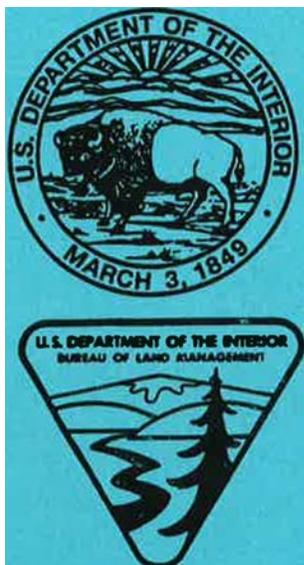


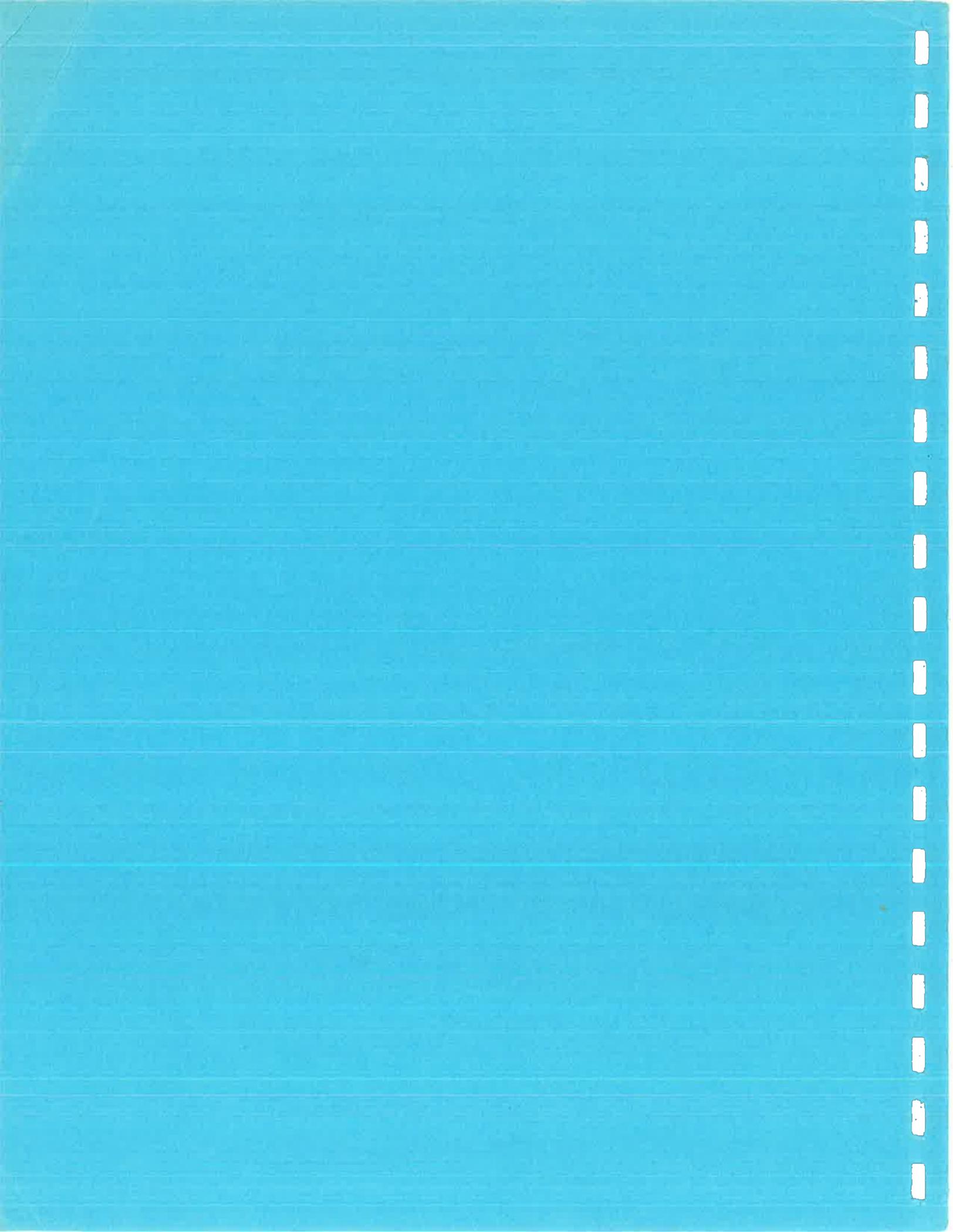
United States Department of the Interior
Bureau of Land Management
Ukiah District
Arcata Resource Area

March 1995



Arcata Planning Area
Proposed
Resource Management Plan Amendment
and
Environmental Assessment





