francis. Francis settled for $48,875 in 1983, while Kahn, whose lands were affected by the still undetermined alignment of the U.S. Highway 101 bypass, did not settle until 1988. *Fifth Annual Report to the Congress on the Status of Implementation of the Redwood National Park Expansion Act of March 27*, *1978* (Arcata: Redwood National Park, 1983), 1; and *Tenth Annual Report to the Congress on the Status of Implementation of*

*the Redwood National Park Expansion Act of March 27*, *1978* (Crescent City, CA: Redwood National Park, 1988), 4.

[14] The clearest expression of this view came from the president of Simpson Timber Company during litigation over final payments for the land. See John L. Walker, "Tall Trees, People, and Politics: The Opportunity Costs of the Redwood National Park," *Contemporary Policy Issues* (March 1984): 22-29.

[15] Peter Berck and William R. Bentley, "Hotelling's Theory, Enhancement, and the Taking of the Redwood National Park." *American Journal of Agricultural Economics* 79 (May 1997): 287-98, and Peter Berck and William R. Bentley, "Comment and Reply—Hotelling's Theory, Enhancement, and the Taking of the Redwood National Park: An Addendum," *American Journal of Agricultural Economics* 81 (February 1999): 601.

[16] The cases were *Arcata Civil No*. *77-1196 TEH* and *Civil No*. *78-0879 TEH*; *Simpson Civil No*. *78-0868 TEH*; and *Louisiana-Pacific Civil No*. *78-0874 THE*.

[17] Economists sharply criticized Henderson's refusal to consider enhancement, and lambasted the final calculation of the Land Valuation Commission as double the actual value of the land and timber. See Olson, Moomaw, and Thompson, "Redwood National Park Expansion," 269-75. For final payouts, see "Company News; Louisiana-Pacific" *New York Times*, April 9, 1988 .

[18] Christopher E. DeForest, *Watershed Restoration*, *Jobs-in-the Woods*, *and Community Assistance: Redwood National Park and the Northwest Forest Plan*, Gen. Tech. Rep. PNW-GTR-449 (Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station), 10, http://www.treesearch.fs.fed.us/pubs/2991, (accessed December 2, 2006), 13.

[19] General Accounting Office report quoted in ibid. Not surprisingly, REPP generated a great deal of criticism. Although often mean-spirited in its depictions of lazy workers, a free-spending Congress, and obtuse environmentalists who loved to spend other people's taxes, such criticism was not entirely unfounded. The benefits provided to workers under REPP were generous and far exceeded any other federal employment assistance program. Eligible claimants who turned sixty on or before September 30, 1984, received a weekly benefit equal to 100 percent of previous earnings for eleven years, and younger workers received weekly benefits for up to seventy-two weeks depending on their length of employment in the affected industries. Lump-sum payments were also an option; though they did not always compensate for health and retirement benefits, they were especially attractive to those who chose to relocate and resume full employment elsewhere.

[20] Ibid., 13.

[21] G. Frank Williss, *"Do Things Right the First Time": The National Park Service and the Alaska National Interest Lands Conservation Act of 1980*, 2nd ed. (Anchorage: National Park Service, Alaska Regional Office, 2005), 162-67; and C. Brant Short, *Ronald Reagan and the Public Lands: America's Conservation Debate*, *1979-1984* (College Station: Texas A & M University Press, 1989).

[22] DeForest, *Watershed Restoration*, 6-8.

[23] John H. Grobey et al., *Redwood National Park Tourism Study: Economic Impacts of Alternative Park Development Plans* ([Arcata, CA]: Humboldt State University Foundation, 1979); and DeForest, *Watershed Restoration*, 10-11.

[24] *Tenth Annual Report to the Congress on the Status of Implementation of the Redwood National Park Expansion Act of March 27*, *1978* (Crescent City, CA: Redwood National Park, 1988), 51; and Barbee interview.

[25] Terry Spreiter, interview by Neil Surprenant and James O'Barr, July 26, 2004, digital recording, RNSP Archives.

[26] DeForest, *Watershed Restoration*, 8.

[27] For an overview of these matters, see Richard W. Haynes, *Emergent Lessons from a Century of Experience with Pacific Northwest Timber Markets* (Portland: OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, 2008); Dudley J. Burton, "The Decline of California's North Coast Redwood Region," *Policy Studies Journal* 10 (May 1981): 272-84; and Karen L. Waddell and Patricia M. Bassett, *Timber Resource Statistics for the North Coast Resource Area of California*, *1994* (Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, 1996), http://www.treesearch.fs.fed.us/pubs/5115 (accessed June 30, 2009).

[28] DeForest, *Watershed Restoration*, 8, 12-14.

[29] For a full accounting of these projects in Humboldt County, see Redwood Region Economic Development Commission, *An Economic Development Action Plan and Strategy for Humboldt County*,

*California* (Eureka, CA, 1978); Linda Kirkham and David W. Tannehill, *Status of the Humboldt County Economic Monitoring System Report: Prepared for the Redwood Region Economic Development Commission* (Eureka, CA,1979); and David W. Tannehill and Walter Kasun, *Status of the Humboldt County Economic Monitoring System Report Ii: Prepared for the Redwood Region Economic Development Commission* (Eureka: The Commission, 1980). For overviews of recent trends, see William Stewart, "The New Economies of the Redwood Region in the 21st Century," in *Proceedings of the Redwood Region Forest Science Symposium: What Does the Future Hold?* Gen. Tech. Rep. Psw-Gtr-194, ed. Richard B. Standiford, Gregory A. Giusti, Yana Valachovic, William J. Zielinski, and Michael J. Furniss (Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, 2007), 393-402, http://www.treesearch.fs.fed.us/pubs/28288 (accessed July 2, 2009); Waddell and Bassett, *Timber Resource Statistics for the North Coast Resource Area of California*, *1994*; and Wendy J. McGinnis, Richard H. Phillips, and Kent P. Connaughton, *County Portraits of Oregon and Northern California*, Gen. Tech. Rep. Pnw-Gtr-377 (Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, 1996), 244-49, http://www.fs.fed.us/pnw/publications/pnw_gtr377 (accessed July 1, 2009).

[30] DeForest, *Watershed Restoration*, 8, 13-14; Stewart, "New Economies of the Redwood Region in the 21st Century"; and McGinnis, Phillips, and Connaughton, *County Portraits of Oregon and Northern California*, 232-37.

[31] The California Department of Forestry was reorganized and renamed the California Department of Forestry and Fire Protection (CDF) in the early 1990s; see Mark V. Thonton's chapter "An Overview of CDF History" in Daniel G. Foster and Mark V. Thornton, *Management Plan for CDF's Historic Buildings and Archaeological Sites*, *CDF Archaeological Reports*, *Number 22* (Sacramento: State of California, Department of Forestry and Fire Protection, Archaeology Office, 2001), 8-15.

[32] Mary Ann Madej and Harvey Kelsey, eds., *Proceedings of a Workshop on Techniques of Rehabilitation and Erosion Control in Recently Roaded and Logged Watersheds*, *with Emphasis to North Coastal California* (Arcata: RM Division, Redwood National Park, 1978), Accession # REDW 00084, Catalog # REDW 27746, File 100, Agee Collection, RNSP Archives.

[33] Vicki Ozaki, interview by Neil Surprenant and James O'Barr [July 2004], digital recording, RNSP Archives; Spreiter interview; and *Redwood National Park Watershed Rehabilitation Program* (1984), 3-4. Spreiter quotation from Marie Gravelle, "Restoration Project Puts Ex-Loggers to Work Saving Trees," *Los Angeles Times*, June 13, 1993 .

[34] "The Redwood National Park Watershed Rehabilitation Program: A Progress Report and Plan for the Decade [Draft]," June 1990, unpaginated typescript; Madej and Kelsey, eds., "Proceedings of a Workshop"; and *Rehabilitation Plan*, *Redwood National Park*, October 1978, 13, General/Unsorted Files, Folder "Redwood National Park, 1976-1978," NPS-Pacific West Regional Office Archives, Oakland, California (hereafter PWRO Archives).

[35] *Redwood National Park Watershed Rehabilitation Program* (1984), 14-15.

[36] Ibid., 10-13.

[37] Ibid., 14.

[38] Ozaki, written comments on draft administrative history for RNSP.

[39] *Redwood National Park Watershed Rehabilitation Program* (1984), 3-4.

[40] In written comments on the final draft administrative history, Ozaki recalled that the Hydrology program described in a January 1980 Organization Chart was originally referred "as the Sediment Budget Project." As Ozaki also noted, the Hydrology Branch would later be designated Geomorphology. "After the Geology Branch and Geomorphology Branches merged, the group focused on hydrologic and channel monitoring as well as watershed-level studies."

[41] Redwood National Park Organization Charts and Role and Function Statements, January 1980, RNSP Archives. Cultural Resources Management, which will be discussed more fully in a later section, was also folded into the new Resources Management Division. Like other branches in this division, Cultural Resources staff—primarily through archeological surveys—was responsible for identifying, monitoring, and ensuring the protection of cultural resources in the midst of larger rehabilitation projects.

[42] Ibid.

[43] The new Southern Operating Center, which was occupied by Resources Management staff on the north end of Orick, included a rented house, known as the "White House," and the trailers that had been at the May Creek site.
[44] *Redwood National Park Watershed Rehabilitation Program* (1984), 5-7.
[45] Madej, written comments on the draft administrative history for RNSP. For an overview of geological science in the Park Service, see David B. Shaver and Jim F. Wood, "Geology in the National Park Service," *Geotimes* (April 2001): 14-19.
[46] National Park Service. *Watershed Rehabilitation Plan: Redwood National Park*, *California* ([Denver]: U.S. Department of the Interior, National Park Service, Denver Service Center, 1981), 9.
[47] Ibid., 44.
[48] Robert Belous, "A View from Redwood Creek: Learning by Doing," *Park Science* 4 (Winter 1984): 5; and *Redwood National Park Watershed Rehabilitation Program: A Progress Report and Plan for the Decade 1990-2000 (*[Crescent City, CA]: Redwood National Park, National Park Service, 1990), 4-14.
[49] Quotation from Madej, written comments on draft administrative history for RNSP.
[50] An Act to Amend the Act of October 2, 1968. Publications included Mike Coghlan and Madej, "Main Channel Response to Increased Sediment Supply, Upper Redwood Creek, California," *Transactions*, *American Geological Union (Abstracts)* 62, no. 45 (1981): 858; Harvey Kelsey, Mary Ann Madej, John Pitlick, Peter Stroud, and Mike Coghlan, "Major Sediment Sources and Limits to the Effectiveness of Erosion Control Techniques in the Highly Erodible Watersheds of North Coastal California," in *Proceedings of a Symposium on Erosion and Sediment Transport in Pacific Rim Steeplands*, *January 25-31*, *1981*, *Christchurch*, *New Zealand*, *IAHS-AISH Publication Number 132* (Washington, DC: International Association of Hydrological Sciences, 1981), 493-510; and Mary Ann Madej and Harvey Kelsey, "Sediment Routing in Stream Channels: Its Implications for Watershed Rehabilitation," in *Proceedings*, *Symposium on Watershed Rehabilitation in Redwood National Park and Other Coastal Areas*, *August 24-28*, *1981*, *Arcata*, *California* (Berkeley: Center for Natural Resource Studies of the John Muir Institute, 1984), 17-25. Park staff in Technical Services and Resources Management also produced a number of technical reports that were widely distributed to other federal and state land-use agencies. Among these were Harvey Kelsey and Peter Stroud, *Watershed Rehabilitation in the Airstrip Creek Basin*, *Redwood National Park Technical Report No*. *2* (Arcata: National Park Service, Redwood National Park, 1981); Esteban H. Muldavin, *Vegetation Succession in the First Ten Years Following Logging of Coast Redwood Forests*, *Redwood National Park Technical Report No*. *6* (Arcata: Redwood National Park, 1981); James M. Lenihan, *A Handbook for Classifying Early Post-Logging Vegetation in the Lower Redwood Creek Basin*, *Redwood National Park Technical Report No*. *7* (Arcata: Redwood National Park, 1982); Michael Coghlan, *A Climatologically-Based Analysis of the Storm and Flood History of Redwood Creek*, *Redwood National Park Technical Report No*. *10* (Arcata: Redwood National Park, Arcata Office, 1984); Jeff Purkerson, John A. Sacklin, and L. Lee Purkerson, *Temperature Dynamics*, *Oxygen Consumption*, *and Nitrogen Utilization in Static Pile Composting*, *Redwood National Park Technical Report No*. *14* (Arcata: Redwood National Park, Arcata Office, 1985); and Vicki L. Ozaki, *Geomorphic and Hydrologic Conditions for Cold Pool Formation on Redwood Creek*, *California*, *Redwood National Park Technical Report No*. *24* (Arcata: Redwood National Park, Arcata Office, 1988).
[51] Some of the technical reports in this vein include Harvey Kelsey, *Sediment Sources and Sediment Transport in the Redwood Creek Basin: A Progress Report*, *Redwood National Park Technical Report No*. *3* (Arcata: National Park Service, Redwood National Park, 1981); John Pitlick, *Sediment Routing in Tributaries of the Redwood Creek Basin: Northwestern California*, *Redwood National Park Technical Report No*. *8* (Arcata: Redwood National Park, 1982); Madej, *Recent Changes in Channel-Stored Sediment: Redwood Creek*, *California*, *Redwood National Park Technical Report No*. *11* (Arcata: Redwood National Park, 1984); Nick Varnum, *Channel Changes at Cross Sections in Redwood Creek*, *California*, *Redwood National Park Technical Report No*. *12* (Arcata: Redwood National Park, Arcata Office, 1984); Cynthia L. Ricks, *Flood History and Sedimentation at the Mouth of Redwood Creek*, *Humboldt County*, *California*, *Redwood National Park Technical Report No*. *15* (Arcata: Redwood National Park, Arcata Office, 1985); Nick Varnum and Vicki L.Ozaki, *Recent Channel Adjustments in Redwood Creek*, *California*, *Redwood National Park Technical Report No*. *18* (Arcata: Redwood National Park, Arcata Office, 1987); Sandi Potter, *Data Release: Redwood Creek Channel Cross Section Changes*, *1985-1986*, *Redwood National Park Technical Report No*. *22* (Arcata: Redwood

National Park, Arcata Office, 1987); and Randy D. Klein, *Stream Channel Adjustments Following Logging Road Removal in Redwood National Park*, *Redwood National Park Technical Report No*. *23* (Arcata: National Park Service, Redwood National Park, 1987). The sediment budget also proved critical for assessing, prescribing and monitoring improved timber harvest practices in the upper watershed.

[52] Madej quoted in Belous, "View from Redwood Creek," 4.

[53] Barbee's last official day at Redwood was January 8, 1983. His new position as superintendent of Yellowstone National Park began the next day. Warnock's new appointment at Redwood began on 6 March 1983. Lee Purkerson, who previously held the position of associate superintendent, became the division chief for Technical Services and also replaced Steve Veirs as the park's environmental scientist. Veirs left RNP to take a position with the National Park Service—Cooperative Park Studies Unit at the University of California, Davis.

[54] *Redwood National Park Watershed Rehabilitation Program* (1990), 13.

[55] Warnock quoted in Belous, "View from Redwood Creek," 6.

[56] William E. Weaver, *Evaluation of Experimental Rehabilitation Work*, *Redwood National Park*. *Redwood National Park Watershed Rehabilitation Technical Report*, *an Evaluation of Experimental Rehabilitation Work* (Arcata: National Park Service, Redwood National Park, 1987), 158.

[57] Weaver quoted in Belous, "View from Redwood Creek," 6.

[58] Weaver, *Evaluation of Experimental Rehabilitation Work*, 154.

[59] Ibid. Also see Madej et al., "Optimization Strategies for Sediment Reduction Practices on Roads in Steep, Forested Terrain," *Earth Surface Processes and Landforms* 31 (November 2006): 1643–56.

[60] *Watershed Rehabilitation Plan* (1981), 1.

[61] A. Starker Leopold et al, "Wildlife Management in the National Parks," in *Transactions of the Twenty-Eighth North American Wildlife and Natural Resources Conference*, ed. James B. Trerethen (Washington, DC: Wildlife Management Institute, 1963), 29.

[62] *Watershed Rehabilitation Plan* (1981), 1; and Spreiter interview.

[63] Spreiter interview; Madej, written notes on final draft Administrative History; and Spreiter, "Restoring Wildlands . . . A One-Time Opportunity," *Watershed Management Council Newsletter: Watershed Restoration* 4, no. 1 (Spring 1991), http://www.watershed.org/?q=node/102 (accessed May 8, 2010). For the subsequent discussion of this issue during the 1990s, see chapter 7.

[64] *Redwood National Park Watershed Rehabilitation Program* (1990), 4-14.

[65] These sentiments are are stated explicitly in L. Lee Purkerson, undated interview by Neil Surprenant and James O'Barr [Summer 2004], digital recording, RNSP Archives; Jean Rodeck (née Swearingen), interview by author, February 26, 2008; and Barbee interview.

[66] Warnock interview.

[67] *Redwood National Park Watershed Rehabilitation Program* (1990), 13-14.

[68] Although not documented in the historical record, staff at Redwood suspected that these sentiments were behind the $200,000 budget reduction; Terry Hofstra, interview by author, April 8, 2007. For general issues regarding the NPS budget at this time, see Short, *Ronald Reagan and the Public Lands*; and Deanne Kloepfer, Ronald J. Tipton, and Peter M Emerson *The Watt Record: James Watt and the National Park System* (Washington, DC: Wilderness Society, 2006).

[69] *Redwood National Park Watershed Rehabilitation Program* (1990), 13.

[70] *Seventh Annual Report to the Congress on the Status of Implementation of the Redwood National Park Expansion Act of March 27*, *1978* (Crescent City, CA: Redwood National Park, 1985), 14.

[71] An Act to Amend the Act of October 2, 1968. In many respects, the PPZ retained Burton's original idea of a 70,000-acre expansion that allowed some limited timber harvesting on the upstream portions of the enlarged park.

[72] Pub. L. No. 95-250, Senate Report No. 95-528 (Report to Accompany S. 1976), in House Committee on Interior and Insular Affairs, *Legislative History of the Redwood National Park Expansion Act of 1978* (Washington, DC: GPO, 1978), 227.

[73] *Seventh Annual Report*, 12.

[74] Stephanie Sabine Pincetl, "The Environmental Policies and Politics of the Brown Administration, 1975-1983" (PhD diss., University of California, Los Angeles, 1985), 124-27.

[75] *Seventh Annual Report*, 12; and *Redwood National Park Watershed Rehabilitation Program* (1984), 21, 24-25.
[76] *Redwood National Park Watershed Rehabilitation Program* (1984), 21. Also Bundros, comments on draft administrative history for RNSP. Depending on the year, THP reviews by RNP geologists led to the cancellation of 5 to 10 percent and the modification of another 15 to 25 percent of all harvest plans for the Redwood Creek basin from 1978 through 1982.
[77] *Sixth Annual Report to the Congress on the Status of Implementation of the Redwood National Park Expansion Act of March 27*, *1978* (Arcata: Redwood National Park, 1984), 11-12; and *Seventh Annual Report*, 12. The California Forest Improvement Program resulted from passage of the California Forest Improvement Act of 1978. For improving timber markets, see Brian J. Greber, K. Norman Johnson, and Gary Lettman, *Conservation Plans for the Northern Spotted Owl and Other Forest Management Proposals in Oregon: The Economics of Changing Timber Availability* (Corvallis, OR: Forest Research Laboratory, College of Forestry, Oregon State University, 1990); and "Forest Products Firms Expect Recovery to Continue," *Wall Street Journal*, May 9, 1983, 9.
[78] Stephen L. DeMaria, *The Legislative and Regulatory Environment for Forestry Enterprises in California*, *S.J. Hall Lectureship in Industrial Forestry* (Berkeley: University of California, Department of Forestry and Resource Management, College of Natural Resources, 1983).
[79] Figures from *Tenth Annual Report to the Congress on the Status of Implementation of the Redwood National Park Expansion Act of March 27*, *1978* (Crescent City, CA: Redwood National Park, 1988), 29.
[80] *Sixth Annual Report*, 11-12.
[81] *Redwood National Park Watershed Rehabilitation Program* (1990), 7.
[82] *Redwood National Park: Statement for Management; Revised February 1987* ([Crescent City, CA]: National Park Service, Redwood National Park, 1987), 39.
[83] Ibid.
[84] *Redwood National Park Watershed Rehabilitation Program* (1990), 12.
[85] Ibid.
[86] Ibid. Also, Redwood Creek Watershed Group, "The Redwood Creek Integrated Watershed Strategy," June 22, 2006, 21.
[87] Given the subbasin's significance and vulnerability, the Bureau of Land Management (BLM) subsequently designated its holdings as the Lacks Creek Area of Critical Environmental Concern (LCACEC). When the SRL negotiated the purchase of some 4,500 acres in the Lacks Creek drainage and donated it to the BLM in 2005, the LCACEC finally encompassed the entire subbasin except for one historic family-owned ranch in the upland prairies. See "Lacks Creek: A Key Connection," *Save-the-Redwoods League: Fall Bulletin* (2005), 3-4.
[88] "Redwood Creek Integrated Watershed Strategy," 47-54.
[89] An Act to Amend the Act of October 2, 1968.
[90] The progress of the U.S. Highway 101 bypass project is chronicled in the *Superintendent's Annual Reports* for 1984-1992, CF A2621, RNSP Archives.
[91] Ibid.
[92] Although never as expensive, significant, or contentious as the thirty-five-year battle over the routing of U.S. Highway 101 in northernmost Humboldt County, the matter of freeway alignment and widening through Del Norte Redwoods State Park would become an issue of some controversy and contention over the next decade. The focus was primarily on the stretch of U.S. Highway 101 near Cushing Creek, a few miles south of Crescent City. Because it was one of the deadliest stretches of highway in the state, CalTrans proposed widening and straightening the roadway. The original plan was budgeted at $35-40 million and would have entailed cutting down 202 old-growth redwoods and the engineering of complicated drainage systems. After strong criticism from the North Coast chapter of the Sierra Club, Redwood State and National Parks, and local environmental organizations, plans were significantly revised. The project, which broke ground in 1999 and was completed in 2004, ultimately required the removal of just two old-growth trees and cost less than half the original budget proposal. See "Road through Redwood Back to Drawing Board," *National Parks* 69 (May/June 1995): 13-14; and Sue Leskiw, "North Group Wins Award from CalTrans" *Redwood Needles* (December/January 2005),

http://redwood.sierraclub.org/articles/December_04/NorthGroupAward.html, (accessed September 9, 2009).

[93] *Coastal Zone '87: Proceedings of the Fifth Symposium on Coastal and Ocean Management, the Westin Hotel, Seattle, Washington, May 26-29*, ed. Orville T. Magoon, Hugh Converse, Dallas Miner, L. Thomas Tobin, Delores Clark, and George Domurat (New York: American Society of Civil Engineers, 1987), 812-25.

[94] U.S. Army Corps of Engineers, *Survey Report for Flood Control and Allied Purposes*, *Redwood Creek*, *Humboldt County*, *CA* (San Francisco: U.S. Army Corps of Engineers, 1961).

[95] Hofstra and Sacklin, "Restoring the Redwood Creek Estuary," 816-17.

[96] The concern about uncontrolled breaching and premature spawning runs is noted in Hofstra and Sacklin, "Restoring the Redwood Creek Estuary," 817. While no studies confirm a direct connection between manual breaching and inadequate stream conditions for spawning, it remains a matter of concern for fisheries biologists and regulatory agencies. See, for instance, Entrix, Inc., *Russian River Biological Assessment: Prepared for U.S. Army Corps of Engineers*, *San Francisco District*, *and Sonoma County Water Agency* (Walnut Creek, CA: Entrix, Inc., 2004), xlii-xliii, 1-27, 1-28, 2-24, 2-29, 3-60, 3-63.

[97] Hofstra interview, 2004.

[98] Hofstra and Sacklin, "Restoring the Redwood Creek Estuary," 822-23.

[99] Ibid.

[100] Greg Bundros, *Summary Report of Redwood National Park's Involvement to Contain Sediment Eroded from the U.S. Highway 101 Bypass Project Following the October 20*, *1989 Storm*, June 13, 1990, RNSP Archives Library. Also *Superintendent's Annual Report: Redwood National Park—1989*, 5, 11, CF A2621 "Reports and Related Correspondence: Superintendent's Annual Reports, 1988-1989, 1991-1994," RNSP Archives; and "Construction Runoff Hits Redwood Streams," *National Parks* 64, no. 5/6 (May/June 1990): 10.

[101] *Monitoring the Impacts and Persistence of Fine Sediment in the Prairie Creek Watershed 1989-1990* (Arcata: U.S. Department of the Interior, National Park Service, Redwood National Park, 1991); and Bundros, "Summary Report."

[102] H. H. Welsh, Jr., and L. M. Ollivier, "Stream Amphibians as Indicators of Ecosystem Stress: A Case Study from California's Redwoods," *Ecological Applications* 8 (November 1998): 1118-32.

[103] The mitigation and monitoring of the Bypass "Debacle" have made a long-term contribution to assessing stream health throughout the North Coast. The stream-gauging network that was established to help monitor the effects of the U.S. Highway 101 bypass construction are still operated by RNP today. This network provides a unique data set (turbidity and flow data) from the relatively pristine areas of the watershed on which to compare managed timberlands in the region.

[104] Staff meeting notes, February 8, 1980, General Files, A4031 "Other Field Offices," Folder 3, Redwood National and State Parks Archives, Orick, California (RNSP Archives).

[105] Ibid.

[106] Ibid.

[107] Ibid.

[108] For NPS budget restrictions during the Reagan era, see Michael Frome, *Regreening the National Parks* (Tucson: University of Arizona Press, 1991), 97-102. Also see C. Brant Short, *Ronald Reagan and the Public Lands: America's Conservation Debate*, *1979-1984* (College Station: Texas A & M University Press, 1989); and Deanne Kloepfer, Ronald J. Tipton, and Peter M. Emerson, *The Watt Record: James Watt and the National Park System* (Washington, DC: Wilderness Society, 2006).

[109] Kaaron Carver, "The Conflicting Visions and Versions of the Oral and Public History of Klamath" (master's thesis, California State University, Long Beach, 1994), 116-24.

[110] Terrence D. Hofstra, interview by Neil Surprenant and James O'Barr, April 28, 2004, digital recording, RNSP Archives.

[111] Staff meeting notes, February 8, 1980.

[112] Robert Belous, "A View from Redwood Creek: Learning by Doing," *Park Science* 4 (Winter 1984): 5; and "The Redwood National Park Watershed Rehabilitation Program: A Progress Report and Plan for the Decade [Draft]," Redwood National Park, June 1990, unpaginated typescript.

[113] *Superintendent's Annual Report: Redwood National Park—1989*, 1, CF A2621 "Reports and Related Correspondence: Superintendent's Annual Reports, 1988-1989, 1991-1994," RNSP Archives.
[114] Crime numbers—including vandalism, arson, theft, and other property crimes—are detailed in Superintendent's Annual Reports from 1980-1993. General NPS trends for park rangers involved in visitor protection is discussed in Dennis L. Soden and Worth H. Hester, "Law Enforcement in the National Park Service: The Ranger's Perspective," *Criminal Justice Review* 14 (Spring 1989): 63-73.
[115] Information for this and the following paragraph comes from Redwood National Park Organization Charts and Role and Function Statements, January 1980, RNSP Archives; staff meeting notes for February 8, May 13, 1980, and January 20, 1981, all in GF A4031, Folder 3, RNSP Archives; Superintendent's Annual Reports for 1980-1983; and *Redwood National Park: General Management Plan* ([Denver]: U.S. Department of the Interior, National Park Service, 1980), 15-22, 39-43, 55-61.
[116] Kenneth N. Boe, "Yurok Redwood Experimental Forest," unpublished historical sketch, 1983, http://www.fs.fed.us/psw/publications/4351/boe.pdf (accessed October 9, 2007); Pamela A. Conners, *A History of the Six Rivers National Forest: Commemorating the First 50 Years* (Eureka: U.S. Departmentof Agriculture, Forest Service, Pacific Southwest Region, 1998), 136-39; "Redwood Experimental Forest at Yurok", http://www.fs.fed.us/psw/programs/TimberManagement/yurok/, (accessed June 18, 2008); Redwood National and State Parks, *Redwood Maintenance Facility Relocation: Environmental Assessment and Initial Study/Mitigated Negative Declaration* (December 2004), http://www.nps.gov/redw/parkmgmt/upload/redw main fac relo ea.pdf (accessed June 18, 2008); and *Redwood National Park: General Management Plan*, 28-29.
[117] Art Eck recalled that $300,000 of the park's maintenance budget was devoted to keeping the Requa facility functioning (Arthur E. Eck, interview by author, June 26, 2008).
[118] These matters are detailed in the *Redwood Maintenance Facility Relocation Environmental Assessment*.
[119] Located at 219 Hilton Road, on the southern edge of Orick Valley, the "Ant Farm" comprised the main Antonioli house, a large warehouse, a sediment lab, a conference room, and a number of trailers that were added and replaced over the years.
[120] An RNP office was established in Arcata for several reasons. Most important, it was closer to the expansion area than the Crescent City Headquarters. It also put park staff in close proximity to the offices of U.S. Geological Survey staff, as well as academics at Humboldt State University. As the Rehabilitation Program grew rapidly, the facilities at the Jacoby Building proved inadequate and in 1983, RNP leased offices in the old Stewart School Building, which also housed other federal agencies including the U.S. Fish and Wildlife Service, Bureau of Land Management, and USGS. In 1999, following the completion of office buildings on Heindon Road in 1999, all of federal and state land-use agencies (except for the staff of RNSP), moved to the new facilities. RNP staff followed suit within the year. L. Lee Purkerson, undated interview by Surprenant and O'Barr [Summer 2004], digital recording, RNSP Archives; Robert Barbee, interview by author, April 28, 2008; Douglas E. Warnock, interview by author, June 23, 2008; Warnock interview, June 11, 2008; "Federal Building to Open," *North Coast Journal Weekly*, October 28 1999 ; and Redwood National Park Organization Charts and Role and Function Statements, January 1980, RNSP Archives.
[121] Redwood National Park Organization Charts and Role and Function Statements, January 1980; Barbee, interviews with author, April 28 and June 18, 2008; and Jean Rodeck (nee Swearingen), interview by author, February 26, 2008.
[122] Warnock interview.
[123] In commenting on the draft administrative history for RNSP, former RNP Superintendent William Ehorn noted that the position of RNP Superintendent was promoted to the level of GS-15 near the end of Barbee's tenure—both in recognition of his work at Redwood and for broader administrative reasons. When Barbee was transferred to Yellowstone, he thus held the higher grade that accompanied the new position, and when Douglas Warnock came to Redwood he retained the GS-15 grade that he held while serving as deputy director for the Alaska Region.
[124] Whalen, interview by author, June 21, 2006; Barbee interview, April 28, 2008; and Purkerson interview.
[125] Warnock interview.
[126] Staff meeting notes, December 13, 1978, CF A4031, 1978-1982, Folder 3, RNSP Archives; and Barbee interview, June 18, 2008. Barbee's first management assistant was Vince Hefti, who had come

to Redwood in the mid-1970s to serve as chief of Maintenance. Barbee designated Hefti as his first management assistant and let him finish out the last months of his NPS career at Redwood. Rather than forcing him to transfer briefly to another park, Barbee charged Hefti with taking care of RNP public relations matters. While Hefti was still on the payroll, Peart arrived at RNP in March 1979 through an appointment from the WRO as the regional director's field representative.