PROPOSED AMENDMENT
ARCATA RESOURCE AREA
RESOURCE MANAGEMENT PLAN
AND
ENVIRONMENTAL ASSESSMENT

United States Department of Interior
Bureau of Land Management



Ed Hastey
State Director

EA #AR-95-07
March 1995



United States Department of the Interior

BUREAU OF LAND MANAGEMENT
Arcata Resource Area
1695 Heindon Road
Arcata, California 95521-4573

Dear Reviewer:

Enclosed for your review and comment is the Bureau of Land Management's Draft Resource Management Plan (RMP) Amendment and Environmental Assessment (EA) for the Lack's Creek, Red Mountain, Covelo Vicinity, and Scattered Tracts Management Areas (MA's) in the Arcata Planning Area. This proposed amendment was developed in response to the release of President Clinton's Northwest Forest Plan for managing habitat for late-successional and old-growth forest related species within the range of the northern spotted owl. The President's plan was adopted on April 14, 1994 and provides more specific federal management direction than was available when the Record of Decision (ROD) for the Arcata RMP was published in April 1992.

The proposed plan amendment/EA analyzes two alternatives for management of old growth and late successional forest ecosystems and associated watersheds, and land disposal and acquisition opportunities for these four MAs. These alternatives address issues identified during public meetings and agency scoping conducted early in the planning process. The selected alternative will guide management on approximately 122,000 acres of public lands. Currently, the Watershed Management/Old Growth Retention Alternative is the Preferred Alternative.

Comments concerning the proposed plan Amendment/EA will be considered in preparing the final plan amendment and EA. For additional information please contact the Arcata Resource Area at the address below or at 707/825-2300.

All comments must be received by May 30, 1995. Please send your comments to our new address:

Bureau of Land Management
Arcata Resource Area
1695 Heindon Road
Arcata, CA 95521-4573

Sincerely, ¹¹

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Lynda Roush
Area Manager

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Summary

The Proposed Arcata Resource Management Plan (RMP) Amendment and Environmental Assessment (EA) evaluate alternative strategies for managing public lands in the Lacks Creek, Red Mountain, Covelo Vicinity, and Scattered Tracts Management Areas (MAs) of the Arcata Resource Area (ARA). These MAs encompass approximately 122,400 acres of public land administered by the U.S. Bureau of Land Management (BLM) and 127,300 acres of federal mineral ownership where the surface is privately owned (BLM split estate land) in the northern California counties of Humboldt, Mendocino, Trinity, and Sonoma.

The existing plan for these MAs, the Arcata RMP, was adopted in April 1992. The ROD for the Arcata RMP directed that a plan amendment be prepared addressing land tenure and forest management in the Lacks Creek, Red Mountain, Covelo Vicinity, and Scattered Tracts MAs after completion of regional planning efforts for northern spotted owl habitat. This proposed amendment was developed in response to the release of President Clinton's Northwest Forest Plan (NWFP) for managing habitat for late-successional and old-growth forest related species within the range of the northern spotted owl. The NWFP plan was adopted on April 14, 1994; it amends the planning documents of all national forests and BLM districts within the range of the northern spotted owl, including the Arcata RMP, and provides more specific federal management direction than was available when the Arcata RMP ROD was published in 1992.

The scope of the proposed Arcata plan amendment is limited to a review of decisions related to forest management and land tenure adjustments in the four MAs listed above. Planning issues addressed in this amendment are:

- management of forest lands, including old-growth and late-successional forest ecosystems;
- disposal and acquisition of lands;
- watershed management; and
- areas of critical environmental concern (ACECs).

In addition to these issues, the following management concerns are also addressed: access, minor forest products, and off-highway vehicle designations. The objectives of the plan amendment are to:

- identify and incorporate NWFP land allocations and management direction for the four MAs in the plan amendment area,
- establish more specific resource condition objectives and land allocations and identify suitable management activities for the four MAs in the plan amendment within the context of the NWFP,
- identify areas where BLM should manage and acquire lands in support of regional ecosystem and watershed management strategies, and
- identify parcels of land that may be disposed of through exchange to consolidate public lands into larger and more effective management blocks.

The supplemental environmental impact statement (SEIS) prepared for the NWFP (USDA and USDI 1994) is a programmatic document analyzing the impacts of alternative plans for managing federal forest lands within the range of the northern spotted owl in Washington, Oregon, and northern California. The proposed Arcata plan amendment is tiered to the SEIS and incorporates the impact analyses in the SEIS by reference. The Arcata plan amendment/EA was prepared in accordance with the requirements of the Federal Land Policy and Management Act (FLPMA) of 1976, as amended, and the National Environmental Policy Act (NEPA) of 1969.

Each of the planning issues, management concerns, and planning criteria are discussed in Chapter 1. Those aspects of current management that are not at issue are covered in the Continuing Management Guidance and Actions section of Chapter 2. The Continuing Management Guidance and Actions were developed primarily from laws, regulations, manuals, and existing land-use plans and apply to all alternatives.