[127] Quotation from Barbee interview, June 18, 2008.

[128] Squad meeting minutes, June 20, 1979, CF A4031, Folder no. 1, RNSP Archives.

[129] Barbee interview, June 18, 2008. Barbee expressed frustration that no permanent place could be found for Peart.

[130] United Nations Environment Programme: World Conservation Monitoring Centre, Protected Areas and World Heritage, "Redwood National Park," July 1995, http://www.unep-wcmc.org/sites/wh/redwood.html ; United Nations Educational, Scientific and Cultural Organization (UNESCO) MAB Biosphere Reserves Directory, "California Coast Ranges," April 23, 2002, http://www.unesco.org/mabdb/br/brdir/directory/biores.asp?mode=all&code=USA+36 (both accessed May 5, 2008) . Established in 1970, the Man and the Biosphere Program was originally intended to recognize and promote conservation, research, and sustainable development within uniquely significifant environmental areas. The Man and the Biosphere Program has never offered substantive recommendations for the management of RNP or RNSP. Rather, it has periodically affirmed NPS management practices as appropriate contributions to the viability of the larger Biosphere Reserve.

[131] Rodeck (née Swearingen) interview, February 26, 2008.

[132] *Superintendent's Annual Report: Redwood National Park—1983*, 1, CF A2621, 1980-1986.

[133] *Superintendent's Annual Report: Redwood National Park—1986*, 1, CF A2621, 1980-1986.

[134] Warnock interview.

[135] John Cook, interview by Dan O'Neill and William Schneider in Vail, Colorado, October 8, 1991, transcript, *Yukon-Charley Rivers National Preserve Project Jukebox*, http://uaf-db.uaf.edu/jukebox/yuch/htm/jcook.htm ; Bob Belous, interview by Dan O'Neill and William Schneider in Vail, Colorado, October 8 and 9, 1991, transcript, *Yukon-Charley Rivers National Preserve Project Jukebox*, http://uaf-db.uaf.edu/jukebox/yuch/htm/bobbel.htm (both accessed June 16, 2008); and William E. Brown, "A Tribute to Bob Belous," *George Wright Forum* 18, no. 3 (2001): 3-6.

[136] Quotation is from Belous's description of the management assistant position in *Superintendent's Annual Report: Redwood National Park—1984*, 27, CF A2621, 1980-1986.

[137] The description of the assistant superintendent's position at Redwood comes from Warnock interview. Lee Purkerson recalled that, with the arrival of Warnock and Spalding at Redwood, he was designated for transfer back to Washington, DC, in part because of professional disagreements with NPS Senior Scientist Theodore Sudia, Purkerson declined the transfer and took a downgrade to serve as chief of Technical Services at Redwood. Purkerson (conversation with James O'Barr, March 6, 2009, noted in written comments on draft administrative history for RNSP).

[138] Squad meeting minutes, November 10, 1987, CF A4031, Folder no. 1, and squad meeting [minutes], March 15, 1988, CF A4031, Folder no. 2, RNSP Archives.

[139] Eck interview, June 26, 2008; and squad meeting [minutes], September 22, 1988, CF A4031, Folder no. 2, RNSP Archives.

[140] When Don Reeser left Redwood in March 1988 to become superintendent of Haleakala National Park, Bob Belous became the acting chief of Resources Management. At the time Eck applied for the position at Redwood, however, Belous was slated to become the special assistant to John Cook, who had been designated Southwest Regional Office director.

[141] "Superintendent's Orientation," Administrative Officer to Deputy Superintendent, memorandum, June 26, 1989, CF A2623 "Reports—Situation, 1988-1990," Box 181, RNSP Archives.

[142] *Annual Report—1989*, 1.

[143] Ibid., 2.

[144] Quotations are from *i*bid., 1. Reference to Eck as "supervisor" is in squad meeting [minutes], July 25, 1989, CF A4031, Folder no. 3, RNSP Archives. The positive local response to Ehorn's activities in

the south end of the park is noted in Edwin Keister, Jr., "A New Park Saved the Tall Trees, but at a High Cost to the Community," *Smithsonian* (October 1993): 42-54.

[145] Eck interview; and Hofstra interview by author, April 8, 2007.

[146] *Redwood National Park Resources Management Plan and Environmental Assessment* (revised April 1984), 52 B-C, RNSP Library; squad meeting [minutes], February 6, 20, and December 12, 1990, CF A4031, Folder no. 4, RNSP Archives; Hofstra interview by Surprenant and O'Barr; and *Superintendent's Annual Report: Redwood National Park—1988*, 22, 24, CF A2621, 1988-1989, 1991-1994, RNSP Archives.

[147] Terry Spreiter, interview by Surprenant and O'Barr, July 26, 2004, digital recording; Vicki L. Ozaki, interview by Surprenant and O'Barr [July 2004], digital recording; Greg Bundros, interview by Surprenant and O'Barr, July 20, 2004, digital recording, all on file at RNSP Archives; Purkerson interview; Hofstra interview by Surprenant and O'Barr; and Hofstra, interview by author, April 8, 2007. Also see *Resources Management Plan and Environmental Assessment* (February 1982) ([Arcata, CA]: Redwood National Park, 1982). Bob Barbee recalled the unorthodox nature of the watershed rehabilitation program, and its general isolation from park staff and visitors with a colorful anecdote about a contract crew that worked in the late 1970s and early 1980s. Made up of "Ho-Dads," as park personnel sometimes referred to the commune members who performed a good deal of the manual labor for Rehabilitation, these crews tended to work in various states of undress. At one time, Barbee had to warn one of their supervisors that she needed to wear a shirt whenever a special visitor or an NPS official was expected to be in the field (Barbee interview, April 28, 2008).

[148] Quotation is from Barbee interview, April 28, 2008.

[149] Ozaki interview.

[150] Eck interview.

[151] Madej, written notes on final draft administrative history.

[152] *The Redwood National Park Watershed Rehabilitation Program: A Progress Report and Plan for the Future* ([Crescent City, CA]: Redwood National Park, National Park Service, 1984), 55.

[153] "Operations Evaluation Report," May 27, 1986, enclosed in Regional Director Howard Chapman to Superintendent Warnock, memorandum, 30 May 1986, CF A2621, 1980-1986, RNSP Archives. The team consisted of James Mills, Patty Knadler, Dave Cherry, Phil Ward, Foon Lee, and Bruce Kilgore.

[154] All tenures noted in squad meeting [minutes], June 15, July 12, and October 25, 1988, CF A4031, Folder no. 2; and squad meeting [minutes], January 10, 31, March 28, June 13, 27, August 1, September 19, October 17, and November 14, 1988, CF A4031, Folder no. 3, all in RNSP Archives.

[155] The decision to redefine the Chief of Resources Management position was first announced at the squad meeting for January 8, 1990, CF A4031, Folder no. 3, RNSP Archives.

[156] The phase-out of the Arcata Office was announced at the squad meeting for November 2, 1989, CF A4031, Folder no. 3, RNSP Archives.

[157] Hofstra appointment and altered plans noted in *Superintendent's Annual Report: Redwood National Park—1991*, n.p., CF A2621, 1988-1989, 1991-1994, RNSP Archives. Quotation from Eck interview.

[158] *Superintendent's Annual Report: Redwood National Park—1988*, 1, CF A2621, 1988-1989, 1991-1994, RNSP Archives.

[159] Ibid.

[160] Throughout the 1980s, RNP staff presented professional papers at national and international conferences, collaborated with academics, worked with resource managers at other national parks and in different federal and state agencies, and authored more than one hundred articles and reports dealing with scientific and resources management issues at RNP. These accomplishments are reflected in *Bibliography of Redwood National Park Publications* (June 1989), RNSP Library. In 1992, Terry Sprieiter and RNP staff authored a preliminary manual on watershed rehabilitation that was issued for wide distribution beyond the park (*Watershed Restoration Manual: Redwood National Park* [Orick, CA: Redwood National Park, Watershed Restoration Program, 1992]). For a broader discussion of how the watershed restoration program at RNP influenced other projects, see Robert R. Ziemer, "Temporal and Spatial Scales," in *Watershed Restoration: Principles and Practices*, ed. J. E. Williams, C. A. Wood, and M. P. Dombeck (Bethesda, Md.: American Fisheries Society, 1997), 80-95; and Christopher E. DeForest, *Watershed Restoration*, *Jobs-in-the Woods*, *and Community Assistance: Redwood National Park and the Northwest Forest Plan*, Gen. Tech. Rep. PNW-GTR-449 (Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station), 10,

http://www.treesearch.fs.fed.us/pubs/2991, (accessed December 2, 2006). Also Eck interview; and Hofstra interview by author, April 8, 2007.

[161] Based on a quick analysis of publications related to redwood creek over the past two decades, it could be argued that more is known about salmonids in RNSP than about redwood trees.

[162] *Redwood National Park Watershed Rehabilitation Program* (1984), 14-15.

[163] Ibid., 30-35

[164] Richard West Sellars, *Preserving Nature in the National Parks: A History* (New Haven, CT: Yale University Press, 1997), 280.

[165] *Redwood National Park Watershed Rehabilitation Program* (1984), 36-37; "The Redwood National Park Watershed Rehabilitation Program: A Progress Report and Plan for the Decade [Draft]," Redwood National Park, June 1990, unpaginated typescript; and *Bear Management Plan and Environmental Assessment: Redwood National Park* (Crescent City, CA: U.S. Department of the Interior, National Park Service, Redwood National Park, 1986).

[166] "Watershed Rehabilitation Program: Progress Report and Plan for the Decade."

[167] Sellars, *Preserving Nature*, 262-71; and National Park Service, *State of the Parks—1980*, *A Report to the Congress* (Washington, DC: National Park Service, 1980), in Lary M. Dilsaver, ed., *America's National Park System: The Critical Documents* (Lanham, Md.: Rowman and Littlefield Publishers, 1994), http://www.nps.gov/history/history/online_books/anps/anps_7g.htm,(accessed July 6, 2008).

[168] "The Agreement on Biological Diversity:" Memorandum of Understanding, California's Coordinated Regional Strategy to Conserve Biological Diversity, September 19, 1991, http://biodiversity.ca.gov/Text/mou.html, (accessed July 8, 2008).

[169] *Superintendent's Annual Report: Redwood National Park—1992*, 25, CF A2621, 1988-1989, 1991-1994, RNSP Archives.

[170] *Superintendent's Annual Report: Redwood National Park—1989*, 3; *Superintendent's Annual Report: Redwood National Park—1991*, n.p.; *Annual Report—1992*, 3; *Superintendent's Annual Report: Redwood National Park—1994*, 39-40, all in CF A2621, 1988-1989, 1991-1994, RNSP Archives.

[171] Patti Bell, e-mail communication with the author, September 22, 2009.

[172] "Watershed Rehabilitation Program: Progress Report and Plan for the Decade."

[173] Ibid.

[174] Ibid; Ann King Smith to Assistant Superintendent, Redwood National Park, August 28,1985, RNSP, General Data, Pacific West Regional Office Archives, Oakland, California (hereafter PWRO Archives). Karin Anderson Grantham, current Cultural Resources program manager for RNSP, notes that many of Redwood's archeological resources have never received formal determinations of eligibility for listing on the National Register. This is evidenced by the fact that there are approximately 150 archeological sites known in RNSP today (2009) and only about 36 of these sites actually are listed on the NRHP—and 26 of those are in the Bald Hills District (Grantham, comments on draft administrative history for RNSP).

[175] "Operations Evaluation Report," May 1986.

[176] Park staff and temporary contractors completed 209 of these reports; 80 were completed in conjunction with staff from the Western Archaeological Conservation Center. See "Watershed Rehabilitation Program: Progress Report and Plan for the Decade."

[177] "Watershed Rehabilitation Program: Progress Report and Plan for the Decade." Much of this work was also conducted with the support of contracting archaeologists and NPS staff from the Western Archeological and Conservation Center, including contributions from Suzanne Baker, James Benson, John Hayes, James Roscoe, Sally Salzman, and Laura Soulliere,

[178] American Indian Religious Freedom Act of 1978, Pub. L. No. 95-341 (August 11, 1978) 92 Stat. 469, 95th Congress, Joint Resolution [S.J. Res. 102], 42 U.S.C. 1996; for a discussion of the act's importance, see Robert S. Michaelson, "The Significance of the American Indian Religious Freedom Act," *Journal of the American Academy of Religion* 52, no. 1 (March 1984): 93-115.

[179] Polly McW. Bickel to Roger Kelly, Western Regional Office, February 21, 1978; and Roger Kelly, Regional Archaeologist, to Regional Director, Western Region (and Enclosures), May 30, 1978, both in File "REDW: Native American Advisory Committee, 1978," PWRO Archives.

[180] Acting Director to All Regional Directors, February 6, 1978, File Code A5623 (560), PWRO Library.

[181] On the larger issue of the NPS and Native American exclusion, see Mark David Spence, *Dispossessing the Wilderness: Indian Removal and the Making of the National Parks* (New York: Oxford University Press, 1999). During the mid-1970s, as several American Indian tribes pushed for access to national park resources throughout the West, the response from the Park Service and its supporters was often angry and defensive. See, especially, a series of articles written by Thomas H. Watkins: "Ancient Wrongs and Public Rights," *Sierra Club Bulletin* 59 (September 1974): 15-16, 37-39; "Triple Jeopardy at Glacier National Park," *National Parks and Conservation Magazine* (September 1975): 20-22; and "Glacier: Beleaguered Park of 1975," *National Parks and Conservation Magazine* (November 1975): 4-10.
[182] "Scope of Work: Inventory of Traditional Cultural Locations within Redwood National Park," 29 March 1978, Archeology Records File "REDW, Native American Advisory Committee, 1978," PWRO Archives. Much of this work is presented in Polly Bickel, *Cultural Resources in Redwood National Park: Inventory Information and Recommendations* (Denver: U.S. Departmentof the Interior, National Park Service, Denver Service Center, 1978); and Polly Bickel, *A Study of Cultural Resources in Redwood National Park* (Denver: U.S. Departmentof the Interior, National Park Service, Denver Service Center, 1979).
[183] Sally S. Salzman and Polly McW. Bickel, *Archeological Survey in Rehabilitation Units in Redwood National Park*, *California* (Arcata: National Park Service, 1979).
[184] Polly McW. Quick, "Changing Roles for the Anthropologist: Current Work among Native Americans in North America"; expanded version of a paper entitled "Changing Roles for the Anthropologist: Current Studies of Native American Religious Issues," presented at the Annual Meeting of the American Anthropological Association (Washington, DC, December 3-7, 1982)"; Document No. ED249007, Education Information Resource Center, 1982, http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=ED249007&ERICExtSearch_SearchType_0=no&accno=ED249007 (accessed August 19, 2009).
[185] Polly McW. Bickel to Wilfred Logan, February 21, 1978, File: "REDW: GMP and Native Americans," PWRO Archives.
[186] "Review of Agency Policies and Procedures for their Impact on American Indians' Religious Freedoms," September 21, 1978, File: "REDW: Native American Advisory Committee, 1978," PWRO Archives.
[187] Bell e-mail correspondence.
[188] At the time of her appointment, Smith was known as Ann G. Smith. Bickel noted the preference of Native American representatives to have direct access to park staff in Bickel to Logan, February 21, 1978.
[189] Quotations are from the abstract for Ann King Smith, "Redwood National Park Consultations with Northwest California Indians," paper presented at the First Annual California Indian Conference: October 18-19, 1985, University of California, Berkeley 1985.
[190] On RNP as a model for Native American consultations during *General Management Plan* (*GMP*) planning processes in the NPS, see Acting Regional Director to Warnock, December 10, 1985, File: "Redwood National Park, 1986," PWRO Archives.
[191] Copies of correspondence and legal recommendations in regards to these matters are compiled in File: "REDW and Native Americans," PWRO Archives.
[192] The term comes from "Comments on the Draft Environmental Statement for the General Management Plan for Redwood National Park, December 1979," enclosure in Denis P. Galvin, Denver Service Center Manager, to Regional Director, Western Region, January 22, 1980, File: "Redwoods—Solicitors Review," PWRO Archives.
[193] Regional Archeologist to Associate Regional Director, Western Region Resource Management and Planning, Trip Report, "Redwood National Park, Sept. 18-19, 1989," File: "Redwood 1989 General File," PWRO Archives. David Sale, Sandra Davis, and Dr. Lynn Robbins, "Defining Common Ground: An Evaluation of Relationships and Cultural and Natural Resource Issues between Redwood National and State Parks and the Park-Associated American Indian Communities"; An Ethnographic Overview and Evaluation of American Indian Consultations for Redwood National and State Parks—Phase 2 Report (PMIS PROJECT NO. 5531), July 2005, 75, 87, 98. Lee Purkerson, conversation with James "Bow" O'Barr, 6 March 2009—noted in written comments on draft administrative history for RNSP.

[194] Smith, abstract for "Redwood National Park Consultations with Northwest California Indians." Similar sentiments were expressed five years later in "The Redwood National Park Watershed Rehabilitation Program: A Progress Report and Plan for the Decade [Draft]," (Redwood National Park, June 1990), unpaginated typescript.
[195] *Superintendent's Annual Report: Redwood National Park—1980*, 4-6, CF A2621 "Reports and Related Correspondence: Superintendent's Annual Reports, 1980-1986," RNSP Archives.
[196] "Redwood Renaissance: The Story of Stabilizing and Reforesting Logged-Over Lands in Redwood National Park," brochure, RNSP Archives.
[197] Rodeck (née Swearingen) interview.
[198] The Tall Trees shuttle bus averaged 7,000 passengers over its first three years. Numbers soon dropped to between 4,000 and 5,000 over the next few years, however, in part because park staff and the concessionaire decided to limit most trips to the busiest—and most profitable—times of the day. Because ridership continued to decrease in the late 1980s, in part the result of reduced public interest and problems with the concessionaire, the guaranteed service payment of $40,000 proved too onerous for the park's budget. Park staff and volunteers subsequently took over shuttle operation in 1989 and continued the service until disbanding it in fall 1992. By that time, private passenger vehicles had already been allowed on the road to the Tall Trees Grove for the past three years and—as a consequence of the just completed Dolason Prairie Trail—most of the passengers on the bus were hikers who only wanted to return to their cars at the trailhead and were generally too tired, and too briefly on the bus, to listen to a park interpreter. Ridership numbers for the shuttle bus are available in *Superintendent's Annual Report—1980*, 4; *Superintendent's Annual Report—1981*, 1; *Superintendent's Annual Report—1982*, 1; *Superintendent's Annual Report—1983*, 2; *Superintendent's Annual Report—1984*, 4; *Superintendent's Annual Report—1985*, 23; *Superintendent's Annual Report—1986*, 29. Also *Superintendent's Annual Report: Redwood National Park—1988*, 22; *Superintendent's Annual Report: Redwood National Park—1989*, 40; *Superintendent's Annual Report: Redwood National Park—1991*, 33; *Superintendent's Annual Report: Redwood National Park—1992*, 37-38, all in CF A2621, 1988-1989, 1991-1994, RNSP Archives. Along with ridership numbers for the year, the end of the shuttle program is noted in the *1992 Annual Report*. Shuttle bus concessions at other parks had largely ended by the early 1980s. Some were resurrected in the late 1990s, but none was as long-lasting or continuous as the Tall Trees shuttle. See Theodore Catton, "The Road Not Taken: Transportation Alternatives in National Park Planning in the 1970s"; paper presented at Designing the Parks, Charlottesville, VA, May 20-22, 2008, copy in author's possession.
[199] *Annual Statement for Interpretation* (Redwood National Park, 1993), 38-78.
[200] Roy L. Irving, "Preferences of State and National Park Visitors for Interpretive Methods: Implications" (M.A., Humboldt State University, 1986), 7-16.
[201] As with other aspects of park management, the most rapid growth in the park's interpretive program occurred in the early 1980s. The wayside exhibit program, which carried various elements of the "Redwood Renaissance" theme, progressed rapidly toward the eventual installation in 1982 of 42 exhibit panels at 33 different sites. Interpretation and visitor contact grew considerably in the early 1980s, and included the presentation of 418 different programs of 29 different types to 20,355 visitors. *Superintendent's Annual Report—1980*, 4-6; *Superintendent's Annual Report—1981*, 1-3; *Superintendent's Annual Report—1982*, 1-2; *Superintendent's Annual Report—1983*, 1-3; *Superintendent's Annual Report—1984*, 5-6; 1993 *Annual Statement for Interpretation*, 9-12. Some of the popular works that repeated RNP's interpretive themes include Jeremy Joan Hewes, *Redwoods: The World's Largest Trees* (New York: Rand McNally, 1981); Joseph E. Brown, *Monarchs of the Mist: The Story of Redwood National Park and the Coast Redwoods* (Point Reyes, CA: Coastal Parks Association, 1982); John B. Dewitt, *California Redwood Parks and Preserves: A Guide to the Redwood Parks and a Brief History of the Efforts to Save the Redwoods* (San Francisco: Save-the-Redwoods League, 1982); Sandra L. Keith, "Renewing Redwood Park," *American Forests* 89 (February 1983): 22-27; Harriett E. Weaver and David Swanlund, *Redwood Country: A Guide through California's Magnificent Redwood Forests* (San Francisco: Chronicle Books, 1983); John G. Mitchell, "Unfinished Redwood," *Audubon* 90, no. 4 (September 1988): 57-77; and Seth Zuckerman, "The Next Tallest Tree: Restoration in Redwood National Park," *Pacific Discovery* (Summer 1990): 23-29.

[202] *Redwood National Park: Statement for Management* (March 1992), 38-42; *1993 Annual Statement for Interpretation*, 30-30-35; Margaret Littlejohn, *Redwood National Park: Visitor Services Project*, Report 59 (Moscow, ID: Cooperative Park Studies Unit, University of Idaho, 1994); and "History of Total Annual Visits for Redwood National Park", http://www2.nature.nps.gov/NPstats/dspAnnualVisits.cfm, (accessed September 3, 2007).
[203] 1992 *Statement for Management*, 38-42; 1993 *Annual Statement for Interpretation*, 30-30-35; Littlejohn, *Visitor Services Project*; and "History of Total Annual Visits for Redwood National Park."
[204] Information on trails and campgrounds: *Superintendent's Annual Report—1982*, 20; and *Superintendent's Annual Report—1985*, 27. For backpacking interest, see James Morton Turner, "From Woodcraft to 'Leave No Trace': Wilderness, Consumerism, and Environmentalism in Twentieth-Century America" *Environmental History* 7 (July 2002): 462-84.
[205] *Superintendent's Annual Report—1986*, 30. Also see "Celebrating 20 Years: HI-Redwood National Park," in *Hostelling International USA*, *Golden Gate Council*, *Annual Report 2007*, 15, available, norcalhostels.org/files/annualreport07_web.pdf.
[206] *Superintendent's Annual Report—1980*, 4-6; *Superintendent's Annual Report—1981*, 1-2; *Superintendent's Annual Report—1982*, 1-2; *Superintendent's Annual Report—1983*, 2-3; *Superintendent's Annual Report—1984*, 5-6; *Superintendent's Annual Report—1985*, 23-25; and *Superintendent's Annual Report—1986*, 29-31. Also see Lynda Mealue, "25th Anniversary of Howland Hill Outdoor School," *Redwood Currents: Redwood National and State Parks Resource Management Newsletter* 18 (March-May 2004): 7-8; and "Howland Hill Outdoor School Education Guide," 5-6, http://www.nps.gov/redw/forteachers/howland-hill-outdoor-school.htm, (accessed December 6, 2007).
[207] *Superintendent's Annual Report—1980*, 4-6; *Superintendent's Annual Report—1981*, 1-2; *Superintendent's Annual Report—1982*, 1-2; *Superintendent's Annual Report—1983*, 2-3; *Superintendent's Annual Report—1984*, 5-6; *Superintendent's Annual Report—1985*, 23-25; *Superintendent's Annual Report—1986*, 29-31; *Superintendent's Annual Report—1988*, 22-23; *Superintendent's Annual Report—1989*, 140-41; *Superintendent's Annual Report—1991*, 33, 35; and *Superintendent's Annual Report—1992*, 4, 37-38.
[208] *Superintendent's Annual Report—1981*, 2; "Howland Hill Outdoor School Educators' Guide," http://www.nps.gov/redw/forteachers/howland-hill-outdoor-school.htm, (updated March 20, 2008).
[209] The decision to directly manage the Wolf Creek Outdoor School (WCOS) facility came after park staff had to euthanize a bear that kept frequenting the school. Prior to this incident, Resources Management staff expressed exasperation with the public schools staff and the failure to implement a manadatory bear-proofing program among the outdoor school users. As they saw it, the bear died because of poor management at WCOS. The matter was understood differently by the Humboldt County Office of Environmental Education, where long-term staff still resent the park's decision to take over management of WCOS. *Superintendent's Annual Report—1985*, 24-25; and "Watershed Rehabilitation Program: Progress Report and Plan for the Decade." Sentiments within the Humboldt County Office of Environmental Education noted by O'Barr in written comments on draft administrative history for RNSP.
[210] *Superintendent's Annual Report—1992*, 38.
[211] *Superintendent's Annual Report—1991*, 33-34.
[212] *Superintendent's Annual Report—1992*, 6-7.
[213] Quotation from "Design Analysis, Redwood Information Center, Package 206, Redwood National Park, California" (October 1982), 1, Interpretation Archives, J19, RNSP Archives.
[214] Barbee later joked that Clausen's desire to have the Redwood Information Center built on the Cal-Pac site did three things: railroaded the planning process through the normally very deliberative environmental impact study process; ensured that the facility was constructed in a timely manner; and, by placing the park's primary visitor site in a tsunami zone ironically undermined its long-term viability (Barbee interview, June 18, 2008).
[215] *Superintendent's Annual Report—1985*, 33.
[216] 1993 *Annual Statement for Interpretation*, 18.
[217] Quotations from "Development Concept Plan Environmental Assessment: Freshwater Lagoon Spit, Redwood National Park" (October 1984), 1.

[218] Ibid.
[219] Ibid., 5.
[220] *Environmental Assessment*, *Proposed Management Plan: Freshwater Lagoon Spit*, *Redwood National Park* (April 1990), 17, RNSP Library. The Park Service also entertained four other alternatives that accommodated as few as eighty and as many as three hundred vehicles—but all possessed similar commitments to the construction of comfort stations, an activity site, a boat launching area, and foot paths to the beach and Freshwater Lagoon.
[221] *Superintendent's Annual Report—1984*, 2.
[222] *Superintendent's Annual Report—1984*, 3, 27.
[223] 1984 *Report*, p. 1. In testimony before Congress in 1993, the history of local exasperation with homeless campers, and praise for a decade of park efforts to regulate camping along the Freshwater Spit, is clearly stated in an otherwise long critique of park efforts to manage the area; U.S. Congress, House Subcommittee on Procurement, Taxation, and Tourism, Subcommittee on Procurement, Taxation, and Tourism, *Unfair Competition from the Public Sector in the Tourism Industry and Tourism-Related Areas: Hearing before the Subcommittee on Procurement*, *Taxation*, *and Tourism of the Committee on Small Business*, *House of Representatives*, *One Hundred Third Congress*, *First Session* (Washington, DC: General Printing Office, 1993),164.
[224] *Superintendent's Annual Report—1991*, 8; Karen Jeffries, "U.S. Tests Support for Park Hotel," *Eureka Times-Standard*, January 17, 1993, 1, 12; and *Final Development Concept Plan Environmental Assessment: Davison Ranch*, *Redwood National and State Parks*, *Humboldt County*, *California* (Arcata: Redwood National Park, 1996). The term *recreation resource(s)* comes from *Superintendent's Annual Report—1991*.
[225] *Superintendent's Annual Report—1991*, 8; Jeffries, "U.S. Tests Support for Park Hotel," 1, 12; *Final Development Concept Plan Environmental Assessment for Davison Ranch*; and Ehorn, written comments on draft administrative history for RNSP.
[226] The final transfer to the NPS occurred through a two-step process: the California Department of Fish and Game transferred the hatchery to the California Department of Parks and Recreation, which then—through existing cooperative agreements with the NPS—transferred the facility to the NPS. *Superintendent's Annual Report—1992*, 3 and *Superintendent's Annual Report—1994*, 33; Earl Leitritz, *History of California's Fish Hatcheries 1870–1960* (Sacramento: State of California Department of Fish and Game, 1970), 67-68; and Michael Corbett and Denise Bradley, *Final Historic Resources Study Report for Prairie Creek Fish Hatchery*, *Redwood National and State Parks*, *Humboldt County*, *California* (Chico, CA: Mountain Anthropological Research, 1997), 5-8.
[227] Karin Anderson Grantham, Redwood's cultural resources program manager, notes that the Coyote Creek property "was not acquired for its historic values as known now with the information about the Lyons Ranch. In speaking with Ann King Smith once, she told me that the park didn't make the connection between all of the different barns and historic resources until sometime after the Coyote Creek acquisition" (comments on draft administrative history for RNSP).

# Part Four

## RECREATING REDWOOD THROUGH COOPERATIVE MANAGEMENT AND PARTNERSHIPS, 1994–2003

The superintendent's annual report for 1994 began with a dramatic observation: "Redwood National Park marked the year 1994 with a change likely matched only by its creation in 1968 and its expansion in 1978. This was the year when the Federal and State Redwood Parks initiated a cooperative management strategy to improve public service and enhance resource protection. The year also marked the close of the 25th Anniversary celebrations commemorating the 1968 establishment of the national park, a fitting complement to the new Federal-State relationship."[1] While equating the formation of Redwood National and State Parks with the long battles to establish and expand Redwood National Park may seem an exaggeration, Superintendent William "Bill" Ehorn's statement was essentially correct. Like the legislative acts that created and enlarged Redwood National Park (RNP), the cooperative agreement that created Redwood National and State Parks (RNSP) set an important new precedent in state and federal partnerships that would become more common throughout the Park Service in subsequent years.