The proposed plan amendment/EA analyzes two alternatives for these four MAs: Current Management (No Action Alternative) and Watershed Management/Old-Growth Retention (Preferred Alternative); the alternatives for each MA are described in Chapter 2. These alternatives address issues identified during public meetings and agency scoping conducted early in the planning process. The alternatives analyzed in this EA are summarized in Table S-1. A comparative summary of the impacts of the alternatives is included in Table S-2. The alternatives are designed to provide general management guidance. Specific projects for a given area or resource will be detailed in future activity plans.

Table S-1. Summary of Arcata Plan Amendment Alternatives

Issue/Concern	Alternative 1 Current Management	Alternative 2 Watershed Management-UOid-Growth Retention
Management of Forest Lands, Including Old-Growth and Late-Successional Forest Ecosystems	<ul style="list-style-type: none"> ● Manage 72,764 acres as Late-Successional Reserves (LSRs). ● Manage 49,605 acres as matrix. ● Five RNA/ACECs totaling 15,100 acres would preserve and protect 3,231 acres of old-growth forest. ● Apply silvicultural prescriptions (timber stand improvement) on previously entered forest stands to develop habitat for late-successional forest species. 	<ul style="list-style-type: none"> ● Manage 72,764 acres as LSRs. ● Manage 49,605 acres as matrix. ● Seven ACECs (five RNA/ACECs and two watershed ACECs) totaling 24,287 acres would preserve and protect 6,173 acres of old-growth forest. ● Apply silvicultural prescriptions (timber stand improvement) on previously entered forest stands to develop habitat for late-successional forest species.
Disposal and Acquisition of Lands	<ul style="list-style-type: none"> ● Retain 109,649 acres of public land. ● Acquire 10,280 acres of state and private land. ● Dispose of 3,320 acres of public land including 1,120 acres of matrix and 2,200 acres of LSR. ● Transfer 9,400 acres of LSR to the Mendocino National Forest. 	<ul style="list-style-type: none"> ● Retain 109,309 acres of public land. ● Acquire 18,669 acres of private land. ● Dispose of 3,660 acres of public land in the matrix. ● Transfer 9,400 acres of LSR to the Mendocino National Forest.

Table S-1. Summary of Arcata Plan Amendment Alternatives

Issue/Concern	Alternative 1 Current Management	Alternative 2 Watershed Management/Old-Growth Retention
Watershed Management	<ul style="list-style-type: none"> ● Prepare watershed analyses for four watersheds (Cedar Creek, South Fork Eel River, Thatcher Creek, and Mattole River). Manage 26,392 acres as Tier I Key Watersheds. ● Prepare watershed activity plan for public lands in the Lacks Creek watershed. ● Implement management actions in Elder Creek RNA/ACEC plan to benefit Elder Creek and Fox Creek watersheds. ● Implement management actions in Red Mountain RNA/ACEC Activity Plan to benefit Cedar Creek fisheries. ● Manage all Riparian Reserves in accordance with NWFP standards and guidelines. ● Manage designated and eligible components of the National Wild and Scenic Rivers System in accordance with the Wild and Scenic River Guidelines. 	<ul style="list-style-type: none"> ● Prepare watershed analyses for four watersheds (Cedar Creek, South Fork Eel River, Thatcher Creek, and Mattole River). Manage 26,392 acres as Tier I Key Watersheds. ● Participate in watershed associations and cooperative resource planning for key watersheds. ● Acquire private lands within the South Fork Eel River watershed and manage as a watershed ACEC. ● Acquire all private lands within the Lacks Creek watershed and manage as a watershed ACEC. ● Manage all Riparian Reserves in accordance with NWFP standards and guidelines. ● Manage designated and eligible components of the National Wild and Scenic Rivers System in accordance with the Wild and Scenic River Guidelines.
ACECs	<ul style="list-style-type: none"> ● Designate five RNA/ACECs (existing) totaling 15,100 acres. 	<ul style="list-style-type: none"> ● Designate seven ACECs (five existing RNA/ACECs and two watershed ACECs) totaling 24,287 acres of BLM land.

Table S-1. Summary of Arcata Plan Amendment Alternatives

Issue/Concern	Alternative 1 Current Management	Alternative 2 Watershed Management/Old-Growth Retention
Access	<ul style="list-style-type: none"> ● Pursue general goal of obtaining access to all public lands without access. ● Acquire public access to three areas. 	<ul style="list-style-type: none"> ● Pursue general goal of obtaining access to all public lands without access. ● Acquire public and/or administrative access to 17 areas.
Minor Forest Products	<ul style="list-style-type: none"> ● Provide minor forest products as available from timber stand improvement activities to develop habitat for late-successional forest species. 	<ul style="list-style-type: none"> ● Provide minor forest products as available from timber stand improvement activities to develop habitat for late-successional forest species.
Off-Highway Vehicle Designations	<ul style="list-style-type: none"> ● Continue designation of approximately 30,300 acres as CLOSED to vehicle use. ● Continue LIMITED vehicle use designation (vehicle use is limited to transportation facilities designed for highway vehicles having four or more wheels) on approximately 76,300 acres and Pine Ridge Roads 5111 and 5111.10. ● Approximately 15,700 acres in the Scattered Tracts MA are undesignated. 	<ul style="list-style-type: none"> ● Designate approximately 36,000 acres as CLOSED to vehicle use. ● Designate 86,038 acres and the Pine Ridge Road and maintained spurs as LIMITED (vehicle use is allowed only on transportation facilities designed for highway vehicles having four or more wheels).

^a "Old-growth" acreage is derived from a "suitable" owl nesting/roosting/foraging habitat model using Wildlife Habitat Relationships (WHR) typing of forested lands in the Ukiah District. Those timber stands in which trees contributing to the canopy layer average a minimum of 24" diameter breast height (DBH) and in which the canopy layer is continuous over a minimum of 40% of the stand are used in this definition. It is recognized that the definition includes a broader range of conifer sizes than many old-growth definitions but may exclude some sites dominated by mature hardwood.

^b Nonfederal acreage will be acquired if available.

Table S-2. Summary of Impacts for the Arcata Plan Amendment Area

Resource	Alternative 1 Current Management	Alternative 2 Watershed Management/Old-Growth Retention
Watershed Resources	<ul style="list-style-type: none"> ● Acquisition of 2,480 acres of private land would increase the amount of federal land in the Lack's Creek watershed and enhance the ability of the BLM to cooperate with the National Park Service in protecting downstream resources in the Redwood National Park. ● Preparation and implementation of a watershed activity plan for Lacks Creek MA would benefit water quality in the Redwood Creek watershed. ● Acquisition of 900 acres of land between Elkhorn Ridge and Brush Mountain would increase the amount of federal land in the South Fork Eel River watershed and enhance the ability of the BLM to manage the watershed as a Tier 1 Key Watershed. ● Over the long-term, management of 26,392 acres as Tier I Key Watersheds would reduce sedimentation throughout the Cedar Creek, South Fork Eel River, Thatcher Creek, and Mattole River watersheds and aid recovery of water quality and riparian habitat. ● Continuation of the CLOSED to vehicle use designation for approximately 30,300 acres in the plan amendment area would continue to provide protection against soil erosion, compaction, and water quality degradation that could result from cross-country vehicle use. 	<ul style="list-style-type: none"> ● Designation and management of the Lacks Creek Watershed ACEC (2,978 acres of public land plus an additional 11,065 acres of acquired private land within the watershed) would enhance, preserve, and protect watershed resources in the Lacks Creek watershed and downstream resources in Redwood National Park. ● Designation and management of South Fork Eel River Watershed ACEC (10,784 acres of public land plus an additional 2,408 acres of acquired private land) would enhance, preserve, and protect watershed resources in the South Fork Eel River watershed. ● Over the long term, management of 26,392 acres as Tier I Key Watersheds would reduce sedimentation throughout the Cedar Creek, South Fork Eel River, Thatcher Creek, and Mattole River watersheds and aid recovery of water quality and riparian habitat. ● Designation of approximately 36,000 acres in the plan amendment area as CLOSED to vehicle use would provide protection against soil erosion, compaction, and water quality degradation that could result from cross-country vehicle use.

Table S-2. continued

Resource	Alternative 1 Current Management	Alternative 2 Watershed Management/Old-Growth Retention
Watershed Resources (continued)	<ul style="list-style-type: none"> ● Continuation of a LIMITEDa vehicle use designation on approximately 76,300 acres in the plan amendment area and Pine Ridge Roads 5111 and 5111.10 would continue to provide protection against soil erosion, compaction, and water quality degradation that could result from cross-country vehicle use. 	<ul style="list-style-type: none"> ● Designation of approximately 86,000 acres in the plan amendment area and the Pine Ridge Road and maintained spur roads as LIMITEDa would provide protection against soil erosion, compaction, and water quality degradation that could result from cross-country vehicle use.
Late-Successional and Old-Growth Ecosystems	<ul style="list-style-type: none"> ● Management of 72,764 acres as LSRs would maintain and enhance existing late-successional and old-growth forest conditions. ● Focusing proposed forest improvement activities on previously entered forest stands in LSRs would accelerate development of old-growth characteristics in those areas. ● Acquisition of 10,280 acres of private land in the Lacks Creek, Red Mountain, and Scattered Tracts (Gilham Butte) MAs would increase the total acreage of LSRs in the plan amendment area by 14%. The land acquisitions would enhance the viability of the NWFP LSR network by providing greater potential ecological diversity, increased opportunity for maintenance of natural ecological processes and functions, and greater connectivity. 	<ul style="list-style-type: none"> ● Management of 72,764 acres as LSRs would maintain and enhance existing late-successional and old-growth forest conditions. ● Focusing proposed forest improvement activities on previously entered forest stands in LSRs would accelerate development of old-growth characteristics in those areas. ● Acquisition of 18,669 acres of private land in the Lacks Creek, Red Mountain, and Scattered Tracts (Gilham Butte) MAs would increase the total acreage of LSRs in the plan amendment area by 26%. Land acquisitions and cooperative partnerships would enhance the viability of the NWFP LSR network by providing greater potential ecological diversity, increased opportunity for maintenance of natural ecological processes and functions, and greater connectivity. Development of cooperative partnerships for management of late-successional habitat on an additional 8,500 acres of private land would further enhance the viability of the LSRs.