Much as the establishment and expansion of RNP reflected broader national trends, so too did the formation of RNSP. The integration of National Park Service (NPS) and California Department of Parks and Recreation (CDPR) management came in the midst of the Clinton administration's much touted effort to "reinvent government" by reducing the size and reach of federal agencies, removing administrative overlaps, and encouraging federal-state and public-private partnerships. In terms of natural resource management, this would find expression in executive orders that mandated closer cooperation among public land-management agencies and Indian tribes, federal projects that contracted a growing number of operational activities to private companies, and regional approaches to public lands management that brokered compromises among state, federal, local, private, tribal, and

environmentalist interests. By making the federal government a partner rather than a lead agency or sole authority in the administration of public lands, Clinton expected agencies like the NPS to become leaner, more adaptive, and better able to address diverse and dynamic public interests.[2]

Within this broader trend, the move toward cooperative management at Redwood also reflected the basic limitations and impasses of the previous twenty-five years. Carved out of private property, fitted around three state parks, and vulnerable to upstream land uses, RNP often operated in a variously antagonistic and dependent relationship with external parties. The reality of this situation shaped, and undermined, the park's first Master Plan process, which necessarily emphasized cooperation with private landowners and regional economic interests. Expansion was supposed to address and correct the dependant position of the national park, but this expectation soon faded in light of the nonresolution of the state park issue and larger political shifts that eroded budgets and removed incentives for private landowners to cooperate with the NPS. The creation of RNSP solved some of these problems, and in doing so, it marked a renewed commitment for cooperative solutions. Much as park planners recognized in the early 1970s, Redwood could never reach its "full stature" except with "the cooperation of all the various and divergent interests operating in the redwoods."[3]

In the effort to integrate the state parks and national park, the NPS and CDPR wound up creating an important model for state and federal partnerships that would become more common in the field of resource management in later years. Within the parks themselves, issues concerning the new management regime were worked out in a comprehensive *General Management Plan/General Plan* (2000). The "joint plan" addressed a host of issues relating to resources management, visitor use, facilities development, and cooperative programs with private landowners, American Indian organizations, and other federal and state agencies, and ultimately set the parks' new course for the twenty-first century.

[1] *Superintendent's Annual Report: Redwood National Park—1994*, 1, CF A2621 "Reports and Related Correspondence: Superintendent's Annual Reports, 1988–1989, 1991–1994," RNSP Archives.

[2] The use of private contractors for a significant number of operational tasks within public agencies became a tenet of the federal government under President Ronald Reagan (1981–1989). While government contracting had become an important part of federal public works and military procurement contracts during the Eisenhower administration, and was first codified in 1966 with the Office of Management and Budget Circular A-76, a 1983 revision of the circular expanded the role of private contractors and consultants within several federal agencies. Reagan's Executive Order 12625, issued January 28, 1988, promoted further reliance on private contractors for government work, from janitorial and transportation services to a host of administrative support positions. Circular A-76 and Executive Order 12625 did not have a significant effect within the NPS, and the trend toward relying on private contractors diminished during George H. W. Bush's presidency (1989–1993). The circular was revised in the first months of President William Jefferson Clinton's first term, and by the mid-1990s, its effects were felt throughout the federal government—including the NPS. Nicholas Henry, "The Contracting Conundrum in the Unitied States: Or, Do We Really Understand Privatization," in *Privatization or Public Enterprise Reform?: International Case Studies with Implications for Public Management*, ed. Ali Farazmand (Westport, CT: Greenwood Press, 2001), 95-126.

[3] Quotation is from "Prologue," *Master Plan: Redwood National Park*, *California* (Denver: U.S. Departmentof the Interior, National Park Service, Denver Service Center, 1973). The same wording was used in the "Prologue," *Redwood National Park Master Plan (Preliminary Working Draft)*, (August 1971).

# Chapter Seven

## A Return to Founding Principles:

## Old Promises and New Prospects, 1994–2003

### Creating Redwood National and State Parks

The legislation that established Redwood National Park (RNP) in October 1968 came with the expectation that Jedediah Smith Redwoods, Del Norte Coast Redwoods, and Prairie Creek Redwoods state parks would all become part of a single National Park Service (NPS) unit. No particular agreement to this effect had been worked out prior to passage of the Redwood National Park Act, in part because the reticence of California state officials could not be overcome in time to have the bill signed into law by the November elections. The issue stagnated for the next ten years, which presented significant challenges to the planning and management of the peculiarly shaped national park. To help rectify the situation, Congress gave new emphasis to the transfer of state park lands to NPS management in the Redwood National Park Expansion Act of 1978. With congressional guarantees of federal employment for affected state park employees and a carefully negotiated five-year "lease agreement" whereby the Park Service would manage but not technically own the three state parks, the transfer almost became reality until Director Whalen killed the deal with his surprise announcement in June 1979.

In the years following Whalen's decision, efforts to revive the issue remained largely dormant. The matter received some high-level attention in the late 1980s when William Penn Mott, Jr., who had vehemently opposed state park transfers in the 1970s when he was director of the California Department of Parks and Recreation (CDPR), became an advocate for federal management of the state parks during his tenure as NPS director. However, it was not until Superintendent William "Bill" Ehorn made the issue central to his vision of

making Redwood into “a park of true national stature” that the subject of park integration once again received wide attention.[1] As Ehorn complained, multiple parks and jurisdictions created a litany of problems: “frequent confusion [among visitors] about which park is where, what rules are in effect, and fees charged in the state parks. Common planning for visitor facilities is made difficult, and the development of Redwood National Park has lagged because of uncertainty as to whether it should duplicate state park facilities. Duplication of staffing for such inescapable functions as administration and maintenance mean poor use of tax dollars.”[2] This last point had special significance for Douglas P. Wheeler, secretary of the California Resources Agency (CRA); as the state dipped into recession and tax revenues fell markedly, reducing park operations became a high priority. Given these circumstances and Ehorn’s insistent concerns, the basic issues of the original unsigned 1979 agreement were suddenly back on the table.[3]

Following the 1990 election of Governor Pete Wilson, and his subsequent appointment of Secretary Wheeler the following January, efforts to resolve the long neglected subject of park consolidation began in earnest. Federal and state officials were confident the resolution of the matter was largely a bureaucratic, interagency affair that could be handled through high-level negotiations. It certainly helped that Wheeler was deeply familiar with NPS policies in such matters, having spent seven years (1969–1976) in the U.S. Department of the Interior as assistant legislative counsel and deputy assistant secretary for Fish and Wildlife and Parks. The first official meeting on the state parks issue occurred in August 1991 at the Governor’s Conference Room in the state capitol, and included NPS director James Ridenour, NPS Western Regional director Stanley T. Albright, Superintendent Ehorn, Secretary Wheeler, and CRA undersecretary Michael Mantell. As Ehorn recalled, the state proved “willing to go along with” the parks transfer, but in the course of the meeting Wheeler also expressed the idea that “NPS [would] pay a fee to the state for the state parks.” While this condition by itself did not derail a possible parks transfer, it was a surprise to NPS

officials that necessitated further thought and discussion before any clear commitments could be made. The ensuing delay, however brief it may have been, ultimately allowed the development of a much stronger challenge to Ehorn's vision.[4]

The private meeting in Sacramento soon became public knowledge, and was quickly construed by some employees in the state parks system as a secret compact to "give away" the three redwood parks to the NPS. This reaction to the meeting in Sacramento proved far more dramatic and controversial than Ehorn, Wheeler, or any of the other attendees could have imagined—and soon produced a series of heated statements from state park employees and their supporters along the North Coast. In late October 1991, the North Coast Interpretive Association, which represented park staff in the Klamath District State Parks, published a newsletter with a banner headline: "Old Growth Redwood Parks in Jeopardy!" Petitions circulated around state park visitor centers and state park employees gave out buttons bearing a circle and slash across the NPS arrowhead and bison logo with the word "takeover." Bumper stickers reading "Say No to the Buffalo" also became popular around North Coast communities, and letter writers to local papers filled the editorial pages with complaints against the proposal.[5]

**Figure 7.1 Button protesting transfer of North Coast Redwood State Parks to National Park Service Administration, ca. 1993.** Source: RNSP Archives.

The issues ranged from concerns about losing the “crown jewels” of the state park system to a sense that NPS regulations would be more restrictive than state park rules regarding issues like beach access, camping, driftwood gathering, and beach fires. Some even argued that federal management might lead to wholesale development of park lands along the lines of Yosemite Valley, which the state once managed but ceded back to the federal government in 1905 for inclusion in a much larger Yosemite National Park. This argument echoed the old SRL case against a redwood national park in the 1930s, which used the development of Yosemite Valley as its prime example of federal management gone

wrong, but it also reflected a few new concerns about a possible lodge, horseback-riding center, and other tourist facilities at the Davison and B-Mill deck properties.[6]

Public supporters of park integration essentially represented two points of view that both mirrored and contradicted the “Say No to the Buffalo” camp. Local chambers of commerce and other economic development organizations—which represented the same interests that once so passionately opposed the establishment and expansion of Redwood National Park (partly on the grounds that the state parks were well run and already protected sufficient acreage)—strongly supported the transfer of state parks management to the Park Service. Their belief that a “complete national park” would increase “national recognition” and make Redwood “a major destination point” was rooted in the long-held expectation that the national park would become a major tourist destination. National conservation groups also strongly supported unified NPS management of the redwood parks, but for different reasons. Groups like the Sierra Club, Audubon Society, and the National Parks and Conservation Association had a historical commitment to the establishment and expansion of Redwood National Park, which expressly called for the integration of the state parks into the national park’s administrative structure. Given the uncertainty of state budgets in the early 1990s, they further reasoned federal resources would better guarantee long-term protection and management of all of the parks’ resources.[7]

The real issue, as former Deputy Superintendent Art Eck recalled, had little to do with any of these matters. From the beginning of talks about park integration, salaries and seniority proved the most critical concerns for CDPR officials. State park staff worried that, once they became part of the NPS, they would lose the higher salaries and better benefits they enjoyed as California state employees. These concerns could and would be addressed, but the initial fears they engendered were difficult to overcome. More significant, and much harder to resolve, was the matter of institutional seniority. Within the state park system, the three northern redwood parks represented the pinnacle of professional advancement.

Despite clear guarantees on the part of the NPS to match all state salaries and benefits, and to grandfather in certain state park policies, these would never be enough since the loss of the three North Coast parks would decapitate the entire system of promotion and advancement within CDPR.[8]

In an effort to calm the situation and find some resolution, the newly appointed State Parks director Don Murphy—who opposed a state parks transfer—and NPS Western Regional director Albright authorized the formation of a ten-member California Coordinating Committee on Operational Efficiencies to "explore [the] potential joint operational improvements and cost savings that might be achieved between [the] adjacent state and national park units.[9] Besides the redwood parks along the North Coast, the committee also studied parallel situations in the San Francisco Bay Area and Southern California involving the Golden Gate and Santa Monica Mountains national recreation areas. Although forewarned, the committee soon learned during its site visit to the North Coast that the issues at Redwood were more pressing, more complex, and far more intractable than the situations in the Bay Area and Los Angeles County.[10]

Superintendent Ehorn and California's North Coast Redwoods District superintendent William Beat made passionate but opposing arguments for the disposition of the state parks issue during the committee's site visit. Both sides of the argument were compelling, but committee members, who had been selected by Ehorn, Beat, and others in large part because they had no preconceived ideas about the park issues, worked to maintain studied neutrality. By the time they finished their final site visit in the Malibu area, however, they had already committed themselves to a "third path." For each situation, the committee concluded that shared park operations, using the collective resources of both agencies, would offer greater advantages than any other option, including unified management by a single agency. In the particular case of the redwood parks, the committee recommended that "given the threats to park resources, two major park agencies operating

side by side have a larger, more effective voice in coping with the threats with their combined staff expertise and support bases. Similarly, federal and state budgets can fluctuate at different points in time. Some years, the federal funding will be healthier; while other years, state funding may be better. . . . A financial reality is that park resources and visitor experiences will be best served by the most cost effective use of both NPS and CDPR [resources and] budgets."[11]

The committee's decision was a blow to Ehorn's vision, in which park consolidation was the cornerstone of larger projects that included development of a park lodge, a new visitor center, land acquisition, and a host of other developments that could instruct and accommodate visitors as well as continue the park's commitment to natural resource protection. Even though none of these proposed developments were anywhere close to implementation, and most would have been challenged by new environmental concerns and regulations that will be discussed later, the failure to bring the state parks under NPS management would prove the greatest setback to Ehorn's original goals for Redwood. Yet the committee's decision was not so much a defeat as a change of course, and Ehorn quickly embraced the new reality of cooperative management.[12]

When it became clear that a new cooperative management agreement between NPS and CDPR was the only path to take, Ehorn and Deputy Superintendent Eck worked hard to make the arrangement an effective reality. Ehorn recalled coming up with the proposal for two partnered superintendents, one from NPS and one from CDPR, to coadminister the parks complex. Eck's legislative background and precise eye for detail proved especially helpful in crafting a formalized cooperative management agreement that would allow all of the parks within the congressionally authorized boundaries of RNP to operate under specific and unified management. His efforts shaped the committee's *Public Review Draft Report* issued in January 1994, which called for an operational memorandum of understanding

(MOU) between the CDPR and NPS and recommended that the federal and state park lands be known collectively as the Redwood National and State Parks.[13]

The *Draft Report* was submitted to public hearings held in Arcata, Orick, and Crescent City in early February 1994. Representatives from national environmental organizations expressed a preference for a merging of the parks into a single national park, while community leaders—who simply wanted to see the long-standing issue settled once and for all—tended to favor the committee's recommendations. There were no acrimonious disagreements, however, and the movement to consolidate park management encountered no real opposition.[14]

As the public hearings were underway, an "all-employees meeting" of state and national parks employees was also held to give a full briefing on the draft plan. Afterwards, representatives from both agencies started meeting on a regular basis to work out the details of implementing the likely adoption of the committee's final recommendations.[15] The *Final Report of the California Coordinating Committee on Operational Efficiencies* was issued in March, with a deadline of August 1 for signing a "Memorandum of Understanding by and between the California Department of Parks and Recreation and National Park Service Regarding Increased Coordination and Efficiencies." Both the NPS and the CDPR proved ready and eager to implement its provisions; Regional Director Albright signed on almost immediately after the report was issued, and Director Murphy followed suit just a few weeks later.[16]

In the effort to create effective mechanisms for cooperative management, the committee concluded "that both agencies would benefit if agreements at the headquarters level were negotiated to enable and invigorate programmatic cooperation."[17] This proved one of the cornerstones of the final MOU and resulted in the establishment of a state park liaison superintendent, stationed at RNP headquarters in Crescent City, with direct line authority for the management of the three state parks.[18] Following the signing of the MOU

between the NPS and the CDPR, Ehorn and Beat signed a more specific agreement covering “visitor protection and public safety, public information, interpretation and publications, resource management, maintenance, design and construction, planning, signing, and the development of common policies.”[19] Ehorn and Beat also conducted joint interviews for the state park liaison position, which led to the hiring of career state park employee Richard “Rick” Sermon to fill the position in August 1994.[20]

The final result may not have followed anyone’s initial prescription, and it certainly did not reflect Ehorn’s original vision for RNP, but it was not a repudiation of any particular formulation of how the area should be managed. Instead, the creation of RNSP involved the active participation of all parties to move beyond a key matter of long-standing irresolution. In the process, they once again made Redwood into another important precedent within the NPS and for public lands management more generally—matters that received wide recognition and praise almost immediately.[21]

In 1995, the National Park Foundation awarded the National Park Partnership Leadership Award for Resource Stewardship and Preservation to the superintendents of RNSP “in recognition of their innovative partnership . . . in developing joint management strategies for the adjoining redwood parks along the North Coast.” Both Ehorn and Beat accepted the award at a special congressional awards presentation in Washington, DC, where NPS director Roger Kennedy proclaimed, "This partnership is not just a wave of the future; this is the way we'll be doing business from now on.” These sentiments were echoed at the ceremony by CDPR director Murphy, who considered RNSP a model for other land-management agencies across the United States.[22] In later years, RNSP would be widely cited as the precedent for other cooperative land-management arrangements involving NPS units, including the formation of the Lewis and Clark National Historical Parks in Oregon and Washington, the Desert Managers Group in California and Nevada, and the Rio Grande Partnership Team in Texas.[23]

### ADMINISTERING RNSP: IMPLEMENTING COOPERATIVE MANAGEMENT

It is one thing to become a path-breaking model for other endeavors, but it is something else to make the prototype function at all, let alone in an exemplary manner. Change necessarily brought unfamiliarity and discomfort, but these were eased by park managers who were expressly committed to making the new partnership work. When Bill Ehorn suddenly announced his retirement in fall 1994, the search for a new superintendent specifically targeted individuals with experience and openness to working in some form of cooperative management system. Rick Sermon had already been hired for the state superintendent position with these qualities in mind, and the same would be true of Ehorn's replacement—Andrew Ringgold—who came to Redwood from Cape Cod National Seashore. Both Sermon and Ringgold arrived at their new positions within a year of each other, and both men worked together at RNSP until they retired in 2003. Such longevity and personal familiarity went a long way toward fulfilling the possibilities of the MOU, as did their joint strategy to fill other management vacancies with people who were experienced with, or inclined to work in, a cooperative management structure.[24]

With the long overdue resolution of the federal-state parks impasse and a strong new commitment to cooperative management, the joint tenure of Ringgold and Sermon began with a number of accomplishments. Visitor Services and Interpretation provided the greatest potential overlap between NPS and CDPR staff, and it was in these areas where most of the new cooperative developments occurred. A "one-stop shopping" memorandum of understanding was signed by the NPS, CDPR, U.S. Forest Service (USFS), Redwood Natural History Association, and the Del Norte/Crescent City Chamber of Commerce for development of a joint welcome center in Crescent City, with NPS funds going toward a new entrance and upgrade of the facility to meet the Americans with Disabilities Act standards. State and national park ranger offices in the parks were integrated and given joint

responsibility for visitor services, resource protection, and law enforcement throughout the parks complex. An interpretive plan for the consolidated parks was completed, seasonal interpreters were jointly trained by both agencies, and a team of five RNSP interpreters drawn from NPS, CDPR, and volunteer staffs were based out of the Prairie Creek Visitor Center.[25]

Significant cooperation and integration also occurred in Resources Management and Science, though most of the work was conducted by NPS staff. The Ah Pah Road, which crossed both state and federal land, was removed and the area restored to the slope contours and vegetation patterns that existed prior to disturbance and converted to a trail. The resulting Ah Pah Trail not only created a new recreational opportunity but also served to showcase "total restoration techniques in an old growth setting." Another joint project involved the installation of a log revetment on a stretch of Prairie Creek to control erosion at the Elk Prairie Campground while a long-term solution was studied. Other research and planning was conducted for a cooperative prescribed burn of Elk Prairie, and studies were completed of coastal meadows on state and federal lands. NPS staff also began a road inventory on state park lands that was then rolled into the preexisting NPS rehabilitation schedule.[26]

In the first year of their joint tenure at RNSP, as initial cooperative endeavors took shape and matters relating to budgets, protocol, and areas of expertise were worked out, Ringgold and Sermon necessarily continued the top-down management approach that developed in the months following the signing of the NPS-CDPR memorandum of understanding. By early 1996, however, both agreed that cooperative management lacked sufficient "buy-in" from RNSP staff. Clarifying the "relationship between the three California State Parks and the National Park [seemed] a critical hurdle that [needed to] be handled in a priority manner" to sustain an effective interagency partnership. Toward these ends, three workshops were held for all RNSP employees in spring 1996 "to discuss and decide the path

of the partnership." An outside facilitator led a "teambuilding/visioning process" that ultimately produced the Partnership Vision of Redwood National and State Parks.[27]

The key statement of the Partnership Vision was simple and direct: "the common mission of RNSP [is] preserving and protecting the valuable resources of the parks and their associated values, and to preserve the ecological integrity of the entire RNSP."[28] The Partnership Vision expressed a collective purpose for all Redwood National and State Parks employees, but the statement was not as important as the process that led to its production. Because it had come from park staff, the common purpose defined in the Partnership Vision referenced a common experience that resulted in a collective agreement. As Ray Murray, the NPS liaison to the Committee on Operational Efficiencies, later recalled, "the respective management teams adopted a bottom-up process to get buy-in and ideas from the staff to make the partnership work. Counterpart staff developed lists of partnering opportunities and a joint annual work plan was adopted. . . . Ranger patrols, campground staffing, interpretation, resource management, and facility and roads and trails maintenance was closely coordinated."[29]

Much as the success of the unprecedented watershed restoration program benefited from the management styles of Bob Barbee and Lee Purkerson—who trusted the expertise and commitment of the staff they hired and allowed them ample opportunities to explore innovative methods for improving the environmental health of the Redwood Creek watershed—the successful integration of NPS and CDPR management cultures, strategies, and personnel was similarly fostered by the administrative philosophies of Sermon and Ringgold. "A positive partnership evolution depends heavily on the creativity and motivation of key staff," both men later wrote about their experience. "Partnerships ultimately succeed or fail because of the attitudes, energies, and relationships of individuals, not the organizational relationships." To facilitate this evolution, Ringgold and Sermon also recognized that "the management and administrative framework for the partnership must

provide sufficient flexibility and discretion to pursue various routes to success. Rigid guidelines and sideboards constrain creativity, experimentation, and adaptive management."[30]

Cultivating this partnership occurred with little change to the administrative organization of the state or federal parks, though Ringgold and Sermon agreed to gradually coordinate some positions through a process of attrition. Ringgold, with the advice of Art Eck (who became superintendent of Santa Monica Mountains NRA in 1995), also let the position of deputy superintendent lapse, both to keep the federal park unit under a more singular administrative authority and to better balance the partnership with Sermon. The malleable position of the RNP administrative assistant also underwent a change that better fit the new partnership, becoming the designated public relations and external affairs officer for both superintendents.[31] These steps actively fostered a common sense of mission in which all RNSP staff, as noted in Ringgold's 1999 NPS Superintendent of the Year Award for Natural Resource Stewardship, could contribute and act "as full partners in protecting all the resources of both the NPS and CDPR lands."[32]

Murray, who was an early advocate for the CDPR-NPS partnership, largely sees the program as a bona fide success. While the first year or two of the partnership was a period of "initial catharsis," this soon gave way to "a strong resolve to cooperate more closely and look out for each other's interest." Since then, RNSP has become "a showcase agency-to-agency partnership that has greater capacity to manage the park resources and serve and educate visitors." Besides general "cost savings and efficiencies" through "staff coordination, equipment and facilities," Murray notes that the two agencies also jointly prevented the wholesale widening of U.S. Highway 101 through Del Norte Redwoods State Park, something that might not have been possible if park management remained separate and uncoordinated.[33]

The partnership has also allowed RNSP to better weather the shifting nature of state and federal budgets; when funds from Sacramento declined, federal funding tended to pick up the slack, and vice versa. During the shutdown of the federal government in November and December 1995, for instance, "the State Park Superintendent [served as] acting Superintendent for the entire Redwood National and State Parks (RNSP) complex."[34] In these and other respects, cooperative management fulfilled the expectations of the Committee on Operation Efficiencies that two agencies could operate "side by side" and better protect their combined resources. Yet, as Murray concedes, the relationship between NPS and CDPR remained lopsided: "there has always been inequity between the NPS and the lower on-site staffing and budget profile of California State Parks (CSP). [For instance, the] attempt to fully integrate the two ranger staffs was only a partial success[; and when] NPS relocated to the new South Operation Center in Orick, CSP was unable to get funding to co-locate."[35]

**Figures 7.2 and 7.3 Redwood National and State Parks Logo and Entrance Sign.** Adopted in 1996, the official symbol for RNSP reflects a conscious decision to move away from traditional NPS and CDPR designs and create a unique graphic identity for the parks complex. Two side-by-side redwood trees are featured prominently, along with two smaller agency shields, to depict the collaborative partnership that administers RNSP.[36]

### THE *GENERAL MANAGEMENT PLAN/GENERAL PLAN*

In its *Final Report*, the California Coordinating Committee on Operational Efficiencies recommended the preparation of a new general management plan for the combined Redwood National and State Parks. The 1980 Redwood National Park *General Management Plan* (*GMP*) had already reached the end of its original ten- to fifteen-year life span, and the 1985 California State Redwoods Parks *General Plan*—which never considered any form of integration with the National Park Service—was suddenly obsolete. As the coordinating committee had noted, the new park configuration required a "blueprint for the future of the coordinated Redwood National and State Parks' operations."[37] The Western Regional Office concurred with the committee's recommendation and made a new *GMP* "the top priority for new starts at the Denver Service Center" in fiscal year 1995. Tight funding and the demands on regional staff that came with passage of the California Desert Protection Act in October 1994 pushed the start date back another year, but Redwood's *GMP* nevertheless remained a high priority within the NPS.[38]

The planning process, which integrated the requirements of a Park Service general management plan with those of a California Department of Parks and Recreation general plan, finally got underway in a series of scoping meetings throughout the North Coast in June 1996. For the most part, the concerns expressed in these public meetings and the corresponding four alternatives developed by park planners fell into a predictable pattern. On the one hand, many residents of nearby communities expressed their long-held concerns about insufficient development of visitor facilities and feared new restrictions on vehicle access to beaches and other customary uses of state park lands. On the other hand, environmental organizations sought to insure that the new *General Management Plan*/*General Plan* (*GMP*/*GP*) eschewed recreational concerns in favor of greater protection

for park resources. In addition to these two general concerns, the Yurok Tribe advocated for incorporating Native American concerns into the management of their aboriginal territory along with formal recognition of cultural use rights within RNSP.[39]

The four proposed alternatives in the draft *GMP*/*GP* reflected the broad concerns of these three basic constituencies. “Alternative 4—Visitor Use Emphasis,” promised the development of a “wide spectrum of appropriate visitor experiences” including more campgrounds, construction of a new visitor center, additions to existing visitor facilities, road improvements, and concerted efforts to foster tourist development in surrounding communities. Under this alternative, resource management would continue ongoing programs in watershed rehabilitation, second-growth forest management, and the like, but it would prioritize areas most used or enjoyed by visitors. In short, “implementing this alternative would result in the greatest beneficial regional economic impact.”[40]

Counterpoised with this proposal, “Alternative 3— Preservation Emphasis” limited “opportunities for public use and enjoyment . . . to experiences that are consistent with [a] high degree of emphasis on resource stewardship.” In order to more fully protect and rehabilitate park resources, any new visitor center would be located outside RNSP boundaries, vehicle access and circulation would be curtailed in some locations, campgrounds in sensitive areas would be removed or relocated, some equestrian and mountain-biking trails would be slated for removal or redesignation as hiking only, and the establishment of special state wilderness areas in the three state parks would further restrict permitted visitor activities.[41]

As required by the National Environmental Policy Act (NEPA), the draft *GMP*/*GP* also included a “no action” alternative. This option was not a serious consideration, however, since it would have failed to implement the coordinating committee’s recommendation to develop a “parkwide *GMP*” within five years that superseded the “near term planning strategies” developed in the immediate wake of the NPS-CDPR memorandum of

understanding. The “no action” option also would have failed to advance a statutory commitment to incorporate Yurok concerns into park planning and development. In fall 1993, the Yurok Tribe gained federal recognition and formed a duly constituted government. The following April, President Clinton signed a Memorandum for the Heads of Executive Departments and Agencies that directed the NPS and other federal agencies to operate “within a government-to-government relationship with Federally-recognized Native American Tribes.” Toward this end, RNSP and other parks were obligated to “consult, to the greatest extent practicable and to the extent permitted by law, with Tribal governments prior to taking actions that affect Federally recognized Tribal governments . . . ; assess the impact of Federal government plans, projects, programs, and activities on Tribal trust resources and assure that Tribal government rights and concerns are considered during the development of such plans, projects, programs and activities.”[42] These matters were formalized in June 1996 with an MOU between RNSP and the Yurok Tribe, which guided relations between the parties during the *GMP*/*GP* planning process.[43]

Nothing in either the Clinton MOU or the RNSP-Yurok MOU dictated the production of a new *GMP*/*GP*, nor did the MOU between the CDPR and the NPS require the joint plan to lead to any particular action. Yet all of these new formal relationships underscored the fundamental reasons why a new, comprehensive *GMP*/*GP* was necessary. In sum, the “no action” alternative operated as little more than an unacceptable baseline for highlighting the desired qualities of the other three alternatives.