Table S-2. continued

Resource	Alternative 1 Current Management	Alternative 2 Watershed Management/Old-Growth Retention
Late-Successional and Old-Growth Ecosystems (continued)	<ul style="list-style-type: none"> ● Five existing RNA/ ACECs would provide an extra measure of management and protection to 3,231 acres of old-growth forest.b ● Late-successional/old-growth fragments in the matrix would be managed in accordance with matrix standards and guidelines. 	<ul style="list-style-type: none"> ● Seven ACECs (5 RNA/ACECs and 2 watershed ACECs) would provide an extra measure of management and protection to 6,173 acres of old-growth forest.b ● Late-successional/old-growth fragments in the matrix would be managed in accordance with matrix standards and guidelines.
Vegetation and Special Status Species	<ul style="list-style-type: none"> ● Habitat for the federally endangered plant, MacDonald's rockcress (<i>Arabis macdonaldiana</i>), would be protected through compliance with the recovery plan and management provisions of the Red Mountain ACEC, and acquisition of 520 acres. Habitat for 3 federal candidate plant species would also be protected in the Red Mountain ACEC. 	<ul style="list-style-type: none"> ● Habitat for the federally endangered plant, MacDonald's rockcress (<i>Arabis macdona/diana</i>), would be protected through compliance with the recovery plan and management provisions of the Red Mountain ACEC, acquisition of 520 acres, and development of cooperative management partnerships on an additional 2,500 acres. Habitat for 3 federal candidate plant species would also be protected in the Red Mountain ACEC.
Riparian Resources	<ul style="list-style-type: none"> ● Riparian habitats throughout the plan amendment area would benefit through implementation of Riparian Reserve standards and guidelines, management of Tier 1 Key Watersheds, and the Lacks Creek watershed activity plan. 	<ul style="list-style-type: none"> ● Riparian habitats throughout the plan amendment area would benefit through implementation of Riparian Reserve standards and guidelines, management of Tier 1 Key Watersheds, and management of the Lacks Creek and South Fork Eel River Watershed ACECs.

Table S-2. continued

Resource	Alternative 1 Current Management	Alternative 2 Watershed Management/Old-Growth Retention
Wildlife and Special Status Species	<ul style="list-style-type: none"> ● Management of 72,764 acres as LSRs would maintain and enhance habitat for late-successional and old-growth related species, including special status species. ● Management of 72,764 acres as LSRs would comply with USFWS' recovery guidelines for the northern spotted owl and should allow critical habitat to perform the biological function for which it was designated. ● Acquisition of 9,480 acres would enhance the long-term ability of the Designated Conservation Areas (DCAs) in the Lacks Creek and Red Mountain MAs to support USFWS' draft final recovery plan numerical goals for pairs of spotted owls. ● Known northern spotted owl activity centers within the matrix would be protected through management as "unmapped" LSRs. 	<ul style="list-style-type: none"> ● Management of 72,764 acres as LSRs would maintain and enhance habitat for late-successional and old-growth related species, including special status species. ● Management of 72,764 acres as LSRs would comply with USFWS' recovery guidelines for the northern spotted owl and should allow critical habitat to perform the biological function for which it was designated. ● Acquisition of 12,389 acres would enhance the long-term ability of the Lacks Creek DCA to support USFWS' draft final recovery plan numerical goals for pairs of northern spotted owls. ● Direct acquisition of 5,480 acres and development of cooperative management partnerships for 8,500 acres of non-federal land would enhance the long-term ability of DCAs in the Red Mountain MA to support USFWS' draft final recovery plan numerical goals for pairs of northern spotted owls. ● Known northern spotted owl activity centers within the matrix would be protected through management as "unmapped" LSRs.