Compelled by the necessity of a new plan and sensitive to the concerns of various interests, park planners advocated a compromise that was “intermediate between alternative 3 (which emphasizes resource preservation) and alternative 4 (which emphasizes visitor use).”[44] This compromise certainly fit within the basic framework of most NPS planning documents, in which one alternative emphasizes one option, another alternative emphasizes an opposite one, and the preferred alternative is somewhere in-between. But the options and

preferred alternatives also reflected basic historical realities at Redwood. While the NPS had an obligation to focus on preservation, particularly in light of the Redwood National Park Expansion Act's clarification of the 1916 Organic Act, RNP and the three state parks had also made a series of commitments to foster visitor use and recreation. This last item received special mention in the final report (1994) of the California Coordinating Committee on Operational Efficiencies, which called for "a targeted planning effort . . . for additional high quality recreational opportunities . . . [that] will help fulfill the promise of [RNSP] as a destination park."[45]

### DEFINING THE PARKS

Like other general planning documents in both the NPS and CDPR, the joint plan sought "to provide a comprehensive direction for resource preservation and visitor use and a basic foundation for decision making for the parks for the next 15 to 20 years."[46] Unlike most other plans, however, the first stated "focus of this joint plan [was] on why the parks were established." While this implied a subsequent focus on more typical questions about "what resource conditions and visitor experiences should be achieved and retained over time," the concern with why the parks were established reflected another fundamental purpose of the joint plan: namely, to articulate, codify, and enact the RNSP Partnership Vision that had been worked out at the beginning of the planning process.[47] Unlike the previous state and federal acts that created and enlarged the three state parks and RNP, the creation of RNSP was the product of an intergovernmental memorandum of understanding and not a particular piece of enabling legislation. While federal legislation in 1997 formalized the cooperative acquisition and exchange "of goods and services to be used by the [NPS] and the State of California," the *GMP*/*GP* still served as the primary means for defining the new administrative entity known as RNSP and setting the terms by which it would be managed.[48]

To clarify and direct the purposes of the parks, the *GMP*/*GP* established ten goals oriented around three main categories: resource protection and preservation; public enjoyment and visitor appreciation; and maintaining collaborative relationships with gateway communities and local American Indian tribes. Five of the goals fell within the purview of resource protection: restore or replicate "lands, ecosystems, and processes that have been altered by modern human activities"; foster "scientific study and research that promotes preservation, restoration, and understanding of the parks' resources, and provide[s] adequate scientific information to support management decisions about resources and visitor use; take "a leadership role in organizing a multijurisdictional, multidisciplinary approach to addressing the restoration of the Redwood Creek estuary at the mouth of the creek; manage second-growth forests "to accelerate the return of characteristics found in old-growth forests; and commit to the use of fire in places where it has been a part of a natural ecological process."[49]

The remaining four goals fell variously within the categories of public enjoyment and visitor appreciation as well as maintaining collaborative relationships with gateway communities and local American Indian tribes: engage in cooperative, joint efforts with "gateway communities . . . toward strengthening and developing facilities, services, and information delivery systems that facilitate public access to and appreciation of the resources and values of the parks and the surrounding region as well as enhance the economic well-being of local communities"; foster public understanding of the "the significance of American Indian cultures in the history of the region and their historic and contemporary ties to park lands"; maintain through "formal government-to-government relationships with local American Indian tribes . . . mutual interests in managing and protecting the lands, waters, and other resources within the parks"; and coordination with "local interests to achieve mutual strategies and objectives in the areas of public services and facilities, tourism, and the preservation of community values."[50]

While management of RNSP was based on a partnership of equals, federal funding and personnel far exceeded anything that came from the state of California. This was evident in the makeup of the ten-member core/project team for the joint plan. Besides Superintendent Sermon, only one other member came out of the CDPR System—James Trapani, landscape architect for the Northern Service Center. Excluding one consultant with experience working on NPS plans, all the rest were NPS employees. A similar ratio held among the twenty-three technical experts and consultants who worked at RNSP. This disparity certainly reflected the numbers of staff and the years of expertise the NPS had committed to the business of park planning, but it also stemmed from the nature of the different parks' histories. On the one hand, the state parks managers had long emphasized visitation and interpretation for day users, short-term campers, and locals—concerns that did not require a great deal of planning or permanent, full-time staffing. RNP, on the other hand, comprised a much larger staff and much larger budget that was primarily committed to an extensive and long-term program of resource protection and restoration.[51]

### COOPERATIVE MANAGEMENT: VISITOR USE AND INTERPRETATION

Given the ratio of NPS and CDPR planners, as well the historical missions and sizes of the two agencies in the Redwood parks, it is little wonder that most of the goals for the management of RNSP fell within the purview of the largest existing NPS programs. Visitor use and interpretation proved an important exception, however. The state parks had always been the primary destination of most visitors, and the CDPR investment in and development of its visitor programs predated the establishment of Redwood National Park by several decades. It was in this area of park management, especially, where most of the cooperation between NPS and CDPR was planned to occur. Because this was also the arena where the most variance existed among the four different planning alternatives in the draft *GMP*/*GP*, it also offers the clearest window on how cooperative management was intended to proceed into the twenty-first century.[52]

Under the broad category of visitor use and experience, the *GMP*/*GP* addressed four management strategies: education and interpretation; public use, recreation, and visitor safety; visitor access and circulation/roads; and interdependence of parks and communities. There were two common threads that ran through these strategies, and thus defined the larger approach to visitor use and experience in the proposed action alternative: a balance between resource protection and visitor access that strongly favored the former; and cooperation among RNSP managing agencies, American Indian groups, and local communities to develop visitor facilities *outside* the parks. For local and regional interests this represented a departure from some past pronouncements about the possibility of a lodge and new interpretive center in the park. For tourists it meant that current visitor facilities would not be significantly augmented or scaled back as in the other alternatives, but would be upgraded where necessary and integrated around common NPS-CDPR objectives.

With resource protection firmly established as the primary goal of the parks complex, the central purpose of interpretation was to communicate the significance of the resources and the measures taken for their protection and restoration. Doing so required a three-part commitment to education, facilities development, and on-site interpretation. The first would be accomplished through continuation of the two outdoor schools, leasing of those facilities in the off-season for conferences and educational programming by community groups, and expanding educational outreach programs to local schools and community programs. While these steps would seek to shape local and regional appreciation of the parks' purpose, effective in-park interpretation required improved facilities and visitor information sites. As the *GMP*/*GP* noted, "almost none of the interpretive facilities in the parks were designed or constructed to present in-depth interpretation of significant RNSP resources or allow for the expansion of visitor services."[53] As funding allowed, existing state and federal interpretive sites would be improved and cooperative agreements pursued with private entities to develop regional information centers and visitor facilities. On-site interpretation would also

shift to reflect the new administrative reality of the parks, augmenting state park interpretation to include material on the significance of watershed rehabilitation and Native American communities. National park interpreters also increased their repertoire to include state park resources and the history of efforts to protect North Coast redwoods, and all interpretation placed more emphasis on the parks' combined commitment to resource protection and restoration.[54]

The renewed and broadened emphasis on interpretation and education throughout RNSP was generally well accepted during the public comment process. As RNP officials learned in the early 1980s, however, public appreciation of these efforts did not necessarily change perceptions of the park and its purpose. As Superintendent Robert Barbee noted at the time, new interpretive programs at Freshwater Lagoon Spit that were designed to foster public appreciation for the special qualities that needed protection "were well received; however, visitors are interested in continuing their traditional unrestricted recreational use of that area."[55] This is a lesson that park officials would relearn at the same location, but one that would find a different resolution through the development and application of the new *GMP*/*GP*.

### RESOURCES AND VISITOR USE: FRESHWATER LAGOON SPIT AND WILDERNESS

One of the few contentious elements of the draft *GMP*/*GP* concerned the Freshwater Lagoon Spit Area, which received detailed treatment in the plan's section on Public Use, Recreation, and Visitor Safety. Long popular with visitors and long viewed as a critical resource for the town of Orick, anything the joint plan proposed in this area would face scrutiny and elicit criticism. Given the sensitive nature of the situation, the NPS-CDPR response ultimately serves as a touchstone for how the joint plan intended to resolve the competing demands of local interests, visitor use, and resource protection. Like the *GMP*/*GP* as a whole, the plan for Freshwater Lagoon Spit tried to accommodate and even integrate

incompatible uses while also providing a strong affirmation of the national park's long-standing emphasis on resource protection and rehabilitation.

As the joint plan described it, the problems with current visitor use at Freshwater Lagoon Spit were legion: "Overnight use results in sanitation and public safety problems, adversely affects resources, and detracts significantly from the otherwise outstanding visual qualities of the area. . . . [T]here are strong questions about whether the area is an appropriate site for a camping facility . . . given the fact that it is in a high-hazard tsunami zone [and] is perceived to provide inappropriate competition for nearby privately owned facilities and services."[56] The proposed solution was to ban camping and vehicle access to the beach, develop a clearly marked parking area with safe access to the highway, set up appropriate interpretive exhibits and rest-area facilities, and provide directed pathways to the beach. To help transition to the new order and give the private sector an opportunity to develop new camping facilities near the southern part of the parks complex, the joint plan called for a three-year phase out of camping along the spit, which even then would be limited to specific areas and include an overnight use fee. Vehicle access—at Freshwater Lagoon Spit and at other beaches in the parks—would also be phased out, but through a slower process of attrition. Only vehicle use associated with commercial surf fishing would be allowed through a renewable, nontransferable permit process. No permits would be issued after September 1, 1999, and any permit not renewed on an annual basis would be terminated.[57]

For both the NPS and the CDPR, the Freshwater Lagoon Spit Plan addressed a number of nonconforming uses and "met statutory obligations to protect the RNSP resources and enhance public enjoyment of RNSP resources and values, and to provide consistent management of vehicle use on NPS—and CDPR—managed beaches."[58] A less restrictive plan would have pleased local interests and longtime users of the area, who cried foul when they became aware of the preferred plan, but it would not have achieved the primary goals of

natural resource protection and the corresponding emphasis on quiet enjoyment and interpretation of natural processes and scenery. More important, it probably would not have received the necessary authorization of the California Coastal Commission, which praised the plan for "protect[ing] and support[ing] coastal public access and recreation, in a manner balancing competing uses and protecting environmentally sensitive habitat . . . , marine resources, scenic public views, . . . archaeological resources . . . [and] takes into account geologic hazards." In sum, the commission found the "fundamental goals of the [plan] and the Coastal Act [to be] synonymous."[59]

The Freshwater Lagoon Spit Plan was largely an NPS project that stemmed from more than a decade of concern and irresolution. It nevertheless represented a distinct change from previous management ideas about the area that reflected some of the new opportunities that came with the NPS-CDPR partnership. Whereas earlier plans to develop the Freshwater Lagoon Spit were conceived as extensions of the Redwood Information Center, the new proposal was connected to a new plan for locating the park's primary visitor center at another site. Noting the unsatisfactory and potentially dangerous location of the information center—well outside any of the state parks, away from the park's primary resource (old-growth redwood forest), and in a potentially devastating tsunami zone—all three alternatives in the *GMP*/*GP* called for construction of an extensive Visitor Center on private land north of Orick and close to Prairie Creek Redwoods State Park. Built through cooperative partnerships that might include private organizations and the Yurok Tribe along with the CDPR and NPS, the facility would provide more extensive and in-depth interpretation of state and national park resources, include a theater/auditorium, and would offer visitors a wider and more integrated array of information on recreational opportunities in the parks and the surrounding area. The existing information center would be torn down and salvaged, and the area converted to a day-use area focused on the estuary but also connected to similarly low-key recreational and interpretive opportunities along the

Freshwater Lagoon Spit. The final *GMP*/*GP* retained this vision, but in the face of prolonged fiscal challenges, it would only become an option in the event of a tsunami or some other problem, and the successful formation of a private-public-tribal venture.[60]

The planned restrictions on public use at Freshwater Lagoon Spit certainly followed NPS policy, but they also took into account the California Coastal Commission's earlier rejection of the 1984 Freshwater Lagoon Spit Development Concept Plan. As noted in the previous chapter, the commission rejected the plan because the Park Service did not meet state standards for protecting beach resources. In a similar manner, state codes regarding wilderness would shape *GMP*/*GP* plans for managing the large forested areas of the three state parks in ways that were more stringent than NPS policies. The California Wilderness Act of 1975 encouraged the designation of roadless areas within large state parks to become part of the state wilderness system.[61] The Park Service did not have an equivalent policy for any areas within RNSP's federal park lands since none met the minimum criteria of 5,000 contiguous acres of undeveloped, roadless area as defined in the federal 1964 Wilderness Act.[62] The *GMP*/*GP*, however, called for the establishment of what became the Redwood Heritage State Wilderness and the Murrelet State Wilderness—two large core areas within Jedediah Smith and Prairie Creek Redwoods state parks where visitor use and access would be regulated to maintain RNSP's most pristine forest conditions.[63]

Much as the state wilderness designations placed important statutory restrictions on recreational activities and facility development in the largest expanses of old-growth forest in RNSP, the existing trail systems and developed campgrounds in the state parks allowed NPS planners to more fully emphasize resource protection over visitor use in certain backcountry areas on national park lands. One place where this aspect of the NPS-CDPR partnership had a significant effect was in the ecologically, culturally, and historically sensitive Bald Hills. A plan to develop overnight use areas in the Bald Hills had long been

controversial, and it was finally deemed unnecessary when the variety of recreational opportunities available in the state parks were formally integrated into the *GMP*/*GP*.[64]

### PLANNING AND TRANSITION: DAVISON RANCH AND B-MILL DECK

Redwood's transition from a national park to a national and state parks complex, and the new entity's management through and beyond the *GMP*/*GP* planning process, is perhaps best illustrated in the changing circumstances that shaped the planning and development of the Davison Ranch and the B-Mill deck sites for more than a decade. When it was acquired by Redwood National Park in 1991, the Davison Ranch had long been the core property of a century-old dairy operation. Located in the bottomlands of Davison Creek, a tributary of Prairie Creek, the land had to be cleared—and kept clear through subsequent decades—of willow, alder, and other riparian brush in order to serve as good pasture and cropland. Since 1937, the Davison Ranch had also been the annual retreat center for a nondenominational church organization. Besides a few houses and outbuildings related to dairying operations, the property acquired by the national park also included a "convention complex" of utilitarian buildings and camping areas along a diked section of Prairie Creek. On the other side of Davison Road, immediately across from the ranch property, the Arcata Redwood Company operated its B-Mill complex from 1948 to 1970. While almost nothing remained of the former mill structures in January 1996, when the national park completed its acquisition, more than half of the fifteen-acre site was covered by the pavement and asphalt that had underlain the mill and its vast log deck.[65]

Although not large parcels, the location of these 115 acres made them significant for a number of reasons. Straddling an access road to Gold Bluffs Beach and Fern Canyon, bordering lands already within Redwood National Park—including groves of ancient redwood in the Trillium Creek drainage—and easily approached from U.S. Highway 101, the area had a great deal of potential for locating visitor services, as a hub for recreational opportunities,

for landscape restoration, and as a place to locate administrative facilities. Given the condition of the properties, and their significance to the park as a whole, accomplishing any of these options would require a good deal of planning, funding, and time. From early plans for a visitor center and lodge to the eventual decision to restore the B-Mill deck site and remove most of the ranch buildings, the planning and development of the Davison Ranch area followed many of the basic trends that characterized park management in the 1990s. This included the impasse and resolution of the national park–state parks issue as well as subsequent concerns about the appropriate balance between visitor use and resource protection during and after the *GMP*/*GP* planning process.

During the early planning stages for the Davison property, well before any of the talk that led to the formation of RNSP, park planners were tasked with crafting a development concept plan that emphasized visitation and recreation. In accordance with Superintendent Ehorn's vision, planners proposed a destination lodge at the B-Mill deck site and a visitor activity area at the ranch that included a horseback-riding concession, a number of new trailheads for equestrians, hikers, and mountain bikers, a parking area, and—in the old convention complex area—employee housing and administrative facilities. The Western Regional Office issued a request for proposal for the lodge project, but it soon became clear that any development along these lines would run into significant obstacles. For starters, the large companies that expressed an interest in developing the site noted that a golf course or some other recreational amenity would have to be included to make the lodge financially viable. Converting national park lands into a golf course was not acceptable, however. The lodge idea also ran counter both to general NPS policy and to explicit statements in Redwood's 1980 *GMP* that encouraged the development of visitor service facilities in gateway communities.[66]

Given the financial and policy hurdles that a lodge project would entail, park planners soon directed their efforts toward a development that centered on a new activity center at the

B-Mill deck site. This would replace the Redwood Information Center at the mouth of Redwood Creek and—linked with the recreational opportunities in the Davison Ranch area—would offer more visitor amenities and provide more direct access to adjacent groves of old-growth redwoods. While this plan avoided the pitfalls of the lodge proposal, it did not resolve a new set of problems associated with the trails that would emanate from the activity center and Davison Ranch. As RNSP environmental specialist Aida Parkinson recalls, work on the Davison Ranch development concept plan (DCP) was complicated by the distrust that had flared up in the early 1990s between Redwood and the state parks. Many of the proposed national park trails were intended to intersect with state park trails, but NPS planners were not able to effectively coordinate with CDPR staff until after the decision to create RNSP.

The impasse between NPS and CDPR was exacerbated by a number of jurisdictional and environmental challenges that further complicated planning for the Davison Ranch/B-Mill deck site. The failure of the horseback-riding concession, which Superintendent Ehorn championed as an excellent opportunity for the national park to provide more recreational opportunities to visitors and support a locally based concession, is a case in point. The concession only lasted a few years, in large part because the animals had to be transported from stables outside the park near Orick. Although the Davison hay barn was available, and would have proved an excellent facility, it could not be used because a bridge over Prairie Creek that would have connected the area with several planned trails on national park lands could not be built. For starters, one end of the bridge and a short stretch of trail would have been partly located on private land that the park still needed to either purchase or access through a negotiated easement. As long this matter remained unresolved and relations with CDPR remained chilly, the development of a full trail plan could not proceed.

The matter of trails, bridges, and horses illustrates a further complication with the planning process for Davison Ranch. The bridge that horseback riders did use to cross Prairie Creek was old and subject to flooding, hence the proposal for a new bridge. Although

it was entirely on NPS-owned land, any plan to remove the old bridge would first require a study to determine if potential floodplain alterations would need mitigation. This last complication—and its promise of further uncertainty—only hastened the demise of the horseback-riding concession. Yet concerns about floodplain mitigation went beyond a single bridge. Indeed, they became attached to the most basic element of any Davison Ranch project. The planned upgrading of the access road from U.S. Highway 101 to the ranch and B-Mill deck was thwarted when park botanists—in compliance with a number of relatively new federal and state environmental regulations—discovered that both the existing and planned route of Davison Road cut right through a jurisdictional wetland.

The formation of the RNSP complex addressed some of the complications related to a possible trail plan, but also led to a new delay—and dramatic transformation—in the planning process. The first draft DCP for Davison Ranch was issued in July 1994, with public meetings held in Crescent City in August. After reviewing the draft and incorporating comments from various individuals and agencies, a final DCP that included the activity center option was set to be issued in May 1995. While the final document was being printed, Parkinson learned that RNSP had just received authorization for a new *GMP*. She immediately called the printer and said, “Stop printing. I’m bringing you a page to be bound into the document.” The new cover page read “Errata: We received word that we are going to be preparing a new *GMP*. We are changing our preferred alternative from activity center to trailhead because an activity center is a major development that would benefit from the large public involvement effort of the *GMP*, and the trailhead alternative is common to all the development alternatives in the DCP.”[67]

With most of the DCP pushed off to the *GMP*/*GP* planning process, the park developed and signed a finding of no significant impact (FONSI) for a trailhead at B-Mill deck with hiking, horseback riding, and mountain-bike trails radiating out into national and state parks lands. The FONSI also included a planned refurbishment of the Davison Ranch hay

barn and the development of a new equestrian trailhead leading from the site. New superintendent Ringgold placed a low priority on the horse trails and riding facility, which had largely been something of a pet project for Ehorn.[68] Rather than revisit the Davison DCP process again, however, Ringgold chose to keep this element of the plan in place. The matter was ultimately settled during the *GMP*/*GP* planning process, during which the barn and horse trails projects slipped away.

One key development project from the Davison DCP remained an important feature of the *GMP*/*GP* planning process: construction of a new activity center at the B-Mill deck site. As noted above, the existing Redwood Information Center was less than desirable, largely because it was not in immediate proximity to Redwood National Park's namesake resource and, with the formation of the RNSP parks complex, it was located at the furthest remove from the three state parks. These problems were magnified by a growing body of research on earthquakes and offshore faults that predicted a high likelihood for a major tsunami event along the North Coast in the near future. If true, the result would be complete devastation of the Redwood Information Center.[69] Budgetary concerns throughout the national park system, and the continuing functionality of the existing information center, made funding for a major building project doubtful. For these reasons, the activity center at B-Mill deck was ultimately dropped and the *GMP*/*GP* planning process determined that "all functions at the Redwood Information Center would remain" for the foreseeable future.[70]

The commitment to the existing facility at Redwood Creek Beach had already received indirect affirmation in 1998, on the thirtieth anniversary of Redwood National Park's establishment. Congress officially renamed the Redwood Information Center the Thomas H. Kuchel Visitor Center, to honor the late Senator Kuchel's work in passing the Redwood National Park Act.[71] Of course a name change was not insurance or protection against a tsunami, nor did it correct any of the other problems associated with the newly reminted visitor center's location. Consequently, the *GMP*/*GP* did allow for a contingency plan that

tentatively retained one basic element of the Davison DCP (and the older Freshwater Lagoon Spit DCP). In the event of a tsunami, flood, or significant shift of the mouth of Redwood Creek, the *GMP*/*GP* called for a new facility "between Orick and Prairie Creek and adjacent to U.S. Highway 101"—although not necessarily at the B-Mill deck site—that would be constructed through "public, private, and/or tribal partnerships."[72]

With all of the major facility projects called for in the Davison DCP either nixed or put off indefinitely, the development of the area ultimately focused on restoration of the B-Mill deck site and, in an effort to implement some parts of a preliminary trail plan, construction of a parking area with a restroom and a trailhead. The scaled-back nature of this plan reflected ongoing concerns about park budgets, which continued to decline at Redwood and throughout the NPS. Because Redwood had received money from the California Department of Transportation (CalTrans) to restore wetlands in the Davison Ranch area as compensatory mitigation for the loss of riparian and stream habitat on Prairie Creek that resulted from construction of the U.S. Highway 101 bypass, this secure funding source largely drove the project.

The B-Mill deck restoration proved a new challenge for Redwood's Resources Management and Science staff, which had to adapt watershed restoration techniques to the removal of large amounts of asphalt and buried materials as well as the reconstitution of wetlands and prairie. All of this was done in concert with the grading and construction of the parking area—which was composed of recycled materials from the old log deck. The hard won result, which included enhancement of native riparian habitat on the Davison Ranch property, became something of a showcase for the park once the new plantings took hold and wildlife returned in growing numbers to the site. Located just off U.S. Highway 101, the newly christened Elk Meadow presented a dramatic, new expression of Redwood's commitment to restore degraded landscapes and integrate them into a larger managed park environment. Construction of the viewing area, parking lot, and trailhead to the Trillium Falls

Trail (completed in 2002), where groves of ancient redwood rise just beyond the now erased perimeter of Arcata Redwood Company's mill operation, only further illustrated this fundamental commitment.

**Figure 7.4 From B-Mill Deck to Elk Meadow.** The final results of the B-Mill deck rehabilitation were featured in the Redwood National and State Parks *Visitor Guide*, summer 2001.

## ECHOES OF THE DAVISON RANCH PLAN AND NEW DIRECTIONS FOR RNSP

The eventual development of the B-Mill deck site illustrates two other aspects of Redwood's administration in the late 1990s and the early twenty-first century. The small visitor area overlooking Elk Meadow, with its interpretive panels on the site's rehabilitation, provides a clear expression of the growing emphasis on framing interpretation and visitor use within the context of restoration and protection. Likewise, the still incomplete project (as of this writing) of cleaning up the Davison property and managing it toward similar ends reflects the parks' continuing struggles with limited budgets and the growing emphasis on partnering with outside agencies and organizations. As RNSP soil scientist Jim Popenoe noted, "A novel might be written about the [B-Mill deck] Elk Meadow restoration, with chapters on planning and consultation, geomorphic restoration, surveying and monitoring, and revegetation. It has been a complicated project, requiring close coordination among divisions, agencies, and contractors."[73] For budgetary and statutory reasons, such coordination would become increasingly central to the management of RNSP as a whole—especially as park managers sought to maintain or increase the scope of resource management.

While the creation of Elk Meadow and the Trillium Falls Trail do not match some of the initial aspirations behind the draft Davison Ranch DCP, they are impressive achievements. They are also incomplete. As called for in the *GMP*/*GP*—as well as the earlier Davison Ranch DCP—the Elk Meadow parking area is supposed to serve as the main access area for an extensive trail network, which has yet to be approved or built. Some of the holdup stems from chronic budget issues and the complexities that Popenoe described, but much of the delay is rooted in concerns over the impacts that trail construction and visitor use might have on threatened and endangered species, namely marbled murrelets (*Brachyramphus marmoratus*) and northern spotted owls (*Strix occidentalis caurina*). Beginning in the early 1990s, threatened and endangered issues would become critical new

factors for resource management and visitor-use projects over the coming decade. As Parkinson recalled in 2007, the Davison DCP "was the first inkling we had that we were going to have to consult with the [U.S. Fish and Wildlife Service] for effects to marbled murrelets from construction and use of trails."[74] It would ultimately take years of close cooperation between RNSP and Arcata-based staff working for the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS)—the two federal agencies most responsible for implementing the basic provisions of the Endangered Species Act—before a final environmental assessment for a trail plan would be finished in 2009.[75]

### ENDANGERED SPECIES, COMPLIANCE, AND THE PASSAGE OF TIME

Threatened and endangered issues were not unique to Redwood, nor was their effect on the slow development of the trail plan limited to that one element of park planning and management. Nevertheless, the fact that almost two decades passed between the initial drafting of a Davison Ranch DCP and the issuance of the final environmental assessment for the Redwood National Park Trail and Backcountry Management Plan does provide a good indication of how significant the monitoring and protecting of threatened and endangered species would become for many aspects of the park's administration. The subject also illustrates the wide array of national, regional, legislative, and policy developments that could shape a project as specific as the trail plan.

At the national, agency-wide level, species and habitat protection had long been a part of resource management throughout the NPS before it became a statutory obligation with the passage of the Endangered Species Act (ESA; 1973). This received further emphasis in 1978 with the sections of the Redwood National Park Expansion Act that strengthened the resource protection components of the original NPS Organic Act of 1916. The ESA amendments of 1988 strengthened the original act, in part by requiring the Secretary of the Interior to clarify listing procedures and to more fully monitor species

identified as candidates for listing. These measures, along with the continued decline of candidate species populations, would contribute to a host of new listings of threatened and endangered species in the early 1990s. In the wake of the 1988 ESA amendments and in the midst of new endangered species listings, the NPS adopted systemwide *Natural Resources Management Guidelines* (better known as NPS-77) "to assemble baseline inventory data describing the natural resources under its stewardship, and to monitor those resources . . . to detect or predict changes that may require intervention." This inventory and monitoring program was defined as "an essential basis for park management," and made the NPS an even more central player in the identification and management of endangered species and their habitat requirements.[76]

Until the early 1990s, when NPS-77 was issued and the Davison Ranch DCP began, only a very few threatened or endangered species were associated with Redwood National Park. Among these were the bald eagle (*Haliaeetus leucocephalus*), American peregrine falcon (*Falco peregrinum anatm*), California brown pelican (*Pelecanus occidentalis californicus*), and Stellar's sea lion (*Eumatopias jubatus*). All of these animals ranged well beyond the park area, and were experiencing marked population recoveries both within Northern California and throughout their usual habitats. Matters soon changed for Redwood National Park between 1992 and 1994, when a number of threatened and endangered species along the North Coast were listed in quick succession. These included the marbled murrelets (*Brachyramphus marmoratus*), northern spotted owl (*Strix occidentalis caurina*) Coho salmon (*Oncorhynchus kisutch*), steelhead trout (*Oncorhynchus mykiss*), and tidewater goby (*Eucyclogobius newberryi*). Because Redwood provided critical habitat for all of these new listings, park staff necessarily became involved in the inventory and monitoring of these threatened and endangered species as well as in developing and implementing a plan for their recovery.

While Resources Management and Science staff worked most closely with USFWS and NOAA Fisheries Service biologists on the assessment, protection, and recovery of threatened and endangered species, all management divisions worked at some level or another to comply with the regulatory provisions of the ESA. The extended effort to develop the park's trail plan bears this out, and well illustrates the degree to which compliance with the ESA and other NPS guidelines would define park management.

As noted earlier, the Davison Ranch planning process took place amid the new threatened and endangered listings and the build up to the co-management agreement between NPS and CDPR. In the wake of these two developments, park planners waited to formulate a trail plan for Davison Ranch and the rest of the parks complex until after the *GMP*/*GP* was complete. The ensuing trail plan developed around four alternatives that mirrored the basic alternatives described in the draft *GMP*/*GP*: no action, moderate development, recreation focus, and the proposed action. In keeping with the resource protection emphasis of the *GMP*/*GP*, the proposed action (also referred to as the "environmentally preferred alternative") was the favored plan because it called for the fewest new trails and would involve "the least development in or adjacent to old growth redwood forest, and would minimize noise, visual disturbance, and increased risk of predation to threatened marbled murrelets and northern spotted owls that occupy old growth forest."[77]

The no action alternative, which included the trail components of the completed Davison Ranch DCP as well as an 8.5-mile section of the East Side Trail in the national park between the Lady Bird Johnson and Tall Trees groves (approved in a 1984 trail plan), contained more trails and involved more extensive trail construction within and near old-growth forest.[78] The 2.9-mile long Davison bicycle and hiking trail, which linked Prairie Creek Redwoods State Park with the Elk Meadow Trailhead, and the 2.5 mile Trillium Falls Trail had already been completed, but the Davison Ranch DCP called for another 16.1 miles of hiking, biking, and equestrian trails. The preferred option only retained two hiking segments

from the 1996 Davison plan, totaling just 4 miles, and called for a 7-mile hiking trail that mostly skirted old-growth forest along the east side of the Redwood Creek basin. The less than 5 miles of remaining trails would serve as links between existing trails in the national and state parks.

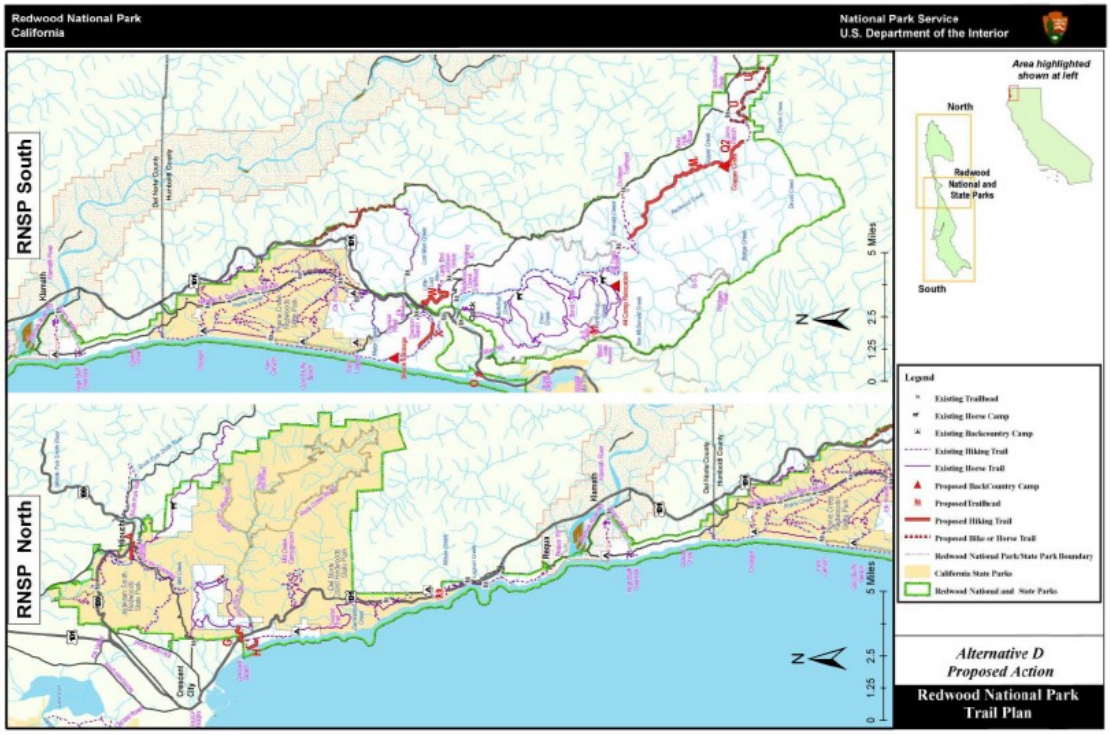


**Figure 7.5 Proposed Action Alternative from *Trail and Backcountry Management Plan: Environmental Assessment* (2009), 201.** Red lines indicate trail lengths and camping areas called for in the plan. Source: National Park Service.

This modest plan, which also included two new camping areas of four and five sites each, ultimately required several years of consultation with the USFWS and NMFS on issues related to endangered species. A brief chronological summary of these consultations illustrates the degree to which threatened and endangered issues had come to affect park management, even for parts of old plans that had already been approved but not yet implemented.

The NPS submitted a preliminary draft Biological Assessment to the USFWS Arcata Fish and Wildlife Office on September 19, 2002. The NPS and USFWS staff met to discuss the proposed project on September 24 and October 28, 2002, and April 8, 2003. The NPS submitted a draft environmental assessment to the USFWS on March 24, 2003. The USFWS provided comments on the draft environmental assessment on May 30, 2003. The NPS submitted subsequent draft [biological assessments] to the USFWS in August and November 2004, for which the USFWS provided comments in October 2004 and February 2005, respectively. The NPS requested formal consultation in April 2005 and met with USFWS in August 2005 to discuss concerns about effects on marbled murrelets. In October 2005, the NPS requested a delay in completion of consultation to consider changes to the proposed action to decrease impacts to marbled murrelets. Between February and May 2006, biologists from the NPS, California Department of Fish and Game, Humboldt State University, and the USFWS met to discuss management of corvids (a family of birds known to prey on nestlings of marbled murrelets and other birds) in RNSP. The NPS submitted new draft sections of the [biological assessment] to the USFWS in May 2006 and received comments in August 2006. The NPS submitted a final [biological assessment] to the USFWS Arcata Fish and Wildlife Office on August 30, 2006.[79]

A similar timeline and set of delays accompanied the consultation process with the NOAA Fisheries Service staff in Arcata. The NPS finally received a biological opinion from the USFWS in January 2007, and another from the NOAA Fisheries Service in September 2007. Both resulted in similar findings, with the USFWS concluding that the *Trail and Backcountry Management Plan* (TBMP) would not likely jeopardize the continued existence of the marbled murrelet or the northern spotted owl. Although there is no designated critical habitat for marbled murrelets in the national park, there are designated critical habitats in the state parks. However, the action proposed in the TBMP does not affect that critical habitat and no destruction or adverse modification of that critical habitat is anticipated. Critical

habitat for the northern spotted owl has been designated but the action proposed in the TBMP does not affect that area and no destruction or adverse modification of that critical habitat is anticipated.[80]

The biological opinion of the NOAA Fisheries Service similarly "concluded that the proposed actions in the trail and backcountry management plan are not likely to jeopardize the continued existence of [Southern Oregon/Northern California Coast] Coho salmon, [California Coastal] Chinook salmon, or [Northern California] steelhead or result in the destruction or adverse modification of their designated critical habitats."[81]

### RESOURCES MANAGEMENT: SUSTAINING THE PRIMARY MISSION OF RNSP

Even more than trails, campsites, and other visitor-use areas, compliance with threatened and endangered species regulations affected watershed rehabilitation and other resource management projects. Ironically, the heavy equipment and work crews associated with efforts to restore the kind of old-growth forest characteristics favored by murrelets and owls could disturb their nesting habits. Finding ways to accommodate these new issues, as well as working with the kinds of budgetary restraints that shaped the Elk Meadow project, were not unique within the NPS; yet they profoundly affected the many long-standing—and long-celebrated—resource management projects at RNSP. The regulatory oversight of the USFWS and NOAA Fisheries Service, as well as increased reliance on non-NPS funding sources, were strong indications of a basic and growing trend that saw resources management at RNSP become more reliant than ever on coordination with other federal and state agencies, as well as nongovernmental organizations (NGOs), private property owners, and public interest groups. [82]

The dynamic interplay of concerns about visitor use, budget limitations, threatened and endangered issues, and restoration that ultimately resulted in the Elk Meadow project closely paralleled the basic issues that shaped resources management, which park officials considered "the primary mission of RNSP."[83] The four management alternatives proposed in

the draft *GMP*/*GP* neatly demonstrate the parameters in which natural resource managers worked in the late1990s and early 2000s, especially in Redwood's signature program of watershed restoration. The no action alternative essentially represented what was possible given then current and expected NPS funding levels: at roughly 2 miles per year, the road treatment program would take approximately sixty-six years to complete. The visitor use emphasis alternative would have involved increased funding for resource management projects, but these would have been directed more toward areas that were seen and used by park visitors (like the B-Mill deck/Elk Meadow site) and would not have appreciably increased the overall treatment of old logging roads.[84]

The proposed action and the preservation emphasis alternatives were indistinguishable in many respects, and both called for a considerable increase in the funding of the rehabilitation program so that it could be completed in seventeen years. Where these two alternatives differed, however, was in the manner they would reach their similar goal. The preservation emphasis presented a wishful assumption that large budgets and high staffing levels would make park managers less reliant on outside or temporary sources of funding and less beholden to the concerns or approvals of outside agencies, groups, and landholders. The proposed option, which was adopted in the final *GMP*/*GP*, represented a more realistic sense of the parks' situation, both in terms of overall NPS budgets and Redwood's long dependence on the cooperation or support of outside interests. In a basic reiteration of the original management plan effort in the early 1970s, the proposed option advocated cooperation "with the timber industry, private landowners, and other government agencies to accomplish long-range resource management planning and reduce threats to the RNSP resources."[85]

Given the history of Redwood National Park, noncooperation was simply not an option, regardless of overall funding and staffing levels. Yet cooperation also meant looking to outside sources to help fund resource management projects. Less secure and less ample

than called for in the preservation emphasis alternative, this kind of funding also required a less comprehensive form of watershed rehabilitation. It was here that the preferred option and the preservation alternative most differed, and those differences most clearly reflected a recent debate within the watershed rehabilitation program over how best to accomplish Redwood's primary mission.

In the late 1980s and through the mid-1990s an old difference of opinion started to grow again among some natural resource management staff about the future purpose of the park's restored landscapes: should restoration primarily be a tool for erosion control or should it rehabilitate sites so that they would in time become virtually indistinguishable from the unlogged portions of the park? This latter ethic would require full restoration and revegetation of all sites, complete road removal, and the recontouring of all slopes. Supervisory geologist Terry Spreiter, who advocated this approach, believed that complete restoration of the logged-over landscape was more in keeping with the essential purpose of Redwood National Park's establishment and expansion: to protect and restore landscapes that approximated the conditions of the mid-nineteenth century. Moreover, such an approach to watershed rehabilitation, which also fit the larger NPS ethos of protecting and showcasing relatively pristine landscapes, had to be adopted soon. Once access roads were removed or too many trees of substantial size had recolonized partially treated areas, it would be impossible to bring in the kinds of equipment needed to reconstitute prelogging geomorphology and vegetation patterns.[86]

The "complete landform restoration" that Spreiter advocated was called for under the preservation emphasis alternative, but it was not adopted as a general policy by the Resources Management and Science Division and only received partial acknowledgement in the final *GMP*/*GP*.[87] Instead, the park opted for "partial landform restoration . . . , with complete removal of all major logging roads and limited removal of minor logging roads that pose the greatest [erosional] threat to park resources."[88] The *GMP*/*GP* recognized complete

restoration as a preferred ideal, but only when time and funding allowed. In practice, however, “landform restoration would be most comprehensive near high visitor use areas.”[89]

The effort to incorporate some level of complete landform restoration into the rehabilitation program represented a balance of sorts between RNSP’s fundamental commitment to resource management and protection and long-standing efforts to improve the visitor experience. But balance was not the overriding concern when setting the future course of the watershed rehabilitation program. Given fiscal realities and the North Coast’s flood history, the emphasis on partial restoration—along with some reliance on faster and cheaper road decommissioning measures—was viewed as a strategic necessity. Concerns about the cost-effectiveness of particular rehabilitation projects and techniques had been a priority of park managers since the mid-1980s, but a 20 percent decline in the park’s annual operation of the national park system (ONPS) budget, combined with a significant flood event in winter 1996-1997, gave these concerns a special urgency.[90]

Although rated as a 10-12 recurrence interval flood event (meaning it had had a likelihood of occurring once every ten to twelve years or a 9- to 10-percent chance of happening in any given year), the 1996-1997 flood washed through untreated areas and caused significant failures at rehabilitated sites that proved less stable than predicted. Post-flood assessments demonstrated that fully restored areas held up only somewhat better in heavy storm events than areas treated simply to control erosion. Given the risks of an even larger flood event in the next few years or decades, the insecurity of future funding sources, and the increased costs and time required for comprehensive restoration projects, the primary focus on erosion control became even more urgent. The nesting habits of threatened and endangered species like spotted owls and marbled murrelets, as well as the seasonal runs of threatened and endangered anadromous fish, also placed additional restrictions on the location, duration, and timing of work projects. These matters only added to concerns

about budgets and floods and furthered the commitment to pursue “the most cost-effective strategy for sediment reduction” in the park.[91]

In terms of program budgets, the 1996-1997 flood actually proved a boon for watershed rehabilitation. The same storms that hit the North Coast also pounded the Sierra Nevada, causing significant damage and flooding in Yosemite Valley. The event captured national attention and brought a supplemental appropriation from Congress to deal with the natural catastrophe. Superintendent Ringgold successfully worked to have Redwood included in the same bill and RNSP received approximately $9 million for road removal and erosion control in the areas affected by the flood. Although not as secure or long-lived as an increase in the park’s basic operating budget, the appropriation became a primary source of funds for the rehabilitation program and allowed for a significant increase in the number of sites that could be covered.[92] Ringgold seized another opportunity to supplement the rehabilitation budget when he successfully petitioned the NPS line item construction program for funds usually designated for road construction to be applied to road removal within the Lost Man Creek watershed. This again brought a significant boost to the rehabilitation program and allowed focused attention on one of the most important habitat areas in the park for threatened salmonids.[93]

While Ringgold’s efforts allowed established programs to continue, they represented a new trend in the NPS and other public agencies, namely a growing reliance on nonrecurring funding sources. The *Redwood National and State Park Business Plan*, itself the product of a cooperative endeavor between the NPS and the National Parks Conservation Association, and funded by outside foundations, described this trend in dramatic terms: “Given the recent fiscal realities faced by Redwood National Park, the park staff has had to prioritize work and programs based on the availability of nonrecurring project funds. In the eight-year period between 1992 and 1999, the amount of nonrecurring funding

utilized by the park staff has increased by 500 percent. Indeed, for [fiscal year 1999] these funds comprised almost half of total park expenditures including investments."[94]

The trends identified in the *Business Plan* would only increase in coming years, as various programs in resource management became dependent on short term or "soft money" grants from the NPS and a network of funding sources and partnerships that included the U.S. Geological Survey's Natural Resources Preservation Program, Northwest Forest Plan projects related to watershed rehabilitation in the upper Redwood Creek watershed, state and federal salmon recovery funds, U.S. Army Corps of Engineers planning and construction funds for work in the Redwood Creek estuary, and cooperative, in-kind contributions from private landowners near RNSP.[95] Although essential to the functioning of RNSP, the variety and short-term nature of funding sources, as well as the need to adapt park projects to the institutional requirements of the funding source, complicated overall planning efforts and made it difficult to follow the prescriptions of the *GMP*/*GP*.[96]

As a result, resource management plans tended to become more opportunistic, focusing on specific sites or projects that garnered funding rather than a more systematic approach to watershed management. This approach was further dictated by the need for USFWS and NOAA Fisheries Service review of the impacts any proposed rehabilitation work might have on threatened and endangered species. Because the review process was so complex and time-consuming, as illustrated in the previous section, USFWS and NOAA Fisheries Service biologists could only provide environmental assessments on projects of a relatively limited scope. This new reality essentially killed RNSP's long overdue effort to produce an updated watershed management plan; although initiated before murrelets, owls and salmon became listed, and periodically revisited in the years since, the management plan was never completed since threatened and endangered species concerns made crafting and approving a wide-ranging and comprehensive plan a near impossibility.[97]

## RESOURCES MANAGEMENT AND SCIENCE DIVISION: CONTINUITY AND CHANGE

As the largest component of the RNSP organizational structure—both in terms of budget and overall full-time equivalents (FTEs)—Resources Management and Science was also the most affected by budget shortfalls and the dependence on nonrecurring funds. In 1999, resource management, protection, and research comprised more than a third of the parks' entire expenditures of $8.6 million (including both ONPS and nonrecurring funds), and an equal share of the national park's 130.4 FTEs. Yet according to the National Parks and Conservation Association's calculations, these numbers were far below where they needed to be. To function well, RNSP required an annual budget of approximately $11.9 million and 193 FTEs—with half of the additional funding and two-thirds of the extra FTEs needed to correct the "total shortfall . . . within the Resource Protection functional area."[98]

The fiscal issues identified in the *Business Plan*, which was part of a much larger initiative to point out and correct years of chronic underfunding in the NPS, were most evident in the number of unfinished resource management plans at RNSP in the years before and after the issuance of the *GMP*/*GP* in 2000. Several key projects that had been identified as priorities in the late 1980s and early 1990s had been stalled for years, including a much needed road inventory of the upper Redwood Creek watershed to identify and prescribe treatment for sediment and erosion sources on private lands, a second-growth forest recovery plan to determine the best method for promoting old-growth characteristics in dense stands of Douglas fir and redwood, and an updated management plan and restoration program for the Redwood Creek estuary.[99] Given the clarifying process that produced the RNSP Partnership Vision in 1996, and the collective endeavor that established clear priorities and goals for the parks complex in the *GMP*/*GP*, the inability to act on even well-laid plans proved especially disheartening.

Despite these shortcomings and the frustrations they engendered, Resources Management and Science continued its well-earned reputation of accomplishment,

particularly as it adapted to new policies and opportunities. Under the experienced direction of Terence “Terry” Hofstra, whose tenure as division chief preceded the arrival of Ringgold and Sermon and extended long after their retirements, Resources Management and Science continued to implement existing management plans that had been updated or established in the early 1990s. Because resources management within the NPS had become increasingly oriented toward compliance with a host of environmental regulations, Resources Management and Science staff also devoted a good deal of time toward refining draft management plans and producing environmental assessments for review by state and federal agencies.[100]

A significant new responsibility for the division came with the implementation of the NPS natural resource inventory and monitoring program. Initiated in 1999 as part of the NPS Natural Resource Challenge, the program set four long-term goals to increase the knowledge base and expertise needed to understand ecosystem integrity within the NPS: a broad-based inventory of natural resources within the Park System; long-term monitoring of environmental resources and processes through the use of geographic information system (GIS) and other tools”; integration of “natural resource inventory and monitoring information [with all aspects of park] planning, management, and decision making”; and share NPS information and resources with other federal and state agencies. Redwood staff had long considered the basic objectives of the inventory and monitoring program to be a necessary, but missing and unfunded component of natural resources management within the park and throughout the NPS. Once the new NPS system-wide program was up and running in the early 2000s, however, it became a significant new component of Resources Management and Science, especially within the fish and wildlife and vegetation management branches.[101]

In order to stretch the program’s funds, foster recognition of common ecosystem and management issues, and encourage cooperation among NPS units, all parks in the inventory and monitoring program were grouped into one of thirty-two regional networks. RNSP

became part of the Klamath network (KLMN), which included four northern California and two southern Oregon national park units: RNSP, Whiskeytown National Recreation Area, Lassen Volcanic National Park, Lava Beds National Monument, Crater Lake National Park, and Oregon Caves National Monument. The formation and development of the KLMN occurred under the initial direction of Dr. Steven Fancy from the Natural Resources Division of the National Park Service's Washington Support Office (WASO), and followed the prescribed plan for designing a network monitoring program.[102] This began with a scoping workshop at Redwood in 1999, followed by workshops at the other park units, then moved to the formation of a board of directors and a science advisory committee. The board of directors comprised six park superintendents, NPS Pacific West Regional staff, two natural resource chiefs (appointed on a rotating basis from the six park units), and both the regional and network inventory and monitoring coordinators. The science advisory committee was established through an agreement between the NPS and U.S. Geological Survey that involved Edward Starkey and Gary Larson from the USGS Forest and Range Ecosystem and Science Center (FRESC).[103]

Along with personnel from the NPS and USGS, the KLMN soon involved staff from USFWS, the NOAA Fisheries Service, and academic researchers from Southern Oregon University—where the program's administrative offices have been located since 2002—as well as Humboldt State University.[104] Operating with a $731,000, four-year budget, the KLMN embarked on Phases I and II of the three-phase inventory and monitoring program: development and then implementation of a systematic inventory of vertebrates and vascular plants in each park. With the inventory design finished and most of the field inventories underway or completed in 2004, KLMN participants set about planning for Phase III, "Vital Signs Monitoring," which at RNSP also included staff from California state agencies and representatives from North Coast tribes.[105]

The initial purpose of this part of the inventory and monitoring program is to use information from the inventories to determine key indicators (or "vital signs") of ecosystem health "to provide the minimum infrastructure needed to track the overall condition of natural resources in parks and to provide early warning of situations that require intervention." The ultimate goal, however, is to provide a clear basis for managing parks in the context of larger ecosystems, and to develop plans and projects that help sustain or restore key components of the ecosystem across a broader region. At the park level, as noted in the NPS guidelines for designing an integrated monitoring program, "the scientifically sound information obtained through this systems-based monitoring program [was expected to] have multiple applications for management decision-making, park planning, research, education, and promoting public understanding of park resources."[106]

While the long-term benefits of these efforts would not be realized for some time, the inventory and monitoring program represented a new emphasis within Resources Management and Science. Coupled with ongoing threatened and endangered surveys, both for in-park projects and as part of larger studies administered through the Northwest Forest Plan (NWFP), species inventories and monitoring also involved a great deal of staff time. Most of this work was conducted by seasonal park employees, as well as scientists and technicians from Humboldt State University (HSU), the Klamath Bird Observatory, Oregon State University, and the USGS Forest and Rangeland Ecosystem Science Center. Consequently, participation in the KLMN brought in a level of new staffing—at least on a temporary basis—that had not been seen at Redwood in more than a decade. Working with personnel from different parks, agencies, and institutions also broadened and deepened RNSP's long-standing commitment to cooperative approaches to resource management. These strong echoes of the past seemed part of a trend at Redwood, and found their fullest expression in a renewed effort to work closely with landowners in the upper Redwood Creek

watershed—a program that harkened back to the late 1970s and, like the inventory and monitoring program, promised many long-term benefits for RNSP and the region.[107]

### RETURNING TO THE UPPER WATERSHED

Beginning with the pioneering work of USGS geologist Dick Janda in the 1970s, park staff had long realized that the overall functional health of the Redwood Creek drainage depended on mitigating historical and ongoing land-use practices in the upper basin. Further research and surveys by NPS geologists Mary Ann Madej, Vicki Ozaki, Randy Klein and others brought an even clearer understanding of road conditions, erosion rates, and sedimentary discharge in the upper Redwood Creek basin, and the threats they posed to resources both within and upstream of the park. Increased understanding about conditions in the upper basin confirmed Janda's work and echoed the same concerns that led to park expansion in 1978, but the issue took on added significance as watershed rehabilitation progressed through the 1980s and into the early 1990s.

Among other things, park staff worried that a major flood event could do to the upper basin—where logging operations had continued—what the floods of 1955 and 1964 had done before. Along with massive erosion events and the destabilization of hillsides and stream channels in the upper basin, such an event would necessarily affect downstream environments. Heavy flooding and deposition along the main stem of Redwood Creek would wash out and bury riparian habitat and alluvial redwood groves within the national park, and destroy critical spawning and rearing habitat for salmonids. Even if such an event did not occur, years of study demonstrated that erosion in the upper watershed remained the primary source of sediment in the main stem of Redwood Creek, which contained 70 percent of the spawning channels within the watershed. As salmonids became more central to resources management, it was evident that mitigating or correcting conditions in the upper watershed could do more to improve in-park aquatic habitat than any other rehabilitation project.[108]

Within the boundaries of RNP, some 415 miles of old logging roads existed before the rehabilitation program commenced. While more than 200 miles had still not been treated by the mid-1990s, the upper watershed contained 1,100 miles of roads—an amount that exceeded the combined length of year-round, or blue-line, streams in the upper drainage. Moreover, the vast majority of these logging roads were constructed before California's forest practice rules were strengthened, and some 500 miles of the older roads were unmaintained and subject to imminent failure. As park staff would later note in a 1999 resource management plan, 85 percent of "the total estimated erosion potential from all roads within the Redwood Creek basin (5,185,000 cubic yards of sediment) is associated with roads upstream of the national park on private timberlands. These poorly constructed and maintained roads represent a major threat to resources along the main stem of Redwood Creek in the national park."[109]

While it was obvious that the most critical long-term impact on Redwood came from private lands in the upper basin, park staff had largely been excluded from working in the area since the early 1980s. This exclusion had environmental, social, and policy consequences that reinforced each other: it not only contributed to the worsening nature of conditions in the basin but also froze into place the decades-old issues and conflicts that had placed the timber industry and the Park Service in an adversarial relationship. No matter how critical the environmental situation seemed, nothing could be done without first engaging, and resolving, this old impasse. How this was accomplished in the coming decade would become a hallmark of a new era in which public-private and interagency cooperation not only defined resources management at Redwood but also defined RNSP's role in the economic and social development of the North Coast.

Building on the previous efforts of Danny Hagans and Ron Sonnevil, NPS geologist Greg Bundros spearheaded an effort in the early 1990s to overcome the reticence of private landowners in the upper Redwood Creek watershed from cooperating with park staff. The

endeavor was helped along by the California Board of Forestry's adoption of a Sensitive Watershed Rule in 1994 which allowed citizens and public agencies to nominate a specific watershed as significantly or uniquely impaired due to the effects of past logging and to petition for the application of more restrictive forest practice rules during the timber harvest plan (THP) review process. As Bundros recalled, "We met with the major landowners to inform them we would nominate Redwood Creek as a sensitive watershed and solicited their involvement in the process. Because the landowners did not want additional regulations, we all agreed to take a more cooperative approach to address erosion from logging roads. The proposed listing of Coho salmon [in 1995] also brought to the forefront the need for better land management."[110]

Even with these new regulatory mandates, only cooperative agreements built on incentives and trust could effectively address land-use issues outside the park. Bundros, who had worked on the THP reviews in the Park Protection Zone (PPZ) and upper watershed during the late 1970s when relations between the park and private landowners were often tense, essentially sought to revive the basic conditions and principles that had led to the cooperative agreements that James Agee had worked on in the late 1970s. Through persistence and a nonconfrontational approach, Bundros eventually managed to convince landowners in the upper watershed that allowing Redwood staff to participate in the development of their THPs could be in their own interest. In particular, NPS geologists could suggest modifications in a THP proposal that would reduce the potential impacts from harvest operations, have less impact on downstream resources, and thus more easily gain acceptance from state review agencies. Furthermore, allowing park staff to decommission and treat old and unused logging roads would improve the health and value of private lands, and would not have to interfere with active logging operations.[111] While landowners received economic benefits through increased land values and the security that came with planning operations around an expected THP approval, the new arrangements also had important

cost benefits for Redwood National Park. As Madej noted in 1991, “To prevent the most erosion for a given amount of money, it would be most effective to treat erosion problems in the upper basin, especially upstream of the PPZ.”[112]

These efforts would coincide with and be augmented by a number of important developments outside Redwood. Among these was a reformulation of the long-standing partnership between the USGS and Redwood geologists. In 1993, Secretary of the Interior Bruce Babbitt formed the National Biological Survey (NBS) to “give more visibility and stature to research in DOI, encourage more focus on ecosystems, and provide fiscal economies of scale by reducing overlap and duplication in DOI research.”[113] Staffing for NBS came from the transfer of scientists and employees already working in seven Interior Department agencies, including the National Park Service. Mary Ann Madej’s position was one of the initial transfers, and she moved to the NBS in late 1993 to work with other NBS staff at the California Science Center in Arcata. The NBS was subsequently moved to the USGS in 1996, where it became the Biological Resources Division (USGS-BRD). Madej also transferred to the USGS, but remained in Arcata where she and other USGS-BRD scientists continued to work closely with staff from the Park Service, Bureau of Land Management (BLM), U.S. Forest Service (USFS), and U.S. Fish and Wildlife Service (USFWS) on issues related to the entire Redwood Creek basin. These interagency collaborations continued when the USGS-BRD was reorganized in 1998, with the Arcata office becoming the Redwood Field Station, one of thirteen field stations under the umbrella of the newly formed USGS Western Ecological Research Center.[114]

The creation of the NBS, and its subsequent iterations in the USGS, strengthened and formalized connections among park staff and scientists in other federal agencies. These developments also coincided with the so-called reinvention of government during the Clinton administration, which fostered an accelerating trend toward privatizing and contracting some government services. Among other things, this led to the rapid growth and proliferation of

NGOs dedicated to public lands policy, which operated in partnership with federal and state agencies. All of this gave added impetus to the park's renewed efforts in the upper watershed, which increasingly involved the support of outside agencies and parties and benefited from access to non-NPS funding sources.

This kind of public-private partnering was especially pronounced in the host of programs related to the Northwest Forest Plan (NWFP), which was first adopted in 1994. The result of the Clinton administration's efforts to broker a compromise between environmental and commercial approaches to forest management, the NWFP is "an integrated, comprehensive design for ecosystem management, intergovernmental and public collaboration, and rural community economic assistance for federal forests in western Oregon, Washington, and northern California."[115] In terms of park staff's work in the upper Redwood Creek watershed, the NWFP had two important consequences. As part of the Northwest Forest Plan's mandate to protect and improve the "long-term health of forests, wildlife and waterways," the USFS and BLM were charged with preparing a watershed analysis (WA) of their holdings. While the NPS was not required to do a similar analysis within its park units, Redwood staff "participated with the local USFS and BLM in crafting a process for standardized watershed analysis on the North Coast." This work also corresponded with a second important effect of the NWFP; namely, the creation of new funding sources for collaborative watershed rehabilitation projects. The completion of the Redwood Creek watershed analysis in 1997 opened the park to potential funding sources, as did the park's efforts to partner with private landholders in the upper watershed.[116]

In many ways, RNP was uniquely poised to benefit from the NWFP. The plan's larger effort to protect old-growth forests, foster sustainable forestry, restore cutover lands, and provide timber-based jobs promoted widespread adoption of the kinds of watershed rehabilitation programs that were first pioneered at Redwood. In doing so, the NWFP also favored the kind of cooperative approach to watershed management and restoration that

was developing in the Redwood Creek basin in the mid-1990s. In short, the renewed effort to work with landowners in the upper watershed coincided perfectly with new federal land management policy and RNSP became a partner in a number of grants related to the upper Redwood Creek watershed. Broad partnerships, or projects funded by multiple sources, were most likely to receive federal matching funds, and RNSP became party to grants that involved the California Department of Fish and Game and Department of Forestry and Fire Protection, USFWS, BLM, NGOs like the Pacific Coast Fish, Wetlands, and Wildlife Restoration Association, private conservation groups, and timber corporations.[117]

The first MOUs with the major corporate landowners in the upper watershed were signed in 1995, which committed NPS geologists and technicians to work in concert with timber-company personnel to locate and fix erosion problems related to unmaintained logging roads. Covering approximately 90 percent of the private holdings in the Redwood Creek basin, these memoranda were renewed in 2000 and held the promise of finally addressing the concerns about erosion, public-private cooperation, and sustainable forestry that so consumed early park planners in the late 1960s and early 1970s. New successes with old problems were not attributable to a single cause or solution. Rather, they stemmed from new contexts and the new approaches they fostered. The cooperative work in the upper watershed certainly benefited from a changed political context, which encouraged and rewarded public-private collaborations to land-management problems. That this political context in turn brought about funding sources and interest groups which did not exist in the early 1980s also helped.

Perhaps the most important new context that fostered this successful endeavor was a simple matter of passing time. The size and power of the North Coast timber industry was not what it had been some three decades earlier, and no one in Congress, the NPS, or the environmentalist community believed anymore that a park could, or should, take a go-it-alone approach toward natural resource management. In short, private landowners and

RNSP operated in a wider constellation of government agencies and interest groups that sought resolution rather than victory in land-use debates. The antagonists of the 1970s had also mellowed with age and came to know each other personally; this was certainly true of Bundros, other longtime RNSP staff members, and timber-company foresters who had worked in the area for two decades and more. The results of these new relationships were impressive, with some years garnering as many as eighteen THP reviews and 40 miles of upgraded or decommissioned roads. In the case of watershed management in the Redwood Creek basin, it seemed as if the twenty-first century had finally caught up with—or grown up to—the cooperative visions of the late 1960s.[118]

The ethic that shaped the RNSP approach to the upper watershed was reflected throughout the natural resources program as well, and was recognized as a model for the Park Service as a whole. In 1996 Terry Hofstra, division chief for Resources Management and Science, received the Natural Resource Manager of the Year Award for guiding RNSP staff "as they forged important working relationships among neighbors, parks, and private entities. A leading proponent and facilitator of interagency and intra-agency and private sector cooperation," Hofstra was singled out for managing RNSP within an ecosystem- or basin-wide context that required thoughtful and creative engagement with the many public agencies and private interests along the North Coast.[119]

As an example of this approach, Hofstra's award notice included a description of a deal he was able to strike among the USFWS, a private timber company, and RNSP to increase nesting habitat for the endangered marbled murrelet.

> When an adjacent landowner recently petitioned the USFWS for a permit to log the remaining 564 acres of old-growth redwood from its property, Hofstra, ironically, foresaw the potential for long-term benefit to the murrelets within the park. By preparing a second-growth forest management plan in the interim, the parks are now poised to accept funds, mandated by the ESA, to counter habitat disruption from the

logging company. If its request for a permit is approved, the firm would pay for thinning ten acres of second-growth forest within the parks for every acre disturbed on private land. Thinning a second-growth forest increases the speed by which the woods return to old-growth, providing increased future habitat for murrelets. If this comes to pass, Hofstra sees it as "a timely and much needed example of the flexibility of the Endangered Species Act in providing for endangered species preservation while accommodating some commercial activities."[120]

### A Forest of Information

While the projects in the upper watershed resurrected principles and achieved objectives from two and three decades earlier, the mid-1990s also saw the culmination of a two-part effort to effectively assess and manage the vast amount of information generated by resource management projects. As early as 1979, park staff working on the original watershed rehabilitation plan noted that information management "was essential for effective program progress," and they called for the creation of an information management branch within the Technical Services Division. The role and function of information services staff they described would have been to "acquire, organize, analyze, store and retrieve park resource and other relevant information for park management and for the Rehabilitation Team."[121]

Little came of this initial appeal, however, in part because few outside of the rehabilitation program understood the sheer volume and complexity of information that would be generated by the design, implementation, and monitoring of restoration projects and other resource management work.[122] The first real effort to directly address part of this issue came in early 1988, when the park received a new position authorization for "a qualified computer programmer . . . for development of an effective GIS and resource information management system."[123] The hiring of Jim Rogers in June and the initiation of the park's first GIS mapping projects the following year did correspond to one of the key concerns about information use

and management; namely, “to acquire, organize, and analyze” data, to update it, and to present it in a usable fashion to park personnel and other interested parties.