Table S-2. continued

Resource	Alternative 1 Current Management	Alternative 2 Watershed Management/Old-Growth Retention
Wildlife and Special Status Species (continued)	<ul style="list-style-type: none"> • Habitat for the federally endangered peregrine falcon would be protected through compliance with the ESA and recovery plan. Acquisition of up to 2,600 acres in the Charlton Creek and Bell Springs watersheds (Red Mountain MA) would provide additional protection for peregrine falcon nesting and foraging sites. • Habitat for the federally endangered northern bald eagle would be protected through compliance with the ESA and the Pacific Bald Eagle Recovery Plan. Improvements in riparian habitat and water quality (through implementation of Riparian Reserve standards and guidelines and management of Tier 1 Key Watersheds) would benefit bald eagle recovery by providing an increasing number of potential nest sites and an improved prey base. • Nesting habitat for the federally threatened marbled murrelet would be protected through compliance with the ESA consultation requirements, future recovery plan, and NWFP land allocations and standards and guidelines. 	<ul style="list-style-type: none"> • Habitat for the federally endangered peregrine falcon would be protected through compliance with the ESA and recovery plan. Acquisition of 1,720 acres in the Charlton Creek, Bell Springs, and Tenmile Creek watersheds (Red Mountain MA) would provide additional protection for peregrine falcon nesting and foraging sites. • Habitat for the federally endangered northern bald eagle would be protected through compliance with the ESA and the Pacific Bald Eagle Recovery Plan. Improvements in riparian habitat and water quality (through implementation of Riparian Reserve standards and guidelines and management of Tier I Key Watersheds) would benefit bald eagle recovery by providing an increasing number of potential nest sites and an improved prey base. • Nesting habitat for the federally threatened marbled murrelet would be protected through compliance with the ESA consultation requirements, future recovery plan, and NWFP land allocations and standards and guidelines.

Table S-2. continued

Resource	Alternative 1 Current Management	Alternative 2 Watershed Management/Old-Growth Retention
Fisheries	<ul style="list-style-type: none"> ● Preparation and implementation of a watershed activity plan for Lacks Creek MA would benefit anadromous fisheries in the Redwood Creek watershed in the long term. ● Management of 26,392 acres as Tier I Key Watersheds would aid recovery of anadromous fisheries in the Cedar Creek, South Fork Eel River, Thatcher Creek, and Mattole River watersheds in the long term. ● Fisheries habitats would benefit through implementation of Riparian Reserve standards and guidelines. 	<ul style="list-style-type: none"> ● Management of 2 watershed ACECs totaling 27,235 acres in the Lacks Creek and South Fork Eel River watersheds (includes 13,762 acres public land and 13,473 acres acquired lands) would enhance habitat and aid recovery of anadromous fisheries in the Lacks Creek, Redwood Creek, and South Fork Eel River watersheds in the long term. ● Management of 26,392 acres as Tier 1 Key Watersheds would aid recovery of anadromous fisheries in the Cedar Creek, South Fork Eel River, Thatcher Creek, and Mattole River watersheds in the long term. ● Fisheries habitats would benefit through implementation of Riparian Reserve standards and guidelines.
Minor Forest Products	<ul style="list-style-type: none"> ● Minor forest products would be made available as a by product of forest improvement activities in LSRs and the matrix. 	<ul style="list-style-type: none"> ● Minor forest products would be made available as a by product of forest improvement activities in LSRs and the matrix.

Table S-2. continued

Resource	Alternative 1 Current Management	Alternative 2 Watershed Management/Old-Growth Retention
ACECs	<ul style="list-style-type: none"> ● 5 existing ACECs totaling 15,100 acres would receive special management attention and protection. ● The 800-acre Lacks Creek RNA/ACEC would continue to preserve and protect old-growth forest values.b ● The 6,895-acre Red Mountain RNA/ACEC would continue to preserve and protect unique botanical and soils values, old-growth forest , raptor habitat, and anadromous fisheries. Acquisition of 520 acres of private land would protect additional habitat for sensitive plant species. ● The 3,775-acre Elder Creek RNA/ACEC would continue to preserve and protect the Elder Creek and Fox Creek watersheds and old-growth values.b ● The 2,550-acre Gilham Butte RNA/ACEC would continue to preserve and protect old-growth forest values.b Acquisition of 800 acres would enhance the designation. 	<ul style="list-style-type: none"> ● 7 ACECs (5 existing RNA/ACECs and 2 watershed ACECs) totaling 24,287 acres would receive special management attention and protection. ● The expanded 1,520-acre Lacks Creek RNA/ACEC would preserve and protect old-growth forest values.b ● The 6,895-acre Red Mountain RNA/ACEC would preserve and protect unique botanical and soils values, old-growth forestb, raptor habitat, and anadromous fisheries. Acquisition of 520 acres of private land and development of cooperative management partnerships on an additional 2,500 acres would protect additional habitat for sensitive plant species. ● The 3,775-acre Elder Creek RNA/ACEC would preserve and protect the Elder Creek and Fox Creek watersheds and old-growth forest values.b ● The 2,550-acre Gilham Butte RNA/ACEC would preserve and protect old-growth forest values.b Acquisition of 800 acres would enhance the designation.