The development of a GIS database was not a smooth process, however. At the time, NPS guidelines and regional support for the implementation of GIS projects remained undefined, and most of RNP’s early computers were not initially compatible with GIS programs. As the division’s dedicated computer systems analyst, Rogers was also pulled in multiple directions, as park staff required his assistance with new computers, operating systems, and programs.[124] Consequently, it was not until 1992, when staff from several divisions formulated and submitted a GIS project statement to the Western Regional Office, that Redwood would be authorized to develop a GIS program implementation plan. This in turn led to the acquisition of new computers, software, and a large flatbed pen plotter for mapmaking, and opened the door for a series of “meetings and numerous consultations . . . with other agency and organizations fostering information, technique and data exchanges as well as equipment sharing.” Through this nearly year-long process, RNP geologist Dave Best took on the task of entering park data into the GIS system, and in cooperation with Rogers, “established standard operating and program implementation procedures, policies and standards.”[125]

With Best in the lead, the GIS program became a key instrument through the 1990s for staff working in the Resources Management and Science Division on rehabilitation projects, biological assessments, archeological surveys, surveys of upper Redwood Creek watershed land uses, and a host of other projects. The technology also had important parkwide applications, and made significant contributions to the *GMP*/*GP* planning process.[126] Indeed, all park divisions made frequent requests for maps and data analyses that became essential management tools. Redwood’s GIS program also fostered the parks’ increasingly important relationships with outside groups. As a main partner in the North Coast Geographic Information Cooperative, which included an array of federal, state, local,

and private organizations, the GIS program shared data on park projects with interested groups and partners in the region. The technology also furthered RNSP's reputation in the NPS as a leader in resource management. In 1997, Best was selected by the NPS Washington Support Office to assist Venezuela's National Institute for Parks in the development of their own GIS program.[127] The following year, in conjunction with staff from the USGS Biological Resource Division, the RNSP GIS program received National Resource Preservation Program funding in 1998 to develop an innovative slope-stability model for Redwood Creek.[128] By 1999, GIS had become so integral to park management that it occupied 3.65 FTE, a strong validation of a twenty-year-old vision to effectively generate and utilize park resource data.

Redwood also addressed the second half of the original 1979 concern about information use and management ("to store and retrieve park resource and other relevant information") when a museum curator position was created within the cultural resources branch of Resources Management and Science and James "Bow" O'Barr was hired in 1996. As an NPS museum management plan team reported in 1997, the management and storage of park artifacts and archival materials up to that time had been "dismal."[129] Artifacts, which included archeological specimens, commemorative or "historical" items, and an assortment of books, artwork, and Native American baskets, were housed in a variety of locales. Some were in Arcata—first at the park offices in the old Jacoby Storehouse building and then later at the Stewart School building—while others were at the Crescent City headquarters in a walk-in safe and then moved into an attic crawl space.

Although hardly ideal, at least these objects were stored in areas where they could be recorded or retrieved by various park staff. The material and data generated by "the large number of natural and cultural resource management studies and other research projects conducted in the park after 1978" remained scattered throughout the park, with most of it remaining "in the offices of [the] park staff" who produced them.[130] This in itself was not a

problem, since those who generated the data tended to consult it the most. But salmonid studies, rehabilitation reports, survey notes, and other materials squirreled away in offices were unavailable to others, who often did not even know of their existence, and could not be integrated into a larger information database like GIS. Even worse, the insecure and casual manner in which this information was stored often resulted in its loss or destruction when an employee moved, retired, or simply reorganized an office. As Lee Purkerson recalled, this occurred because "people didn't appreciate what they had, or know what they had. And we didn't have a decent place to store and keep that stuff safe."[131]

Shortly after O'Barr was hired, "all museum objects associated with archaeology, ethnography, and archives were moved to a special facility within the Arcata Office."[132] Desk files and other materials from staff offices were accessioned and cataloged as well. Besides creating and securing an acceptable storage site, much of the curator's initial effort was dedicated to cataloging specimens related to natural resource management prior to 1987; this included soil samples, fish scales, aquatic invertebrate samples, plant and fungi specimens, and a host of related archival materials. By 2000, the parks' collections consisted "of a minimum of 200 linear feet of field notes, documents, and maps (enough to fit on about 30 library book shelves and 15 map cabinets); and some 70,000 photograph prints and negatives." The scale and the significance of the material, and the effort required for its organization and management, garnered designated ONPS funds and outside grants. The curator also received necessary assistance from staff out of the NPS Western Archeological and Conservation Center, term archivists funded by the national Volunteers in the Parks program, and personnel from HSU.[133]

Although information management made significant strides in a few years, RNSP did not have a facility that could process and store the parks' rapidly growing trove of data, specimens, and old files until the new South Operations Center (SOC) opened in Orick in May 2003. With 2,000 square feet of storage area for archives and a collection of some

450,000 objects, a substantial portion of the building's overall cost and function—in terms of design, the inclusion of specialized furnishings and shelving units, and total floor space—is devoted to what park staff once described as "stor[ing] and retriev[ing] park resource and other relevant information."[134] While the significance of these matters can certainly be measured in terms of square footage and costs, their location in Redwood's largest and most important new administrative facility probably gives an even fuller indication. Indeed, the colocation of the park's archival collections with so many other offices and personnel involved in almost every aspect of park management confirmed the importance of these materials for the future development of the park. In short, it fit within a broader parkwide program of consolidating people and information to better facilitate cooperation across administrative divisions and branches as well as facilitate cooperation with other agencies and partners.

### INTEGRATED AND COLLABORATIVE RESOURCE MANAGEMENT: THE EXAMPLE OF RESTORING CULTURAL AND NATURAL LANDSCAPES IN THE BALD HILLS SINCE 1992

The new SOC replaced a cramped and inconvenient facility on the other side of the Orick Valley that was described as something of a "ghetto," but it was more than just a new building.[135] The 2003 opening represented the culmination of a plan that first began with the suggestion in the late 1980s to integrate Technical Services and Resources Management into one division. Besides bringing almost the entire Resources Management and Science staff from the old Orick and Arcata offices together at one site, the new building also fulfilled a number of other management goals: it brought a significant park presence into the heart of Orick; it created new administrative offices and facilities at the south end of the park for Interpretation, Visitor Protection, and Maintenance staff, as well as their counterparts from California Department of Parks and Recreation (CDPR); allowed for more regular contact and cooperation among different branches, divisions, and agencies working in the southern

end of the park; and created much needed space for cultural resources branch of Resources Management and Science as well as the RNSP Archives and curatorial collection.[136]

The construction of the new SOC building in Orick was significant for the park as a whole, and natural resources management in particular, but it marked a special milestone for cultural resources management at RNSP. Park archeologist Ann King Smith had been calling for a curatorial position and designated storage facility since the early 1980s, and described both in a 1995 report as long overdue “critical needs.” The new facility not only addressed these needs but also created more opportunities for face-to-face encounters with the rest of the division as well as personnel involved in maintenance, interpretation, and fire management that needed to consult on cultural resource compliance issues. Colocation at SOC cut down on travel for all parties, allowed for the easier sharing of databases and software, and provided a physical setting for informal but essential information sharing. The proximity of personnel from different branches and divisions also contributed to making cultural resources a more conscious component of resource management projects.

One area where all of these processes already operated at a high degree was in the application of a Bald Hills vegetation management plan. In the early 1980s, as part of the overall watershed restoration program for Redwood Creek, park staff and outside researchers had conducted a variety of studies in the Bald Hills area that examined flora, fauna, soils, geological processes, and cultural resources. This work made it abundantly clear that the open areas along the ridge between Redwood Creek and the Klamath River had undergone a great deal of change in the past century and a half. The loss of anthropogenic fires in the late nineteenth century, as well as the ongoing effects of grazing and logging, had created a host of threats to the ecology of the Bald Hills, including encroachment of conifers onto the open grasslands or prairies, invasion of exotic grasses, and erosion along roads and heavily grazed areas.

Although generally well known and understood by the mid-1980s, it was not until the end of the decade, when most of the heavily logged and roaded areas of the lower Redwood Creek watershed had been treated, that park managers gave more sustained attention to the host of largely unaddressed problems in the Bald Hills. The result was the *Bald Hills Vegetation Management Plan* (1992), which pushed Redwood's watershed restoration into a new realm: instead of rehabilitating forest areas, park staff worked to push back encroaching conifers and reconstitute the grasslands and oak woodlands of the Bald Hills. The management plan, which also encompassed newly acquired lands in the upper Coyote Creek drainage, also established important bridges between the park's natural resource management program and the Yurok tribe.[137]

Because the ultimate goal of the Bald Hills plan was to restore and maintain the landscape as it had been used prior to the mid-nineteenth century, understanding past Native American use of the area, which remained a place of great cultural significance to Yuroks and Chilula descendants, became an important component of the restoration program. Centuries of extensive Native American use of the Bald Hills had created and sustained "fire yards": extensive clearings within a forested area maintained by intentional burning. The resulting landscape attracts large game animals, promotes greater diversity and abundance of valued plants and grasses, keeps regular camping areas free of pests, and promotes healthy, disease-free stands of acorn-producing oaks. Along with the broad fire yards, the Bald Hills area also had several "fire corridors": open trails along ridgelines created and maintained by fire that had many of the same beneficial characteristics of fire yards.[138]

By the time RNP started to implement the new Bald Hills plan, a quarter of the precontact extent of the open prairies and woodlands had become Douglas fir forest, and another half was threatened with encroachment by young trees. The remaining prairie areas, which had largely been kept open through grazing, were often crowded with exotic grasses

and sedges that had overrun most of the remaining native plants and threatened the floral, faunal, and avian diversity of these unique upland areas. In 1993, about 1,500 acres of prairie were treated with fire, which had an immediate and dramatic effect. “Among the post-burn fire effects were an increase of native species diversity, reduced fuel loads, high conifer seedling mortality and a reduction in key exotic plant species.”[139] Based on this initial success, the controlled burning program annually treated between 500 to 2,000 acres of prairie and oak woodland, with some areas receiving treatment as frequently as every three years. Along with the application of fire, park crews also removed large and small conifers to restore inundated prairies and oak woodlands. The results from this part of the vegetation management plan were equally dramatic, with some 2,000 acres of forested area returned to woodland and grass in the first five years—areas that were then subsequently treated with fire.

Unlike watershed rehabilitation in the logged-over sections of the Redwood Creek basin, the restoration of the Bald Hills to mid-nineteenth-century conditions had clear implications for some of the park’s most significant cultural and historic resources. The area already contained the Bald Hills Archeological District, and local Native American communities still had strong associations with the area. (Concerns that would later be recognized in management documents such as the Bald Hills Ethnographic Landscape.) Recreating the ecological diversity and broad vistas of the area certainly fit within the park’s larger effort to rehabilitate park landscapes, but doing so also promised to restore and maintain conditions associated with Native American land-use regimes and early ranching. As restoration of the Bald Hills proceeded and as the newly recognized Yurok tribe (along with Chilula descendants living on the Hoopa Indian Reservation) made clear their interests and concerns about the area, the distinction between cultural and natural resource management blurred considerably. In the process, Smith and Native American

representatives developed a joint focus on the area that provided a model for subsequent collaboration between NPS staff and North Coast Indian communities.[140]

Following the integration of national and state parks management and the ensuing process of developing a new *GMP*/*GP*, RNSP made a more concerted effort to restore the prairies and woodlands of the Bald Hills in ways that better approximated aboriginal land-use regimes. In light of the RNSP-Yurok memorandum of understanding, the Bald Hills vegetation management plan also incorporated American Indian participants "in the identification, designation, and management of . . . cultural and ethnographic landcsapes." The goal was not simply to recreate precontact landscapes, but to enhance or restore their cultural functionality and thus foster their use. The significance of certain food and medicinal plants, the productivity of oaks (for acorns), the amount of browse for deer and elk, the abundance and quality of basket-making materials would all become part of the parks' overall management goals for the Bald Hills.[141]

The modified Bald Hills vegetation management plan, as put forward in the *GMP*/*GP*, placed cultural resources management at the intersection of multiple programs and interests that included Yurok representatives as well as California Conservation Corps, CDPR, and NPS staff involved in prescribed fire applications, fire suppression, exotic plant control, seed collection, fish and wildlife management, and vegetation management. Because wildland fire management was so central to the Bald Hill rehabilitation, and had become a prominent feature in resource management programs throughout the Park Service, cultural resources management also collaborated with the northern California and southern Oregon Fire Effects Monitoring Team, which were housed at RNSP and funded by FIREPRO (the Park Service's fire management budget planning and allocation system).[142]

The formulation of the new Bald Hills plan in the *GMP*/*GP* also occurred in conjunction with two other significant cultural resource projects: an updating of the National Register of Historic Places nomination for the Lyons Ranches Rural Historic District, which

included additional structures and initiated a multiyear program to stabilize significant historic buildings, and the designation of the Bald Hills Ethnographic Landscape. The latter project followed from the original 1992 *Bald Hills Vegetation Management Plan* as well as King's more general concern that RNSP needed to develop an "ethnographic overview and assessment and traditional use study."[143]

### CULTURAL RESOURCES MANAGEMENT: OLD CHALLENGES IN A NEW CENTURY

These were significant achievements, and like the new SOC building they represented the attainment of long-held goals that could serve as the basis for planning new ways to more fully integrate cultural and natural resource management. Yet like other branches and divisions in RNSP, the cultural resources management branch struggled with the same chronic budgetary shortfalls that plagued the NPS as a whole. Besides the curator position created in 1996, cultural resources was staffed by one permanent archaeologist and a temporary, part-time position "funded by cultural cyclic maintenance funds." As Smith noted in her comments on the 1994 update of the park's *Resources Management Plan* (RMP), this was hardly enough to manage Redwood's cultural resources program, which included compliance with state and federal policies and guidelines, the regular evaluation, protection and interpretation of park cultural resources, guiding and assisting all cultural resource management projects at Lava Beds National Monument, Lassen Volcanic National Park, and Whiskeytown National Recreation Area, and serving as Redwood's liaison with local Native American communities. Even the most cursory overview of these many projects led to a single, inescapable conclusion: RNSP suffered from "a major lack of cultural resources staff."[144]

The cultural resources component of the 1994 RMP included fifteen project statements that ranged from an increase in base funding to hiring another permanent, full-time archeologist to establishing a short-term oral history program. Almost all of the statements were verbatim carryovers from the 1986 RMP, which largely reiterated the

suggestions of an operations evaluation by the Western Regional Office earlier that year. In 1999, another update of the RMP repeated all of the same needs stated in 1986 and 1994—except for the park curator position, which had been filled in 1996.[145] The basic repetition of past "critical needs" was more than a rehash of old reports and repackaging them for a regular cycle of RMP updates; rather, it was affirmation that the problems first identified in the mid-1980s remained chronic and long-standing.

The low-level holding pattern in which cultural resources management operated certainly reflected budgetary concerns both at Redwood and throughout the NPS. Yet it also had roots in the program's ancillary role within the watershed rehabilitation and natural resource management projects of the 1980s and early 1990s. When Lee Purkerson hired Smith in the early 1980s, he told her that she needed to be "an advocate for cultural resources" who could take the program beyond required surveys and compliance reports for rehabilitation projects. Smith took this admonition to heart and soon earned the nickname "AK-47" from Purkerson in recognition of her strong efforts—first, for completing a large number of rehabilitation-related projects and then, for working to expand the program in light of the park area's special significance to North Coast Indian communities and its rich history of land use.[146] These latter efforts mostly fell under the purview of the cultural resource manager's duties as the park's "Indian liaison," and they certainly bore fruit in the wake of the Bald Hills projects, the RNSP-Yurok General Agreement, and the joint planning process between NPS and CDPR that led to the *GMP*/*GP* for RNSP. Through most of the 1990s and into the twenty-first century, however, a host of new responsibilities only made cultural resources staff react in accordance with the conditions that Purkerson hoped the program might avoid.

By the mid-1990s, with most of the cultural resource inventory surveys for watershed rehabilitation-related projects having long been completed and the program operating on a diminished scale, the time might have seemed especially ripe for the kind of advocacy "for

cultural resources" that Purkerson once desired. Instead, the overall workload and number of responsibilities assigned to cultural resources management increased in ways that made such advocacy impossible. The time and energy that was previously devoted to inventory surveys of watershed rehabilitation project areas was instead directed toward the management of cultural resources management projects at Whiskeytown-Shasta-Trinity National Recreation Area and Lassen Volcanic National Park, which respectively lay 160 and 230 miles east of RNSP. Like Redwood, these parks have complex land-use histories and encompass areas of deep significance for surrounding Native American communities; but the scale of these new responsibilities forced the small cultural resources management staff based out of RNSP to narrow rather than broaden the scope of its endeavors. As duties and projects multiplied, and responsibilities for ongoing programs at RNSP continued unabated (including new watershed rehabilitation projects in the late 1990s and early 2000s), cultural resources management became a simple adjunct of park management and policy development. Karin Anderson, who has served as the cultural resources program manager for RNSP since 2001, notes that responsibilities across multiple parks and the requirements of the National Historic Preservation Act (NHPA), "have made the cultural resources program a mostly regulatory and compliance arm of park management to facilitate the array of projects that are undertaken within RNSP."[147]

With staffing levels unchanged, RNSP has had to turn to outside contractors to fulfill a growing number of NHPA-related projects. In 2001, for instance, the cultural resources program received authorization to contract out an ethnographic overview/traditional use study for both state park and national park lands. The overview was also expected to serve as the basis for four other projects that had long been called for in previous RMP updates: a set of guidelines for Native American consultations; an inventory of ethnographic place names; an oral history program; and nomination of traditional cultural sites to the National Register. Cultural resources management, like most other programs at Redwood, also

increased the scale of its work through projects and funding that were part of larger partnerships and cooperative efforts.[148]

### TRIALS OF A TWENTY-FIRST-CENTURY PARK

Following old trends and setting new directions, Redwood grew and changed in important ways in the ten years that followed the formation of RNSP. When Ringgold and Sermon retired from their respective careers in 2003, they could look back much in the same manner that Superintendent Ehorn had looked ahead in 1994. By the thirty-fifth anniversary of Redwood National Park's establishment, and the twenty-fifth anniversary of its expansion, it was easy to conclude that a "cooperative management strategy [had] improve[d] public service and enhance[d] resource protection" in clear and significant ways.[149] In the process, the parks had also begun to make good on the essential, but long-impossible, promises of Redwood's founding years: "the opportunity for all those affected—Federal, State, and local government agencies; timber and other regional industries; conservation organizations; and the people of Del Norte and Humboldt Counties—to work together to develop courses of action for their mutual benefit"; and to model "a new and radical approach to park preservation and a precedent for cooperation [between] industry and the Government . . . [that would] change the course and values of the nation with respect to its approach to natural resources."[150]

The larger processes that brought success in these matters—new funding sources that favored cooperative endeavors, the proliferation of private organizations involved in public lands management, and the growing array of public-private councils, projects, and consortiums, also came with important liabilities. Caught in a syndrome that became all too familiar in both the public and the private sector, RNSP staff spent increasing amounts of time planning projects and seeking funding, which necessarily cut into the time they had for carrying out needed programs. As basic operating budgets continued to fall and park staff were repeatedly forced to "do more with less," programs were necessarily scaled back and

new plans went unrealized. These conditions were exacerbated by another fundamental dynamic of cooperative management. With so many parties involved, and as personnel changed within each participating group, priorities changed and a sense of common mission often faltered. Agreements could also fail when the mission or makeup of a particular group conflicted with that of a partner organization. This was especially true in 2000 and 2001, when the Redwood Creek Landowners Association balked at new Environmental Protection Agency (EPA) restrictions for the allowable total maximum daily load (TMDL) of sediment in Redwood Creek.

The EPA determined that, despite years of cooperation among NPS geologists and upper watershed landowners, sediment discharges into Redwood Creek remained an unacceptable threat to endangered salmonid populations. The measurement of TMDL (which essentially defined sediment as a pollutant) and the determination of what was considered dangerous or healthful for aquatic life, was still a new science. Because it was new, and the EPA ruling essentially curtailed an important economic activity, it was understandably viewed with some caution and skepticism by private landowners.

The EPA decision did not place any of the cooperating parties working in the Redwood Creek basin in direct opposition with each other; neither RNSP staff nor any of the other NGOs concerned with environmental conditions in the basin were involved in crafting or implementing the new TMDL guidelines. There was significant disagreement on the significance and validity of the science used to determine TMDL amounts and their environmental implications. Park Service, USGS, and USFWS scientists who had produced many of the studies behind the EPA data certainly concurred with the agency's concerns about riparian and aquatic habitats, fish, and watershed processes. That concern was also shared by the Redwood Creek Landowners Association, but their sense that the science behind TMDL assessments was unproven threatened to break the partnerships that had formed in the Redwood Creek basin.

The TMDL issue ultimately allowed an old distrust to resurface. As Greg Bundros recalled, the science behind the TMDL assessments “used to be considered speculation,” but had “eventually become more widely accepted by the [timber] industry.” By the time this acceptance had come about, however, the disagreement was no longer about science. It had instead become fitted into the old categories of “environmentalist” and “pro-business” that had once so firmly separated the various interests in the Redwood Creek basin. The parties eventually agreed to disagree on the matter of TMDLs and the EPA, and instead focused on significance of a cooperative watershed management regime. Yet no one could deny that old fault lines had been exposed, and would persist within the broader commitment to cooperation.[151]

These and other concerns remained fundamental challenges in every administrative division and branch at RNSP in the years following the successful completion of the *GMP*/*GP*. In many respects, having this clear plan for the future management of the park only made the increased reliance on cooperative partners and soft money all the more challenging. Philosophical or institutional disagreements among partners could disrupt or set back projects of clearly identified importance to RNSP, as occurred with the TMDL issue. Moreover, when multiple funding sources were involved, the many strings that became attached to a project increased the likelihood that a tangled bureaucratic web could dilute the efficacy of RNSP management goals. At other times, the lack of financial support from the NPS could prevent park staff from taking the lead or even participating in a project that directly corresponded with RNSP management priorities. Whether the result of complex partnerships or chronic budgetary restrictions (which made partnerships so necessary), the vision of RNSP that was developed in the Partnership Vision and the *GMP*/*GP* planning process could become clouded by low expectations. Recalling the reasons for his retirement in 2003, Andy Ringgold said that he “just got tired of saying ‘no’ all the time” to important and necessary projects.[152]

The reliance on cooperative endeavors can foster creative new solutions, but when they are driven by ONPS budget shortfalls they more often than not lead to the deferment of critical actions. As longtime staff begin to retire, especially those in Resources Management and Science, who had been part of the exciting process of physically and philosophically defining Redwood in the post-expansion era and who served as leaders during the formation of RNSP, they will take with them a clear understanding of Redwood's founding purposes. With their absence, and as recent challenges persist, RNSP will need to revitalize and redefine itself again. This will either occur through a conscious reiteration of the terms that have defined the park up to this point, or in some new manner that adapts to changing circumstances in ways that create new, and still unforeseen, opportunities.

---

[1] *Superintendent's Annual Report: Redwood National Park—1989*, 1, CF A2621 "Reports and Related Correspondence: Superintendent's Annual Reports, 1988-1989, 1991-1994," RNSP Archives.
[2] *Superintendent's Annual Report: Redwood National Park—1991*, 3, CF A2621 "Reports and Related Correspondence: Superintendent's Annual Reports, 1988-1989, 1991-1994," RNSP Archives.
[3] Ibid.
[4] Ehorn, comments on draft administrative history. On aspects of Wheeler's career, see Douglas P. Wheeler, "Ecosystem Management: An Organizing Priniciple for Land Use," in *Land Use in America*, ed. Henry L. Diamond and Patrick F. Noonan (Washington, DC: Island Press, 1996), 155-72.
[5] *Superintendent's Annual Report—1991*, 1-2; *Superintendent's Annual Report: Redwood National Park—1992*, 2-3, CF A2621 "Reports and Related Correspondence: Superintendent's Annual Reports, 1988-1989, 1991-1994," RNSP Archives; and North Coast Interpretive Association (NCPIA), "Redwood National Park Take Over Alert," and "Old Growth Redwood Parks in Jeopardy," copies in CF A26 "Narrative Reports and Related Correspondence—1992," RNSP Archives. Also see "Like One Big, Happy Park," *Crescent City Daily Triplicate*, November 24, 2008, 1.
[6] Larry B. Stammer, "U.S. Takeover of 3 State Redwood Parks Studied" *Los Angeles Times*, November 7, 1991, 1; and NCPIA, "Take Over Alert," and "Parks in Jeopardy." The Yosemite example was particularly disingenuous since the 1905 recession to the federal government was in response to concerns about state managers allowing too much development in the valley.
[7] Jeffrey M. Gleckner [for the Crescent City–Del Norte County Chamber of Commerce] to Governor Pete Wilson, January 14, 1992, and Darrel C. Roberts, Executive Director for the Del Norte Economic Development Corporation, to Governor Pete Wilson, January 20, 1992, both in CF A26, "Narrative Reports and Related Correspondence—1992," RNSP Archives. Also "Turnover of State Parks Makes Sense in the Long Term," *Eureka Times-Standard*, November 8, 1991, A4; and Stammer, "U.S. Takeover of 3 State Redwood Parks."
[8] Arthur E. Eck, interview by author, June 26, 2008.
[9] Quotation is from *Final Report: California Coordinating Committee on Operational Efficiencies* (California Department of Parks and Recreation, National Park Service, March 1994), 1. Besides RNP and the three redwood state parks, the committee also studied issues surrounding Angel Island State Park and Golden Gate National Recreation Area, as well as Malibu Creek State Park, Point Mugu State Park, Topanga State Park, Leo Carillo State Beach, and the Santa Monica Mountains National Recreation Area.
[10] Ray Murray, interview by author, May 2, 2007.

[11] Final Report: California Coordinating Committee on Operational Efficiencies, 11-12; and Murray interview.
[12] *Superintendent's Annual Report: Redwood National Park—1994*, 3-4, CF A2621, "Reports and Related Correspondence: Superintendent's Annual Reports, 1988-1989, 1991-1994," RNSP Archives. Ehorn comments on draft administrative history.
[13] *Annual Report—1994*, 3-4. This was a far more formal and integrated designation than anything applied to the other two California state-federal park clusters, and reflected the significance, necessity for cooperation, and level of effort and clarification required to make this critical issue function in light of overlapping congressional and state mandates.
[14] "Appendix II: Public Review Process, Comments Received, and Responses," in *Final Report: California Coordinating Committee on Operational Efficiencies*.
[15] "Update on the Implementation of the Coordinated Management for Redwood National and State Parks, February 14, 1994"; "Minutes (Draft): Redwood National and State Parks Meeting to Discuss 1994 Resources Management Cooperative Projects, South Operations Center, March 10, 1994." Both documents in Ann King Smith Desk Files, South Operations Center, RNSP.
[16] Albright signed on March 17, 1994, and Murphy on April 11, 1994. A copy of the "Memorandum of Understanding by and between the California Department of Parks and Recreation and National Park Service Regarding Increased Coordination and Efficiencies," with signatures is included as Appendix III in *Final Report: California Coordinating Committee on Operational Efficiencies*.
[17] B. Noah Tilghman and Ray Murray, "Seeking Common Ground: Establishing Interpark Partnerships," in *Proceedings of the Second Symposium on Social Aspects and Recreation Research*, *February 23-25*, *1994*, *San Diego*, *California; General Technical Report PSW-GTR-156*, tech. coord. Deborah J. Chavez (Albany, CA: United States Forest Service, Pacific Southwest Research Station, 1995), 93-97, http://www.fs.fed.us/psw/publications/documents/psw_gtr156/psw_gtr156.pdf (accessed June 3, 2008). Tilghman, who was the California Department of Parks and Recreation (CDPR) senior park and recreation specialist, and Murray, who was the NPS chief of Planning, served as the two agency liaisons for the committee.
[18] Ibid., 95.
[19] *Annual Report—1994*, 4. Also "Implementation Report for the Redwood National and State Parks for the period February 1-October 12, 1994," reproduced as an appendix in *Annual Report—1994*, 45-51.
[20] Ibid., 5; and Rick Sermon, interview by Neil Surprenant and James O'Barr, July 19, 2004, digital recording on-file in RNSP Archives.
[21] Albrights' signature came April 11, 1994. The Northwest Plan was completed on April 13, 1994.
[22] "State Parks, NPS Receive Partnership Award," *California Biodiversity News* 3 (Fall 1995), http://www.ceres.ca.gov/biodiv/newsletter/v3n1/partnership_award.html (accessed June 6, 2007). Murphy would later leave his position with CDPR to become deputy director of the National Park Service in 2001.
[23] RNSP was directly cited as a model for the creation of the Lewis and Clark National Historical Parks in 2004, which combined Fort Clatsop National Memorial and other federal properties with state historic sites and parks in Washington and Oregon. See the "Statement of Paul Hoffman, Deputy Assistant Secretary, Fish and Wildlife and Parks, U.S. Department of the Interior, Before the Subcommittee on National Parks of the Senate Committee on Energy and Natural Resources Concerning S. 2167, to Estabish the Lewis and Clark National Historical Park in the States of Washington and Oregon", http://www.doi.gov/ocl/2004/S2167.htm, (accessed June 6, 2007). RNSP is also frequently noted as an important model for other cooperative management programs in Jacquelyn L. Tuxill, Nora J. Mitchell, and Jessica Brown, eds., *Collaboration and Conservation: Lessons Learned from National Park Service Partnership Areas in the Western United States; Conservation and Stewardship Publication No*. *6* (Woodstock, VT: Conservation Study Institute, 2004).
[24] Andrew Ringgold, interview by author, May 14, 2007.
[25] "Annual Status Report, Redwood National and State Parks: For the Period August 1, 1995 to July 31, 1996," electronic document available from RNSP Archives.
[26] Ibid. Quotation on Ah Pah Trail comes from *Watershed Restoration: Redwood National and State Parks Visitor Guide* (2004): 7.
[27] "Annual Status Report."