Table S-2. continued

Resource	Alternative 1 Current Management	Alternative 2 Watershed Management/Old-Growth Retention
ACECs (continued)	<ul style="list-style-type: none"> ● The 1,080-acre Jaqua Butte RNA/ ACEC would continue to preserve and protect old-growth forest values.b 	<ul style="list-style-type: none"> ● The 1,080-acre Jaqua Butte RNA/ACEC would preserve and protect old-growth forest values.b ● Designation and management of the Lacks Creek Watershed ACEC (2,978 acres of public land plus an additional 11,065 acres of acquired private land) would enhance, preserve, and protect watershed resources in the Lacks Creek watershed and downstream resources in Redwood National Park. ● Designation and management of the South Fork Eel River Watershed ACEC (10,784 acres of public land plus an additional 2,408 acres of acquired private land) would enhance, preserve, and protect watershed resources in the South Fork Eel River watershed.
Wild and Scenic Rivers	<ul style="list-style-type: none"> ● Management of designated and eligible components of the National Wild and Scenic Rivers System in accordance with approved management plans and/or Wild and Scenic Rivers guidelines and applicable NWFP land allocations and standards and guidelines would protect these waterways' "outstandingly remarkable values". 	<ul style="list-style-type: none"> ● Management of designated and eligible components of the National Wild and Scenic Rivers System in accordance with approved management plans and/or Wild and Scenic Rivers guidelines and applicable NWFP land allocations and standards and guidelines would protect these waterways' "outstandingly remarkable values".

Table S-2. continued

Resource	Alternative 1 Current Management	Alternative 2 Watershed Management/Old-Growth Retention
Land Tenure Adjustments	<ul style="list-style-type: none"> ● Acquisition of 10,280 acres of non-federal land would consolidate public lands and improve public and administrative access, management efficiency, and effectiveness. ● Disposal of 1,120 acres in the matrix in the Red Mountain MA would relieve BLM of administrative responsibility for six difficult to manage isolated public land parcels. ● Public land parcels (totaling 2,200 acres) in LSRs in the northern part of the Red Mountain MA would be made available for disposal through exchange if the exchanges provided benefits equal to or better than current conditions. ● Transfer of public lands in the Yolla-Bolly/Middle Eel Wilderness and Big Butte WSA (9,400 acres) to the Mendocino National Forest would improve management efficiency and effectiveness of the wilderness. 	<ul style="list-style-type: none"> ● Acquisition of 18,669 acres of non-federal land would consolidate public lands and improve public and administrative access, management efficiency, and effectiveness. ● Disposal of 3,660 acres in the matrix (in Red Mountain, Covelo Vicinity, and Scattered Tracts MAs) would help consolidate federal ownership to more effectively meet LSR objectives. ● Transfer of public lands in the Yolla-Bolly/Middle Eel Wilderness and Big Butte WSA (9,400 acres) to the Mendocino National Forest would improve management efficiency and effectiveness of the wilderness.

Table S-2. continued

Resource	Alternative 1 Current Management	Alternative 2 Watershed Management/Old-Growth Retention
Access	<ul style="list-style-type: none"> ● Acquisition of public access to all public lands in the plan amendment area would improve overall public and administrative access, management efficiency, and effectiveness in the long term. ● Priority acquisition of public access to 3 public land blocks (Gilham Butte, Eagle Peak, and The Cedars) would improve overall public and administrative access, management efficiency, and effectiveness in the short term. 	<ul style="list-style-type: none"> ● Acquisition of public access to all public lands in the plan amendment area would improve overall public and administrative access, management efficiency, and effectiveness in the long term. ● Priority acquisition of public access to 17 public land blocks [NE corner Lacks Creek (or Beaver Ridge), North Jewett, South Jewett, Island Mountain, Red Mountain (trail access), South Fork Eel River, Brushy Mountain, Willis Ridge, Eden Valley, Travis Ranch, Gilham Butte, Iaquia Butte, Coleman Creek, Cameron Creek, Greenough Ridge/Montgomery Woods, Impassable Rocks/Eagle Peak, and Pine Ridge] would improve overall public and administrative access, management efficiency, and effectiveness in the short term.

^a A LIMITED vehicle use designation means that vehicle use is limited to transportation facilities designed for highway vehicles having four or more wheels.

^b "Old-growth" acreage is derived from a "suitable" owl nesting/roosting/foraging habitat model using Wildlife Habitat Relationships (WHR) typing of forested lands in the Ukiah District. Those timber stands in which trees contributing to the canopy layer average a minimum of 24" diameter breast height (DBH) and in which the canopy layer is continuous over a minimum of 40% of the stand are used in this definition. It is recognized that the definition includes a broader range of conifer sizes than many old-growth definitions but may exclude some sites dominated by mature hardwood.