[28] Quotation is from "The Director's Superintendent of the Year Award for Natural Resources Stewardship Nomination" (1999), RNSP Archives. Superintendent Ringgold received the award at a ceremony in June 2000; see *Natural Resource Year in Review—2000* (Washington, DC: U.S. Department of the Interior, National Park Service, 2000), 17 June 2001.
[29] Murray quoted in *National Park Service Partnerships: Redwood National and State Parks* (13 August 2003) http://www.nps.gov/partnerships/redwood_nsp.htm 8 June 2007.
[30] Ringold and Rick Sermon, "Redwood National and State Parks," in Tuxill et al., *Collaboration and Conservation*, 19.
[31] Eck interview; "Squad Meeting Minutes" (12 September 1995) CF A4031, Folder no. 9; "Fiscal Year Cooperative Goals and Accomplishments, 1995-2002," file provided to the author by Ringgold.
[32] "Superintendent of the Year Award Nomination."
[33] *National Park Service Partnerships*. On efforts to prevent the widening of U.S. Highway 101 through Del Norte Redwoods State Park, see "Road through Redwood Back to Drawing Board," *National Parks* 69, No. 5/6 (May/June 1995): 13-14; and Gabrielle Barnett, "Drive-by Viewing: Visual Consciousness and Forest Preservation in the Automobile Age" *Technology and Culture* 45 (January 2004): 49. Some upgrading of U.S. Highway 101 did occur in the area, but was limited to a minor realignment within an existing right-of-way and the removal of no more than five old-growth trees—instead of the several hundred called for in the original plan.
[34] "Annual Status Report."
[35] National Park Service Partnerships.
[36] In comments on the author's draft Administrative History, Ringgold recalled that a special effort was made to create a new logo that did not repeat traditional NPS or CDPR designs.
[37] Final Report: California Coordinating Committee on Operational Efficiencies, 16.
[38] "Annual Status Report."
[39] *Redwood National and State Parks*, *Humboldt and Del Norte Counties*, *California: Final General Management Plan/General Plan*, *Environmental Impact Statement/Environmental Report*, 2 vols. ([Denver]; [Sacramento?]: U.S. Department of the Interior, National Park Service; California Department of Parks and Recreation, 1999), 2: 46-59 (hereafter *Final GMP/GP*, *EIS/ER*).
[40] *Final GMP/GP*, *EIS/ER*, 1:xi-xiii.
[41] *Final GMP/GP*, *EIS/ER*, 1:ix-xi.
[42] William J. Clinton, "Memorandum for the Heads of Executive Department and Agencies," at *National NAGPRA*, http://www.cr.nps.gov/nagpra/AGENCIES/Clinton_Memorandum.htm, , 9 June 2007.
[43] Memorandum of Understanding Among National Park Service, Redwood National Park, California Department of Parks and Recreation, Prairie Creek Redwoods State Park and The Yurok Tribe for Government to Government Relations"; reprinted as Appendix C in *Final Final GMP/GP*, *EIS/ER*, 1:413-16). As noted in the title of the document, this agreement only covered NPS lands and lands of the one state park that lay entirely within Yurok aboriginal territory.
[44] *Final GMP/GP*, *EIS/ER*, 1:47.
[45] "Final Report," 16.
[46] *Final GMP/GP*, *EIS/ER*, 1:3.
[47] *Redwood National and State Parks*, *Humboldt and Del Norte Counties*, *California: General Management Plan/General Plan* ([Denver]: U.S. Department of the Interior, National Park Service; California Department of Parks and Recreation, 2000), 3 (hereafter *GMP/GP*).
[48] The language on the arrangement between the NPS and CDPR at RNSP comes from a brief section of Pub. L. No. 105-83, which authorized a vast array of appropriations for the Department of the Interior. The language relating to RNSP also reserved key authority to the Secretary of Interior: "The purpose of such agreements is to acquire from and provide to the State of California goods and services to be used by the Secretary and the State of California in cooperative management of lands if the Secretary determines that appropriations for that purpose are available and an agreement is in the best interests of the United States." Department of the Interior and Related Agencies Appropriations Act, Pub. L. No. 105-83, 111 Stat. 11543 (November 14, 1997).
[49] *GMP/GP*, 13-14.
[50] Ibid.
[51] Ibid., 110-11.

[52] With the exception of the standoff over park integration in 1991-1993, when state park interpreters took the lead in opposing the NPS "takeover"—as they termed it—and Director Murphy ended the practice of using NPS seasonal rangers in state park campfire presentations, visitor use, and interpretation had always been an area of high cooperation between RNP and the state parks since the early 1980s. For the exclusion of NPS interpreters from state park campfire talks, see *Annual Report—1992*, 1-2; and *Annual Report—1994*, 2-3. For cooperation since the early 1980s, see chapter 6.
[53] *GMP/GP*, 64.
[54] Ibid., 63-69.
[55] Superintendent's Annual Report: Redwood National Park—1983, 8, CF A2621, 1980-1986.
[56] *GMP/GP*, 58.
[57] The 1968 Redwood National Park Act allowed for vehicle access to the beach along Freshwater Spit, but the act—and subsequent expansion act—also authorized the Park Service to develop regulations to protect park resources and visitors. The possibility for multiple interpretations of the authority to regulate vehicles on the beach remains somewhat controversial even today. In response to protests in Humboldt County about losing vehicle access to the beach, Congress passed the Continuation of Traditional Commercial Surf Fishing, Redwood National and State Parks Act (120 State. 2064 Pub. L. No. 109-362 [October 17, 2006]). For an overview, see Julie Cart, "Storm over North Coast Rights; a New Federal Law Lets Some Surf Fishermen Drive onto the Beaches at Redwood National Park, Where Many Have Long Resented Policies That Restricted Access" *Los Angeles Times*, December 18, 2006, B1, 12. Under the new *GMP/GP*, vehicle use was allowed for traditional Yurok fishing on Gold Bluff Beach in Prairie Creek Redwoods State Park. The "traditional" use referenced in the Continuation of Traditional Commercial Surf Fishing, Redwood National and State Parks Act applied to seventeen non-Indian fishers.
[58] *GMP/GP*, 59.
[59] California Coastal Commission, "Consistency Determination for General Management Plan" (CD-011-00), March 14, 2000; cited in "Staff Recommendation on Consistency Determination No. CD-033-04, Freshwater Lagoon Spit Development Concept Plan," July 14, 2004, www.coastal.ca.gov/cd/W15a-7-2004.pdf (accessed June 9, 2007).
[60] *Final GMP/GP*, *EIS/ER*, 1:63-64, 109, 129-30; and *GMP/GP*, 54.
[61] California Wilderness Act, State of California, Public Resources Code: Division 5, Chapter 1.3, Sections 5093.30-5093.40—California Wilderness Preservation System, http://law.justia.com/california/codes/prc/5093.30-5093.40.html, (accessed October 7, 2009).
[62] The Wilderness Act, Pub. L. No. 88-577 (16 U.S. C. 1131-1136). There are some exceptions to the 5,000-acre threshold for wilderness designation in a national park. For instance, if the area is on an undeveloped part of an island that is less than 5,000 acres, or if it is a less than 5,000-acre block of land that is part of a preexisting Wilderness Area prior to its addition to a national Park. The 1,363-acre Otis Pike Fire Island High Dune Wilderness in the Fire Island National Seashore is an example of the former condition, and the 2,917-acre Indian Peaks Wilderness in Rocky Mountain National Park is an example of the latter.
[63] *GMP/GP*, 76. In response to a civil suit by the Wilderness Society against the Department of the Interior, and in accordance with with NPS Management Policies 2001, section 6.2.1, the NPS conducted a Wilderness Suitability Assessment for RNP in 2005. Their conclusions essentially confirmed the elements of the *GMP/GP* regarding the nondesignation of national park lands as wilderness areas. Echoing both the 1980 Management Plan and the *GMP/GP*, the Wilderness Suitability Assessment concluded "that the lands within Redwood National Park do not warrant further study for wilderness evaluation at this time. However, following successful completion of watershed restoration activities in 12–15 years, or during the next General Management Plan effort, reconsideration of wilderness suitability for certain tracts of land within Redwood Creek could be warranted." Quotation from "Notice of Assessment of Suitability and Non-Suitability for Further Study of Lands within Redwood National Park for Consideration as Wilderness Areas," *Federal Register* 71, no. 21 (February 1, 2006): 5362.
[64] *GMP/GP*, 56-58, 68-70. The proposal for a campground in the Bald Hills was made part of the Visitor Use Emphasis Alternative in the *Final GMP/GP*, *EIS/ER*, 1:131.

[65] Sylvia Van Kirk, *Davison Property: History of the Davison Ranch*, *Evaluation of National Register Eligibility* ([Arcata, CA]: Redwood National Park, 1992).
[66] The paragraphs on Davison Ranch are drawn from the following sources: Van Kirk, *Davison Property*; *Davison Ranch: Draft Development Concept Plan*, *Environmental Assessment* ([Arcata, CA]: Redwood National and State Parks, 1995); *Davison Ranch: Final Development Concept Plan*, *Environmental Assessme nt* ([Arcata, CA]: Redwood National and State Parks, 1995); *Final Development Concept Plan Environmental Assessment: Davison Ranch*, *Redwood National and State Parks*, *Humboldt County*, *California* (Arcata: Redwood National Park, 1996); James H. Popenoe, *Delineation of Jurisdictional Wetlands at the Davison Ranch Acquisition*, *Redwood National and State Parks* ([Orick, CA]: Redwood National and State Parks, South Operations Center, 1997); "Story of the B-Mill Mitigation and Restoration," available on RNSP intranet, file:///S:\team\shdata\"B-Mill digital photos"\WebPages\B-Mill.htm, February 11, 2005; and Aida Parkinson, "Planning and Development in the Davison Ranch Area," typescript given to the author on May 15, 2007.
[67] *Davison Ranch Draft Development Concept Plan*, errata sheet.
[68] Ehorn's interest in reestablishing a horseback-riding concession at Redwood was well known, and it was listed as a management priority in his first annual report; *Annual Report—1989*, 3-4.
[69] Some of this research is highlighted in *GMP/GP*, 250-51.
[70] Ibid., 54.
[71] Thomas H. Kuchel Visitor Center, Pub. L. No. 105-277, div. A, Sec. 101(e) [title I, Sec. 146] (October 21, 1998), 112 Stat. 2681-231, 2681-267.
[72] *GMP/GP*, 54.
[73] Jim Ponenoe, "Update: Elk Meadow Restoration Web Pages," *Redwood Currents: Redwood National and State Parks Resource Management Newsletter* 8 (Mar/Apr/May 2001): 12.
[74] Parkinson, "Planning and Development in the Davison Ranch Area."
[75] *Redwood National Park Trail and Backcountry Management Plan: Environmental Assessment* (U.S. Department of the Interior, National Park Service, Redwood National Park, 2009).
[76] *Natural Resources Management Guidelines (NPS-77)* (Washington, DC: U.S. Department of the Interior, National Park Service, 1991), 1. The broader discussion of the Endangered Species Act and the NPS is informed by Napier Shelton and Lissa Fox, *An Introduction to Selected Laws Important for Resources Management in the National Park Service* (Denver: U.S. Department of the Interior, National Park Service, Natural Resources Publication Office, 2000); National Parks and Conservation Association, *Natural Resources Assessment and Ratings Methodology* (Fort Collins, CO: National Parks Conservation Association, Center for State of the Parks, 2008); Loyal A. Mehrhoff and Peter A. Dratch, "Endangered Species and the National Park Service," *Endangered Species Bulletin* 27, no. 1 (January/February 2002): 4-7; Richard West Sellars, *Preserving Nature in the National Parks: A History* (New Haven, CT: Yale University Press, 1997), 270-76.
[77] *Trail and Backcountry Management Plan*, 44-45.
[78] *Backcountry Trail Plan*, *Redwood and Skunk Cabbage Creeks: Redwood National Park* ([Denver?]: National Park Service, Redwood National Park, 1984).
[79] *Tail and Backcountry Management Plan*, 3.
[80] Ibid., 4.
[81] Ibid., 5.
[82] The effort to reconcile watershed rehabilitation and other park projects with threatened and endangered regulations are detailed in *A Conservation Strategy for Managing Threatened and Endangered Species in Redwood National and State Parks* ([Crescent City and Arcata, CA]: U.S. Department of the Interior, National Park Service, 2003).
[83] Quotation is from "Superintendent of the Year Award Nomination," copy given to the author by Andrew Ringgold.
[84] *Final GMP/GP*, *EIS/ER*, 1:88-89, 118, 128.
[85] This phrase is restated in *GMP/GP*, 54.
[86] Terry Spreiter, interview by Neil Surprenant and James O'Barr, July 26, 2004, digital recording on-file in RNSP Archives; and Spreiter, "Restoring Wildlands . . . A One-Time Opportunity," *Watershed Management Council Newsletter: Watershed Restoration* 4, no. 1 (Spring 1991), http://www.watershed.org/?q=node/102 (accessed May 8, 2010).

[87] The phrase "complete landform restoration" is used in *Final GMP/GP*, *EIS/ER*, 1:98, and in *GMP/GP*, 37.
[88] Quotation is from *GMP/GP*, 41. As Mary Ann Madej recalled, some of the arguments for partial or full restoration, and the economic as well as environmental issues that must be considered, were part of a "Roads Summit" in 1995 where "all disciplines had input into planning which roads would be treated on which schedule and which roads would remain as service roads." (Madej, written comments on the final draft of this administrative history). Some of the key concerns brought forward at the Roads Summit are presented in Ozaki, Judy Wartella, and Madej, "Environmental Tradeoffs in Management Decisions," in *Making Protection Work: Proceedings of the Ninth Conference on Research and Resource Management in Parks and on Public Lands*, ed. David Harmon (Hancock, MI: George Wright Society, 1997), 444-49.
[89] Quotation is from *GMP/GP*, 41
[90] The decline in the ONPS budget over the late 1980s and through the 1990s followed a system-wide trend throughout the NPS. Although paralleling broader trends within the NPS, some of Redwood's budget woes were unique to the park. For instance, the accounting methods used by the congressional Office of Management and Budget (OMB) were especially stringent; while park staff tallies had total expenditures at just $13 million by the mid-1990s, OMB calculations showed the original appropriation of $33 million was all gone. The loss of this expected funding source was critical, but it was further compounded by Redwood's reputation within the national park system as a generously funded park—especially in relation to other western parks of larger size or with greater visitation. As the NPS pie shrunk in the 1980s and 1990s, this impression only made it harder for Redwood to maintain, let alone increase, its baseline funding. Christopher E. DeForest, *Watershed Restoration*, *Jobs-in-the-Woods*, *and Community Assistance: Redwood National Park and the Northwest Forest Plan* (Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, 1999), 13-14; Terrence D. Hofstra, interview by author, April 8, 2007; Hofstra, interview by Neil Surprenant and James O'Barr, April 28, 2004, digital recording, RNSP Archives; and Ringgold interview. For budget levels, see *Redwood National and State Parks: Business Plan*, *2000* (Issued by the National Parks and Conservation Association as part of the NPS Business Plan Initiative, http://www.nps.gov/redw/parkmgmt/upload/business plan.pdf (accessed January 7, 2008).
[91] Quotation is from Mary Ann Madej et al., "Optimization Strategies for Sediment Reduction Practices on Roads in Steep, Forested Terrain," *Earth Surface Processes and Landforms* 31 (November 2006): 1654. Also see Madej, "Erosion and Sediment Delivery Following Removal of Forest Roads," *Earth Surface Processes and Landforms* 26: 175–90.
[92] "Superintendent of the Year Award Nomination."
[93] *Resources Management Plan: Redwood National and State Parks* (December 1999 Revision)," 19-20; "Superintendent of the Year Award Nomination"; *Superintendent's Annual Report: Redwood National Park—1996*, Lateral Files, South Operations Center (SOC).
[94] *Redwood National and State Parks: Business Plan*, *2000*, 14.
[95] For an overview of these kinds of funding sources and projects related to RNSP, see *California Coastal Salmon and Watersheds Program* (Sacramento: California Resources Agency, 2002). The Natural Resource Preservation Program (NRPP) was created in 1981 to fund natural resources research and management programs in the NPS. In 1993, research funds associated with NRPP were transferred to the National Biological Survey, which worked with other federal agencies as well as NPS. In 1996, the Biological Survey was subsumed within the USGS Biological Resources Division. Selection and development of research projects is a joint regional responsibility of NPS and USGS, and the close association between the USGS Redwood Field Office in Arcata and NPS staff facilitated the identification of NRPP-funded projects related to watershed rehabilitation and invasive plant removals.
[96] *Redwood National and State Parks: Business Plan*, *2000* 8-12, 32.
[97] Spreiter interview. The *Conservation Strategy for Managing Threatened and Endangered Species* (2003) provided clear guidlelines for various management activities (for example, watershed restoration, road maintenance, trail construction and maintenance, facility construction and maintenance, site restoration, backcountry use, and so on). Applying the strategy to a watershed rehabilitation management plan that encompassed significant parts of multiple watersheds was

another matter altogether. The many years required to produce the 201-page final Environmental Assessment for the *Redwood National Park Trail and Backcountry Management Plan* (*TBMP*) clearly illustrates the impossible nature of the endeavor. The *TBMP* involved 16.7 miles of trails (most of which had already been included in previously approved plans) and two small campsites. Altogether, the trails and campsites would comprise little more than a dozen acres. The geographic—and thus threatened and endangered habitat—scale of any Watershed Management Plan would dwarf the *TBMP* by orders of magnitude.

[98] *Redwood National and State Parks: Business Plan*, *2000*, 18-19, 24-25.

[99] [Draft] *Redwood Creek Estuary Aquatic Resource Management Plan* (n.d.); and [Draft] *Second Growth Forest Recovery Plan* (September 1996). The Road Inventory was to be a featured component of the never completed *Erosion Control and Disturbed Lands Restoration Plan*. The preliminary and ongoing nature of these plans are noted in *Strategic Plan for Redwood National and State Parks*, *2001-2005*, http://www.nps.gov/archive/redw/strategic_plan.html, (accessed May 8, 2006). The new draft plan for the estuary was in response to continued degradation of the estuary environment; namely, reduced oxygen levels as well as increased water temperatures and algae blooms due to breaching of the sand bar to prevent flooding of private lands and chronically low water flows between the embayment and the north and south slough. The draft plan proposed strategies for improving habitation conditions in the estuary, including reduction and/or alteration of the levee system in the lower creek channel, land acquisition, less controlled breaching, and restoration of riparian habitat.

[100] *These include Bald Hills Vegetation Management Plan and Environmental Assessment* (1992), *Exotic Plant Management Plan and Environmental Assessment* (1995), *Fire Management Plan*, *Redwood National Park* (1995), and *Resources Management Plan* (1999); all in RNSP Library.

[101] Richard West Sellars, *Preserving Nature in the National Parks: A History* (New Haven: Yale University Press, 1997), 267-275; National Research Council Committee on Improving the Science and Technology Programs of the National Park Service, *Science and the National Parks* (Washington, DC: National Academy Press, 1992); *Science and the National Parks II: Adapting to Change* (Washington, DC: U.S. Department of the Interior, National Park Service, 1993). Quotation and basic description of NPS Natural Resource Inventory and Monitoring Program is from *National Park Service: Nature and Science*, *Inventory and Monitoring* (7 August 2008), http://science.nature.nps.gov/im/, 22 September 2008. Recognition of the need for inventory and monitoring at Redwood was expressed in *Resources Management Plan* (1994), 5; and Hofstra Files, "December 1994 Revision of RMP for Redwood," RNSP Archives.

[102] *National Park Service: Nature and Science*, "Recommended Approach for Developing a Network Monitoring Program" (17 April 2006), http://science.nature.nps.gov/im/monitor/approach.cfm, 3 May 2010.

[103] Daniel Sarr, et al, *Klamath Network Vital Signs Monitoring Plan: Natural Resource Report NPS/KLMN/NRR—2007/016* (Fort Collins, CO: National Park Service, 2007), 20-23. Starkey and Larson had been NPS Research Scientists then transferred briefly to the National Biological Survey, which had been created within the Department of the Interior in 1993, and then transferred to the Biological Resources Division of the USGS. Their movement from the NPS to the USGS closely parallels the career of Dr. Mary Ann Madej, who began her career at Redwood National Park in 1978, became a research geologist in the Western Region in 1992, and then moved to the USGS in 1994 to become a research geologist at the Western Ecological Science Center—Redwood Field Station in Arcata.

[104] The Klamath Network's full-time, core staff consists of two permanent National Park Service personnel: a network coordinator and a data manager. In 2001, after the initial start-up period, Daniel Sarr became the KLMN network coordinator, and Robert Truit served as the data manager from 2001-2006. Since 2006, the data manager position has been filled by Sean Mohren. Along with Sarr and Mohren, three term staff members are also stationed at the KLMN offices in Ashland: an aquatic ecologist, a botanist, and a program assistant. Like other Networks in the National Park Service Inventory and Monitoring Program, the planning and design of the KLMN monitoring program followed a three-phase process. "Phase 1 of the process involves defining goals and objectives; beginning the process of identifying, evaluating and synthesizing existing data; developing draft conceptual models; and completing other background work that must be done before the initial selection of vital signs. . . . Phase 2 of the planning and design effort involves prioritizing and selecting the vital signs that will be

included in the network's initial integrated monitoring program. Phase 3 entails the detailed design work needed to implement monitoring, such as developing specific monitoring objectives for each vital sign, developing sampling protocols and a statistical sampling design, developing a plan for data management and analysis, and determining the type and content of various products of the monitoring effort such as reports and websites." *National Park Service: Nature & Science*, *Vital Signs Monitoring*, "Monitoring Planning and Design: The 3-Phase Approach," http://science.nature.nps.gov/im/monitor/3-PhaseApproach.cfm (accessed May 3, 2010).

[105] Karin Anderson Grantham, comments on draft administrative history for RNSP. A fuller accounting of the many "Partners and Associates" involved with the entire Klamath Network also includes Ball State University, California State University at Chico, Colorado State University, the Klamath Bird Observatory, Oregon State University, the USFS Redwood Sciences Laboratory, the University of California at Davis, the University of California at Santa Cruz, the University of Idaho, the University of Washington, the Western Regional Climate Center, and Zara Environmental; *National Park Service: Inventory and Monitoring Program*, "[Klamath] Network Partnerships, September 26, 2005, http://science.nature.nps.gov/im/units/klmn/Partnerships/PART_Main_Page.cfm,(accessed May 3, 2010).

[106] *Natural Resource Challenge: The National Park Service's Action Plan for Preserving Natural Resources* (Washington, DC: U.S. Department of the Interior, National Park Service, 1999); Stassia Samuels, "Natural Resource Inventory and Monitoring Program," *Redwood Currents: Redwood National and State Parks Resource Management Newsletter* 8 (Mar/Apr/May 2001): 6-7; Samuels, "Update: Natural Resource Inventory and Monitoring Program," *Redwood Currents: Redwood National and State Parks Resource Management Newsletter* 9 (June/July/Aug/Sept 2001): 15-16; Samuels and Daniel Sarr, "Network News: News of the Klamath Network and Inventory Program," *Redwood Currents: Redwood National and State Parks Resource Management Newsletter* 16 (June-October 2003): 20-21, 24; Sarr et al., *Vital Signs Monitoring Plan for the Klamath Network: Phase I Report* (Ashland, OR: Klamath Network-National Park Service, Ashland, OR, 2004); Sarah McCullough, *Inventory summary Report: FY2000-2004* (Ashland, OR: Klamath Network-National Park Service, 2006). Quotation is from *National Park Service: Nature and Science*, *Inventory and Monitoring*.

[107] For monitoring related to the Northwest Forest Plan, see Leslie M. Reid, *Monitoring and the Northwest Forest Plan* (Albany, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Research Station, 1994),http://www.fs.fed.us/psw/publications/reid/6MONITORC.htm (accessed May 30, 2007). The amount of staffing, and types of projects related to inventory and monitoring are suggest in the seasonal field schedules listed at the end of each issue of *Redwood Currents*, 1999-2004.

[108] Greg Bundros, written comments on author's draft Administrative History; Mary Ann Madej, *Redwood Creek Channel Maps*, *Redwood National Park Technical Report No*. *13* (Arcata: Redwood National Park, 1984); Madej and Vicki Ozaki, "Channel Response to Sediment Wave Propagation and Movement, Redwood Creek, California, USA," *Earth Surface Processes and Landforms* 21, No. 10 (October 1996): 911-27; Randy Klein et al., "Discussion of 'Erosion on Logging Roads in Redwood Creek, Northwestern California,'" *Journal of the American Water Resources Association* 36, No. 6 (2000): 1439-40; Madej et al., "Optimization Strategies for Sediment Reduction Practices on Roads in Steep, Forested Terrain," *Earth Surface Processes and Landforms* 31, no. 13 (November 2006): 1643–56. Dr. Madej first came to RNP in 1978. In 1994, she became a research geologist with the USGS Western Ecological Science Center (WERC), where she continued her work on Redwood Creek. She subsequently earned a PhD from Oregon State University in 2000.

[109] *Resources Management Plan* (1999), 21; The same quotation can be found in the *GMP/GP*, 36.

[110] Bundros comments on draft administrative history for RNSP; Jim Hight, "Who's Afraid of the TMDL?" *North Coast Journal Weekly*, January 4, 2001, http://www.northcoastjournal.com/010401/cover0104.html (accessed June 2, 2007). Southern Oregon/Northern California Coho salmon (*Oncorhynchus kisutch*) were officially proposed for listing July 25, 1995, and officially listed as threatened on May 6, 1997; see California Legislative Analysts Office, *Restoring Coho Salmon in California* (October 14, 1997), http://www.lao.ca.gov/1997/101497_coho_salmon/101497_coho_salmon.html, (accessed August 12, 2008). Also see National Marine Fisheries Service, *Status Review Update for Coho Salmon (Oncorhynchus Kisutch) from the Central California Coast and the California Portion of Southern*

*Oregon/Northern California Coasts Evolutionarily Significant Units* (Santa Cruz, CA: National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Southwest Fisheries Center, 2001).

[111] Terrence D. Hofstra, Greg Bundros, and Barry Hill, "Protecting Resources at Redwood National and State Parks through Cooperation and Understanding," in *Making Protection Work: Proceedings of the Ninth Conference on Research and Resource Management in Parks and on Public Lands*, ed. David Harmon (Hancock, MI: George Wright Society, 1997), 329-34; Bundros, interview by Neil Surprenant and James O'Barr, July 10, 2004, digital recording, RNSP Archives; and Bundros comments on draft administrative history.

[112] Madej, "Sediment and Hydrological Monitoring in Redwood National Park, 1991 Progress Report," n.p., RNSP Archives.

[113] Quotation is from Frederic H. Wagner, "Whatever Happened to the National Biological Survey?" *BioScience* 49, no. 3 (March 1999): 219-22.

[114] Ibid.; Madej, written comments on the final draft administrative history; and *USGS Western Ecological Research Center*, http://www.werc.usgs.gov/, (accessed May 8, 2010).

[115] Quotation is from U.S. Forest Service, "Northwest Forest Plan Review, http://www.fs.fed.us/r5/nwfp/, (accessed July 14, 2004). The literature on the Northwest Forest Plan is immense. For particularly relevant overviews see Christopher E. Deforest, *Watershed Restoration*, *Jobs-in-the-Woods*, *and Community Assistance: Redwood National Park and the Northwest Forest Plan* (Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, 1999); Kirsten Gallo et al., *Northwest Forest Plan*, *the First 10 Years (1994-2003): Preliminary Assessment of the Condition of Watersheds* (Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, 2005); Cassandra Moseley, *Northwest Forest Plan*, *the First Ten Years (1994-2003): Procurement Contracting in the Affected Counties of the Northwest Forest Plan; 12 Years of Change* (Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, 2006); and Valerie Rapp, *Northwest Forest Plan*, *the First 10 Years (1994-2003): First-Decade Results of the Northwest Forest Plan* (Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station, 2007).

[116] Quotation is from Ozaki, written comments on final draft administrative history for RNSP.

[117] *Natural Resource Projects Inventory Report: Redwood Creek Watershed Inventory and Restoration Association* (1997-2008), http://www.ice.ucdavis.edu/NRPI/NRPIdescription.asp?ProjectPK=7266, 6 July 2007; *Watershed Restoration*; *Redwood Creek National Watershed Center: Resources*, http://www.humboldt.edu/~storage/rcnwc/resources/government.html (June 3, 2007); Redwood Creek Watershed Group, "The Redwood Creek Integrated Watershed Strategy," co.humboldt.ca.us/planning/Prop50/01_RWC_IWS%20Final.pdf; DeForest, *Watershed Restoration*, 24-28; Ringgold nomination; and Bundros interview.

[118] Bundros and Hill, *Road Conditions and Erosion Potential in the Upper Redwood Creek Watershed* (Arcata: U.S. Department of the Interior, National Park Service, Redwood National and State Parks, 1997); *Draft Environmental Assessment: Erosion Prevention on Sierra Pacific Industries and Herb Russ Estate Lands*, *Upper Redwood Creek Basin* (Arcata: Redwood National and State Parks, 1998); *Redwood Creek Watershed Analysis* (Arcata: Redwood National and State Parks, Division of Resources Management and Science, 1996); *A Proposal for a Redwood Creek Watershed Assessment* (Arcata: Redwood National and State Parks, 2001); *Resources Management Plan* (1999)," 20-21; *Superintendent's Annual Reports—1996*, *1998*, *1999*, *2000*, *2001*, *2003*, all in Lateral Files, South Operations Center (SOC); and Hofstra et al., "Protecting Resources."

[119] "Director Kennedy Honors Natural Resource Stewards," *Park Science* 16, no. 3 (Summer 1996): 3-4. Also see Hofstra et al., "Protecting Resources."

[120] "Director Kennedy Honors Natural Resource Stewards," 3-4.

[121] Quoted in "The Redwood National Park Watershed Rehabilitation Program: A Progress Report and Plan for the Decade [Draft]," (Redwood National Park, June 1990), unpaginated typescript.

[122] As retired Environmental Specialist and former Associate Superintendent Lee Purkerson recalled, neither regional administrators nor Assistant Superintendent Don Spalding showed any "appreciation, concern for, or desire for" these matters L. Lee Purkerson, undated interview by Neil Surprenant and James O'Barr [Summer 2004], digital recording, RNSP Archives.

[123] "Watershed Rehabilitation Program: Progress Report and Plan for the Decade."

[124] A good deal of this history is detailed in ibid.
[125] The full adoption of Geographic Information Systems (GIS) is detailed in *Superintendent's Annual Report: Redwood National Park—1992*, 26-26, CF A2621 "Reports and Related Correspondence: Superintendent's Annual Reports, 1988-1989, 1991-1994," RNSP Archives.
[126] James O'Barr notes that a GIS program for cultural resources was developed in the late 1990s by Nelson Siefkin under Ann King Smith, in accordance with standards created by Western Archeological and Conservation center staff in Tucson. The funding for this particular application for GIS came through FIREPRO funds to assess fire effects. O'Barr, comments on draft administrative history.
[127] *ESRI Conservation Program Resources: Parks and Reserves*, http://www.conservationgis.org/links/parks1.html, (accessed July 13, 2008).
[128] *Superintendent's 1998 Annual Narrative Report*, RNSP Archives. Also see G. Legorreta Paulin and M. Bursik, "LOGISNET: A Tool for Multimethod, Multilayer Slope Stability Analysis," in *Proceedings of the iEMSs Third Biennial Meeting: "Summit on Environmental Modelling and Software,"* ed. A. Voinov, A. J. Jakeman and A. E. Rizzoli (Burlington, VT: International Environmental Modelling and Software Society, 2006), http://www.iemss.org/iemss2006/sessions/all.html (accessed August 12, 2008).
[129] Quotation is from *Redwood National and State Parks Museum Management Plan* (Seattle: NPS Cultral Resources, Columbia Cascades Support Office, 1997), 7.
[130] Ibid., 4.
[131] Purkerson interview.
[132] *Superintendent's 1998 Annual Narrative Report; Museum Management Plan*, 25-28; and Bow O'Barr, "Natural History Collections," *Redwood Currents: Redwood National and State Marks Resource Management Newsletter* 3 (Oct/Nov/Dec 1999): 9-10.
[133] Bow O'Barr, "Archiving and Cataloging Park Resource Management Records," *Redwood Currents: Redwood National and State Parks Resource Management Newsletter* 4 (Oct/Nov/Dec 2000): 5; Jonathan Bayless et al., *Redwood National and State Parks*, *Lassen Volcanic National Park*, *Whiskeytown-Shasta-Trinity National Recreation Area: Museum Management Plan* ([Oakland, CA]: U.S. Department of the Interior, National Park Service, Pacific West Region, 2008), 11-13.
[134] Although originally designed for the sole use of RNSP, the archival and museum storage facilities at SOC also includes materials from Lassen Volcanic NP and Whiskeytown-Shasta-Trinity NRA. As noted in the 2008 *Museum Management Plan*, the decision was made to transfer collections from Lassen and Whiskeytown to SOC [in 2005], and thus create a three-park storage repository. The decision was made during the process of developing a regional and national strategy for museum facilities as called for in a congressional appropriations act. A dialogue between the three parks and the region at the staff level led to an agreement that Redwood would serve as a repository for the majority of collections from Lassen and Whiskeytown." It should also be noted that the museum storage facilities in the General Services Administration Build-To-Suit building in Orick remain substandard (ibid., 22).
[135] The term was used by Ringgold in written comments on draft administrative history.
[136] A few RMS staff did not relocate to SOC. Personnel who regularly accessed the upper watershed via Highway 299 and/or worked closely with other agencies and faculty at Humboldt State University remained in the offices on Heindon Road in Arcata where they had recently colocated along with personnel from the Bureau of Land Management, the U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration's National Marine Fisheries Service, and the USGS Western Ecological Research Center Redwood Field Station.
[137] *Bald Hills Vegetation Management Plan* (Arcata: Redwood National Park, 1992).
[138] The terms *fire yards* and *fire corridors* come from Henry T. Lewis, "Patterns of Indian Burning in California: Ecology and Ethnohistory," in *Before the Wilderness: Environmental Management by Native Californians*, ed. Thomas C. Blackburn and Kat Anderson (Menlo Park: Ballena Press, 1993), 55-116.
[139] Steven Underwood, Leonel Arguello, and Nelson Siefkin, "Restoring Ethnographic Landscapes and Natural Elements in Redwood National Park," *Ecological Restoration* 21 (December 2003): 281.
[140] Thomas Gates and Janet P. Eidsness, "Phase II Ethnographic Landscape and Contemporary Native American Concerns for Management of the Bald Hills, Redwood Creek Basin, Redwood National and State Parks, Humboldt County, California," 2002, RNSP Archives. Also see Underwood,

Arguello, and Siefkin, "Restoring Ethnographic Landscapes," 278-83. Eidsness, who worked as a part-time, temporary archeologist at Redwood was also instrumental in these cooperative efforts.

[141] Quotation is from *GMP/GP*, 42. Also see Gates and Eidsness, "Ethnographic Landscape and Contemporary Native American Concerns for Management of the Bald Hills, Redwood Creek Basin, Redwood National and State Parks, Humboldt County, California" (Redwood National and State Parks, 2000), RNSP Archives; Gates and Eidsness, "Phase II: Ethnographic Landscape"; and Underwood, Arguello, and Siefkin, "Restoring Ethnographic Landscapes," 278-83.

[142] Stephen J. Botti, "The National Park Service Wildland Fire Management Program," in *Proceedings of the Symposium on Fire Economics*, *Planning*, *and Policy: Bottom Lines; 1999 April 5-9; San Diego*, *Ca*. *Gen*. *Tech*. *Rep*. *PSW-GTR-173*, tech. coords. Armando González-Cabán and Philip N. Omi (Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture, 1999), 7-13; "National Fire Monitoring Program," *Redwood Currents: Redwood National and State Parks Resource Management Newsletter* 1, (May/June 1999): 3; Corinna Morin, "Prescribed Fire Program," *Redwood Currents: Redwood National and State Parks Resource Management Newsletter* 3, (Oct/Nov/Dec 1999): 14-15.

[143] Quotation is from "Cultural Resources Project Statement, 003," hand-dated March 16, 1993. Initial calls for updating the Lyons Ranches Rural Historic District designations is detailed in "Cultural Resources Project Statement, 005"; both documents in Hofstra Files, "December 1994 Revision of RMP for Redwood." The Bald Hills designation stems from Gates and Eidsness, "Ethnographic Landscape" and "Phase II: Ethnographic Landscape." Also see Ann King Smith, "Ethnographic Overview," *Redwood Currents: Redwood National and State Parks Resource Management Newsletter* 9, (June/July/August/September 2001): 7.

[144] Quotations are from revised materials related to the 1994 *Resources Management Plan*, enclosed in a letter from Smith to Hofstra, 20 April 1995, in Hofstra Files, "December 1994 Revision of RMP for Redwood."

[145] *Resources Management Plan* (1999 ), 24-27; and "Operations Evaluation Report," May 27, 1986, enclosed in memorandum from Regional Director Howard Chapman to Superintendent Ehorn, May 30, 1986, CF A2621, 1980-1986, RNSP Archives.

[146] Quotations are from Purkerson interview. When Smith was hired she went by the name Ann King—hence the reference to AK-47, an automatic assault rifle widely used by Central American revolutionaries in the 1980s.

[147] Karin Anderson Grantham, comments on draft administrative history for RNSP. Compliance-based management also characterizes the efforts of RNSP staff in Lassen Volcanic National Park and Wiskeytown-Shasta-Trinity National Recreation Area. For the multitude of requirements associated with the National Historic Preservation Act, see "The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act," *Federal Register* 63, no. 79 (April 24, 1998): 20496-508, http://www.nps.gov/history/hps/fapa_110.htm (November 9, 2009).

[148] If not ideal from an administrative standpoint, the results of such collaborations could prove remarkable. Between 2005 and 2006, for instance, a collaborative endeavor with the California Department of Parks and Recreation, the Tolowas at the Smith and Elk Valley rancherias, and the UC Davis Archaeological Field School helped extend RNSP's archeological inventory into previously unsurveyed or understudied areas outside the original park expansion area. This resulted in a spectacular find: archeological evidence extending back 7,000 years at a Tolowa village site that had been inhabited as recently as 1902. "Evidence Supports Tolowa's Long History," *Crescent City Daily Triplicate*, January 17, 2007, 1.

[149] *Superintendent's Annual Report: Redwood National Park—1994*, 1, CF A2621 "Reports and Related Correspondence: Superintendent's Annual Reports, 1988-1989, 1991-1994," RNSP Archives.

[150] Quotations are from "Prologue," *Master Plan: Redwood National Park*, *California* (Denver: U.S. Department of the Interior, National Park Service, Denver Service Center, 1973); and David Turello, Bruce Black, and Nelson Murdock, "Concept Paper for Proposed 'Buffer and Watershed Management,'" November 21, 1969, 1, Accession # REDW 00084, Catalog # REDW 27746, File 44, James Agee Collection, RNSP Archives.

[151] U.S. Environmental Protection Agency, Region 9, "Total Maximum Daily Load for Sediment Redwood Creek, California," www.epa.gov/region9/water/tmdl/redwood/rwctmdl.pdf (accessed

August 12, 2008); North Coast Water Quality Control Board, *Redwood Creek TMDL* (2007), http://www.swrcb.ca.gov/northcoast/water_issues/programs/tmdls/redwood_creek/ (August 12, 2008); Hight, "Who's Afraid of the TMDL?"; and Bundros, comments on draft administrative history.

[152] Ringgold interview.

# Epilogue

In the three years following the summer 2003 retirements of Redwood National and State Parks (RNSP) Superintendents Andrew Ringgold and Rick Sermon, parks administration experienced a rate of turnover that it had not seen since the early 1970s. By the time National Park Service (NPS) Superintendent Steve Chaney and California North Coast Redwoods District (NCRD) Sector Superintendent Bruce Lynn arrived in fall 2006, RNSP had already gone through one set of superintendents and two sets of acting superintendents. This relative instability did not affect the parks in significant ways, however. Indeed, RNSP addressed old challenges and grew in several important respects over this short space of time. This is certainly a testament to the ongoing legacies of Ringgold's and Sermon's tenures as well as the capable actions of Superintendents Bill Pierce (NPS) and Marilyn Murphy (NCRD), and their interim replacements. Yet the change and growth of these years is also the result of the broader trends and processes that have shaped Redwood over the course of nearly four decades and allowed park staff to take advantage of new opportunities and embark in new directions.

The ongoing relevance of Redwood's history, and the likely course of the parks' future development, is neatly illustrated by three significant new developments: the 25,000-acre Mill Creek addition to Del Norte Redwoods State Park in 2005; the parks' participation in the creation of the Redwood Creek Integrated Watershed Strategy (completed 2006); and the approval of Redwood's $3 million NPS Centennial Challenge Project for Ancient Redwood Forest and Watershed Restoration (2008). All three speak to the vital legacy of the parks' signature efforts in cooperative management, environmental restoration, regional development, and science-based resource management. One other recent proposal from the Yurok Tribe to form a Tribal Park, and possibly co-manage Yurok, national park, and state park lands as part of a new administrative entity called Redwood National, State and Tribal

Parks, also corresponds with these defining aspects of RNSP and could take the parks' history of setting precedents into a new realm.

The Mill Creek addition involved some old players in the Redwood story—the Save-the-Redwoods League (SRL) and the Stimson Lumber Company—and represented the culmination of an almost century-long effort by the SRL to make the area part of a state or national park. By the time the league was finally able to purchase the land for $60 million in 2002, however, only two hundred acres of old-growth redwood forest remained in a few scattered groves. Because it did not require as much legal or political wrangling, and was in keeping with the league's long relationship with the California Department of Parks and Recreation (CDPR), the land was made part of Del Norte Redwoods State Park. Federal legislation subsequently expanded the statutory boundaries of RNSP in 2005 and made Mill Creek part of the same administrative and funding mechanisms that operated in the rest of the parks complex.[1]

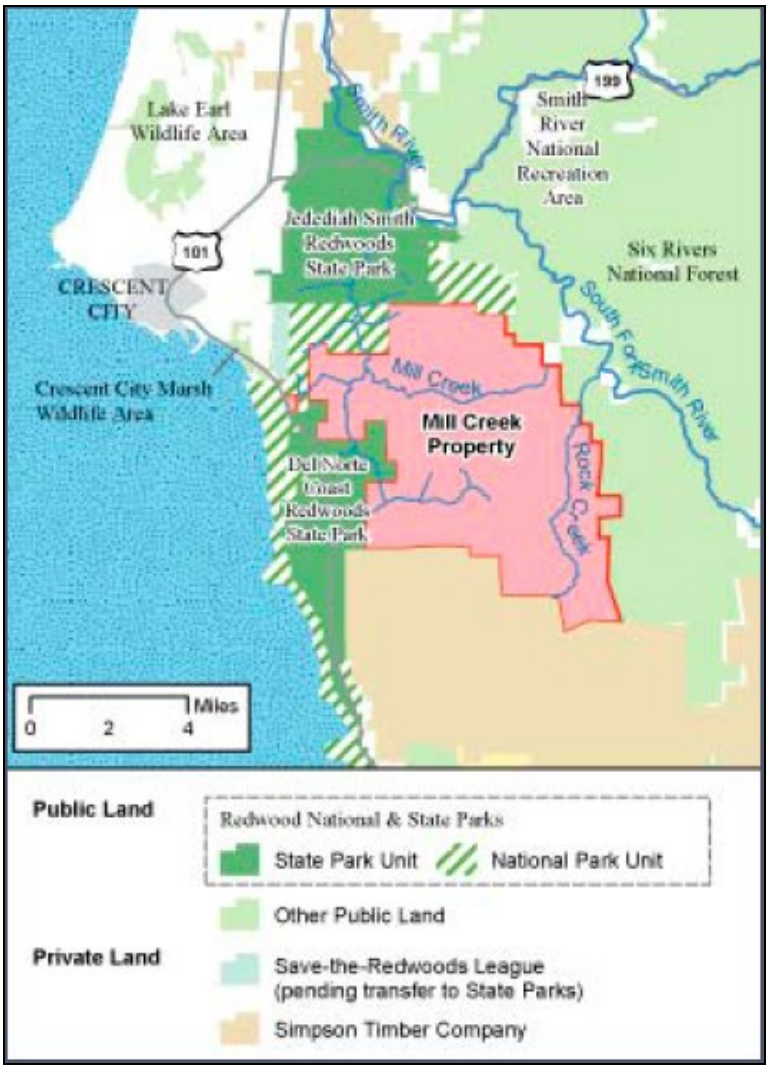


**Figure E.1 The Mill Creek Property, Del Norte Redwoods State Park, and RNSP.** Reprinted from Redwood National and State Parks *Visitor Guide* (2003), 5.

The process that led to the formulation of the Redwood Creek Integrated Watershed Strategy (RCIWS) represents a different iteration of RNSP's history, one that builds on the long necessity of cooperating with all of the stakeholders in the Redwood Creek basin. Comprised of 11 different parties representing county, state and federal agencies, private landowners, environmental groups, and the town of Orick, the RCIWS represents a common recognition that the overall health and improvement of a shared watershed benefits everyone and every interest.[2] In this regard, the Strategy reflects the basic ethic that has guided cooperative efforts in the upper watershed and determined management options in the

estuary. The RCIWS takes these approaches to resources management much further, however, and codifies them into a set of goals for water quality improvement and protection, protection and restoration of salmonids, flood control, economic development, and expanding "partnerships that foster communication, coordination, planning, education, and public outreach regarding all aspects of water management in the watershed."[3] Toward these ends, the RCIWS proposes eight distinct projects: a wastewater treatment facility for the Orick Valley to protect the area's natural hydrology and spur economic development; short term flood control through maintenance of existing Army Corps of Engineers Redwood Creek Flood Control Project; long-term flood control that reduces the need for levee maintenance and fosters estuary restoration; restoration of the Redwood Creek estuary; restoration of the Strawberry Creek tributary of the estuary; erosion control and prevention on public and private lands; and protection and restoration of riparian areas and the steep inner gorges throughout the watershed.[4]

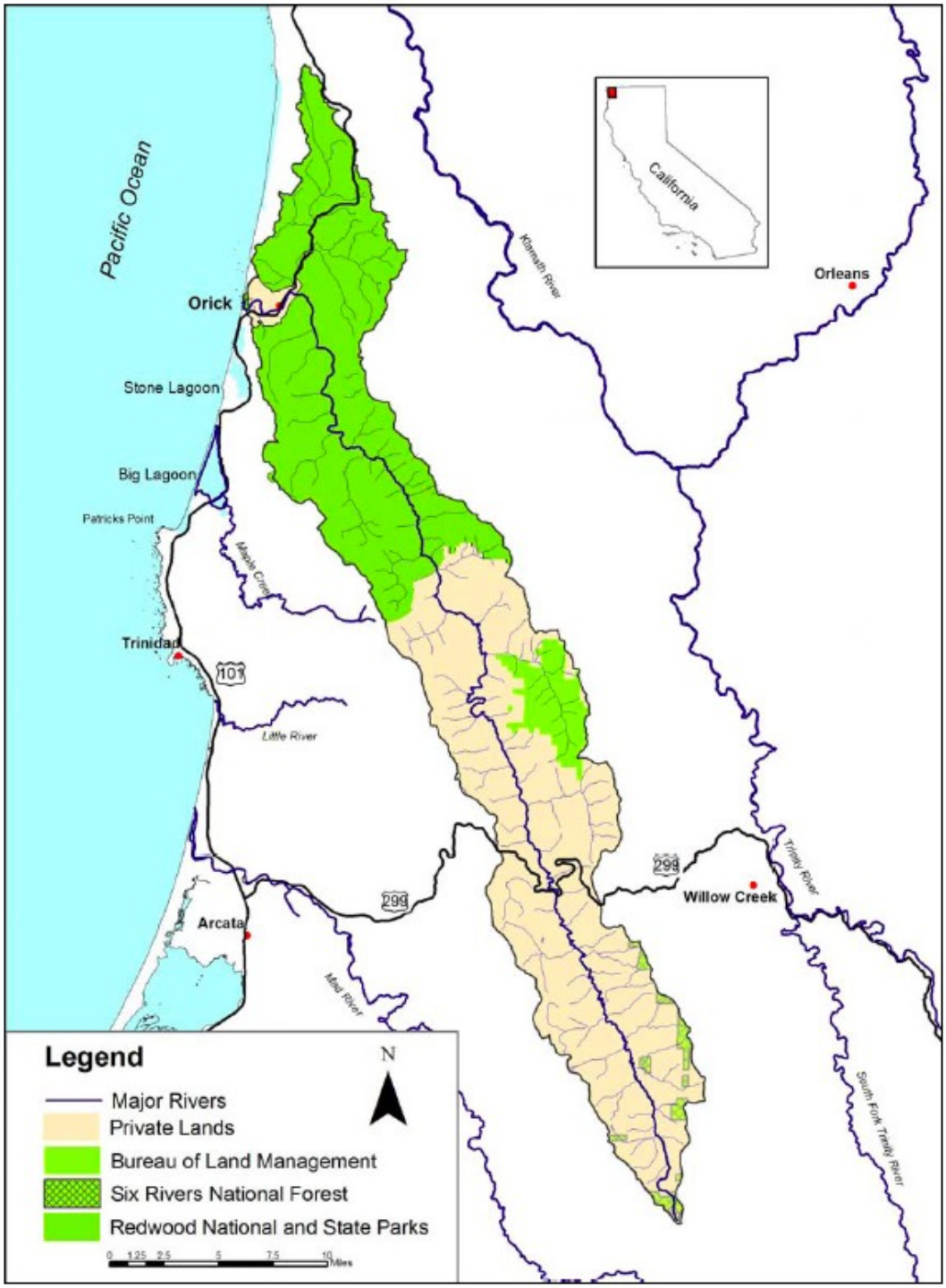


**Figure E.2 Landownership Patterns in the Redwood Creek Basin**. Reprinted from Redwood Creek Watershed Group, *The Redwood Creek Integrated Watershed Strategy*, June 22, 2006, 14.

At 110 pages, the RCIWS was a comprehensive document, but it did not present a specific action plan. Instead, the strategy and the effort that went into its formulation laid the

groundwork for future funding requests. Made up of committed partners, and organized around specific goals with specific projects in mind, the Redwood Creek Watershed Group could use the document as an impressive centerpiece for specific grant applications. Although less formal, and thus less binding, than any of the memoranda of understanding or agreements signed by the National Park Service or RNSP, the strategy was in some respects farther reaching. It reemphasized the actions and concerns of park staff in the upper watershed and the estuary, and it reconfirmed the parks' long-standing interest in supporting the community of Orick. But the RCIWS did so in a way that connected these separate commitments to each other and bolstered them with a wide network of partners. And as members of the Redwood Creek Watershed Group collaborated on grant applications, then implemented projects that no single party could have funded or undertaken on its own, the strength—and necessity—of these partnerships could only grow.

For RNSP, participation in the Redwood Creek Watershed Group and the drafting of the RCIWS had an almost immediate payoff. As chief of Resources Management and Science Terry Hofstra noted, the parks' success in obtaining an NPS Centennial Challenge Project award owed a great deal to the partnerships of the Redwood Creek Watershed Group and the experience gained in developing the goals and objectives of the RCIWS.[5] The RNSP project proposal, entitled "Restore Ancient Redwood Forest and Watershed," involved a program to "stabilize 35 miles of abandoned logging roads, remove all road fill material from 90 stream crossings, and stabilize road fill from 40 log landings." Along with the physical restoration of cutover lands, the project also intended to "educate and involve visitors and businesses, protect stream and riparian habitats, and ensure old growth forest characteristics by applying ecologically-based forest restoration prescriptions to impaired second growth forests."[6]

While all of these qualities were meritorious, one of the special appeals of the Redwood proposal was that it so closely matched a primary goal of the Centennial Initiative

to encourage and recognize “innovative public-private partnerships.”[7] The list of partners for the Restore Ancient Redwood Forest and Watershed project included the leading nonprofit organization from the Redwood Creek Watershed Group—the Pacific Coast Fish, Wildlife, and Wetlands Restoration Association—and the RCIWS itself was noted as a model in the Challenge Project proposal. The other undeniable virtue of the RNSP proposal was the ability to secure additional funding from outside sources. The ten-year Centennial Initiative, which corresponds with the hundredth anniversary of the National Park Service in 2016, is designed to leverage “significant resources to restore and better protect the parks’ natural, cultural and historic resources.”[8] Leveraging “significant resources” is another way of saying matching funds, and the ultimate success of a Centennial Initiative proposal depends on the financial commitment of its partners. In the case of the Restore Ancient Redwood Forest and Watershed proposal, this came from an array of public and private organizations: most notably the Pacific Coast Fish, Wildlife, and Wetlands Restoration Association, the Save-the-Redwoods League, the Smith River Alliance, and three California state agencies—the Department of Parks and Recreation, Coastal Conservancy, and Wildlife Conservation Board.[9]

The support of the Save-the-Redwoods League (SRL), which is by far the largest private contributor to the $6 million RNSP Centennial Initiative project, represents its own hundred-year legacy. Although a good portion of the funding is directed toward ongoing watershed rehabilitation programs in the Redwood Creek and Lost Man Creek drainages (for projects described in the RCIWS), the bulk of the Restore Ancient Redwood Forest and Watershed project is dedicated to “putting the pieces back together” in the heavily logged Mill Creek watershed. The goal, ultimately, is to rebuild the forests that the SRL had worked to save through most of the twentieth century. Doing so also brings new opportunities to RNSP, not just in the matter of enlarging the park or furthering partnerships with outside groups, but in implementing long stalled resource management proposals.

Two central components of the Ancient Redwood Forest project are “thinning overstocked second-growth forests” and working directly with CDPR staff in the restoration of state parks lands. A Redwood National Park second-growth forest management plan had been in the works for several years, but debates about the long-term efficacy of natural or managed succession of young, even-aged forests prevented full implementation. The restoration program for Mill Creek, as outlined in a 2002 study sponsored by the SRL, essentially commits RNSP staff to actively manage second-growth forests to accelerate the development of old-growth forest characteristics. As NPS staff partner with CDPR in restoring the Mill Creek watershed, they will be refining and implementing a new comprehensive second-growth management strategies that will also apply to most of the forested lands in Redwood National Park.[10]

The acquisition and management of the Mill Creek property represents both an expansion of RNSP and a further deepening of the national park-state parks cooperative management regime. As such, it marks the beginning of an important new chapter in the history of RNSP that follows many of the basic trends that have always defined Redwood. The same cannot be said of the Yurok Tribe’s proposed development of a tribal park. Indeed, the tribe’s interest in forming a national, state and tribal parks complex represents the possibility of a whole new trajectory for Redwood. In some respects, the Yurok plan does mirror the early development and history of Redwood National Park. Like the National Park Service, the tribe has embarked on a process of reacquiring privately held lands within their reservation boundaries and elsewhere in their aboriginal territory, and have relied on the support of outside organizations and funding sources to facilitate these transactions.[11] But it is there that the similarities with Redwood’s history, and the history of the National Park Service, end.

The lands the Yurok Tribe seeks either have sacred properties or possess important ecological characteristics that—if protected and or restored—will substantially benefit larger

environmental processes as well as foster the perpetuation of ancient cultural practices.[12] All of this is true of the Blue Creek drainage in the Lower Klamath River basin, which would serve as the core of the Tribal Park. Other park units would include sites near Trinidad, areas within RNSP at the mouth of the Klamath River and above Requa, the Yurok Experimental Forest, and lands currently managed by the BLM, USFS, and private timber companies. The goal, ultimately, would be to establish large contiguous park areas for cultural, environmental, and commercial purposes. On this last score, the tribe has contemplated the development of ecotourism facilities, recreational resources, and increased salmon stocks for commercial and sportfishing.[13]

Besides the tribe's interest in lands within the overlapping boundaries of RNSP and the reservation at the mouth of the Klamath River, the other matter that most directly involves the parks complex and the tribe are proposals to co-manage lands with the Park Service. Some of this involves an extension of collaborative efforts in the Bald Hills area, especially around Gann's Prairie. From the parks' perspective, this is already a preferred management approach. One of Redwood's still unfunded Centennial Initiative proposals is titled "Restore Natural and Yurok Cultural Influences at Gann's Prairie," which called for a partnership "with the Yurok tribe to . . . restore natural processes and cultural influences providing benefits for both visitors as well as Native Americans."[14] While the work in the Bald Hills represents an important coincidence of interests, the tribe's proposal to co-manage other areas of RNSP, as well as its interest in the repossession of reservation lands within the national and state parks complex, represents a more fundamental challenge to the historic and institutional framework of RNSP.

Any movement in the direction of co-management, or in the formation of a national, state, and tribal parks complex, would depend on several factors. Some involve the Yurok Tribe's ability to acquire and administer new lands, a matter that partly depends on how the tribe resolves the final dispensation of the $93 million Yurok Trust Fund that resulted from

the 1988 Hoopa-Yurok Settlement Act. Others depend on the actions of federal and state agencies, including the NPS. Whether any of the Yurok proposals come to pass, the growing force of treaty rights across the United States—and their specific application to the management of public lands—will only become a more determinative aspect of RNSP's future management. How the park responds is impossible to predict, but some things are certain. Based on Redwood's history, as well as its more recent developments, the response will be innovative and probably set new precedents for resources management.

---

[1] Dan Porter et al., "Restoring Complexity to Industrially Managed Timberlands: The Mill Creek Interim Management Recommendations and Early Restoration Thinning Treatments," in *Proceedings of the Redwood Region Forest Science Symposium: What Does the Future Hold? Gen*. *Tech*. *Rep*. *Psw-Gtr-194*, ed. Richard B. Standiford et al (Albany, CA: U.S. Department of Agriculture, , Forest Service, Pacific Southwest Research Station, 2007), 283-94, http://www.treesearch.fs.fed.us/pubs/28274, 12 October 2008; Stillwater Sciences, *Mill Creek Property Interim Management Recommendations* (San Francisco: Save-the-Redwoods League California Coastal Conservancy, 2002); Jeff Denny, "The Most Important Groves," *Redwood National and State Parks Visitor Guide*, (2003): 3; Jim Wheeler, "Putting the Pieces Back Together," *Redwood National and State Parks Visitor Guide*, (2003): 1; Wheeler, "Putting the Pieces Back Together—Mill Creek Update: 4 Years Later," *Redwood National and State Parks Visitor Guide* (2006): 1; "Mill Creek Collaborations Reflect the League's Legacy and Vision," in *Save-the-Redwoods League: Annual Report* (San Francisco: Save-the-Redwoods League, 2003), 4-5; and Yosemite National Park Payments, Rancho Coral de Tierra Golden Gate National Recreation Area, and Redwood National Park Boundary Adjustments, Pub. L. No. 109-131; 119 Stat. 2566, 109th Cong., S.136 (December 20, 2005).

[2] The Redwood Creek Watershed Group comprises the following agencies and groups with interests in the Redwood Creek watershed: Humboldt County, Orick Community Services District, Orick Levee Committee, Bureau of Land Management, RNSP, U.S. Fish and Wildlife Service, U.S. Geological Survey, landowners adjacent to the Redwood Creek estuary, the Redwood Creek Landowners Association, Pacific Coast Fish, Wildlife and Wetlands Restoration Association, and the Redwood Regional Watershed Center.

[3] Redwood Creek Watershed Group, "The Redwood Creek Integrated Watershed Strategy," June 22, 2006, http://co.humboldt.ca.us/planning/Prop50/01_RWC_IWS Final.pdf (accessed August 18, 2008).

[4] Ibid.

[5] Terence Hofstra, interview by author, November 20, 2007.

[6] Quotation is from "National Park Centennial Challenge Projects and Programs Approved for Fiscal Year 2008," atfiles.org/files/pdf/NPSCentennialProjects.pdf (accessed October 14, 2009).

[7] Quotation from announcement certifying the eligibility of the RNSP Ancient Redwood Forest and Watershed Restoration Centennial Initiative Project for FY 2008, www.nps.gov/redw/parkmgmt/upload/REDW%20Proposal%20Template%2010-15-07.doc (accessed October 22, 2008).

[8] Quotation is from a press release by Secretary of the Interior Dirk Kempthorne dated February 5, 2005; "Kempthorne: President's Centennial Initiative Calls for $3 Billion to Improve, Expand National Park Programs," News: U.S. Department of the Interior (January 11, 2007), http://www.doi.gov/news/07_News_Releases/070205.html (accessed October 22, 2008).

[9] Announcement of RNSP Ancient Redwood Forest and Watershed Restoration Centennial Initiative project for FY 2008.

[10] Stillwater Sciences, *Mill Creek Property Interim Management Recommendations*, 98-104.

[11] Yurok Tribe, “Tribal Park Concept Plan [Draft]” (August 2005), 14-23.
[12] While the Blue Creek drainage has particular significance for the Yurok Tribe, as do areas inside the boundaries of RNSP, they exist within a larger territorial concern. A fundamental purpose of the Yurok Tribal governance, as spelled out in the 1993 Constitution, is “to exercise the inherent sovereignty of the Yurok Tribe . . . [through reclaiming] the tribal land base within the Yurok Reservation and enlarg[ing] the Reservation boundaries to the maximum extent possible within the ancestral lands of our tribe and/or within any compensatory land area.” *Constitution of the Yurok Tribe*, http://library.ceres.ca.gov/cgi-bin/doc_home?elib_id=2045 (accessed November 19, 2009)
[13] Yurok Tribe, “Tribal Park Concept Plan [Draft]” (August 2005), 24-29.
[14] “First Annual Centennial Strategy for Redwood National and State Parks” (August 2007), http://www.nps.gov/redw/upload/REDW_Centennial_Strategy.pdf (accessed October 23, 2008).