Chapter 1. Purpose and Need

INTRODUCTION

This Proposed Resource Management Plan (RMP) Amendment and Environmental Assessment (EA) evaluates alternative strategies for managing public lands in the Lacks Creek, Red Mountain, Covelo Vicinity, and Scattered Tracts Management Areas (MAs) of the Arcata Resource Area (ARA). These MAs encompass approximately 122,400 acres of public land administered by the U.S. Bureau of Land Management (BLM) and 127,300 acres of federal mineral ownership where the surface is privately owned (BLM split estate land) in the northern California counties of Humboldt, Mendocino, Trinity, and Sonoma (Table 1-1 and Figure 1-1).

The existing plan for these MAs, the Arcata RMP, was adopted in 1992. The scope of this plan amendment is limited to a review of decisions related to forest management and land tenure adjustments in the four MAs listed above. The plan amendment is being prepared to provide a comprehensive framework for managing public lands and allocating resources in these MAs during the next 10 years. The plan amendment will guide and control future management actions, as well as the development of subsequent and more detailed plans.

This plan amendment/EA was prepared in accordance with the requirements of the Federal Land Policy and Management Act (FLPMA) of 1976, as amended, and the National Environmental Policy Act (NEPA) of 1969.

THE PLAN AMENDMENT AREA

The planning area for the Arcata RMP is located in northwestern California; total planning area acreage includes about 129,100 acres of BLM-administered public land and 132,000 acres of BLM split estate. These public lands are scattered over a four-county area in numerous separate blocks and isolated parcels. The Arcata RMP applies to all public lands administered by the BLM in the ARA except the King Range National Conservation Area; the RMP also applies to those portions of the Clear Lake Resource Area which were not addressed in the Clear Lake Management Framework Plan (MFP) or Cow Mountain MFP.

Table 1-1. Management Areas Addressed in the
Proposed Arcata Plan Amendment/EA

Management Area	Acreages	
	Public Land	Split Estate
Lacks Creek	4,100	500
Red Mountain	35,664	14,000
Covelo Vicinity	66,500	30,000
Scattered Tracts	16,105	82,800
Total Acres	122,369	127,300



LOCATION MAP

MAP 1-1

To facilitate resource planning and management, the planning area for the Arcata RMP is divided into seven MAs based on common features, problems, and management needs. These MAs are briefly described in the following sections.

Management Areas Addressed in This Amendment

This plan amendment/EA addresses management of four of seven MAs included in the 1992 Arcata RMP. These include Lacks Creek, Red Mountain, Covelo Vicinity, and Scattered Tracts; acreages for each of these MAs are shown in Table 1-1. The selected plan amendment will replace decisions in previous planning documents for these four MAs.

Lacks Creek

The Lacks Creek MA is several miles west of the Hoopa Valley Indian Reservation and approximately 5 miles southeast of Redwood National Park in western Humboldt County. The majority of BLM lands in this MA is in a contiguous block along the west slopes of Pine Ridge in the upper reaches of Lacks Creek drainage. This MA is within the Redwood Creek watershed and, therefore, the Redwood National Park Protection Zone established by the Redwood National Park Protection Act of 1978 (PL 95-250).

Most of the MA is forested, and species are primarily Douglas-fir (*Pseudotsuga menziesii*) and mixed hardwoods. An 800-acre block of public land in the northern part of the MA is designated as the Lacks Creek Research Natural Area of Critical Environmental Concern (RNA/ACEC) for the preservation of old-growth forest values. The MA provides habitat for the federally threatened northern spotted owl and associated old-growth species, black-tailed deer, and black bear. The MA may provide habitat for the marbled murrelet. Lacks Creek provides habitat for steelhead and salmon.

Red Mountain

The Red Mountain MA encompasses public lands in southeastern Humboldt and northwestern Mendocino Counties. The majority of public land acreage in the Red Mountain MA is in three large blocks in the following areas: Red Mountain, Elkhorn Ridge-Brush Mountain, and Cahto Peak. Public lands in the northern part of the MA are in small blocks and scattered parcels in the Charlton Creek, Bell Springs Creek, Pipe Creek, Jewett Creek, and Tom Long Creek Watersheds.

The MA encompasses a variety of vegetation types including old-growth Douglas fir, redwood forest, chaparral, riparian, and the unique flora associated with the red soils of Red

Mountain. Species occurring in the MA include the federally listed as threatened northern spotted owl and other old-growth forest related species, the federally listed as endangered bald eagle and peregrine falcon, and other significant species including black bear and black-tailed deer. Anadromous fish species use many streams in the MA. Cedar Creek and South Fork Eel River provide significant habitat for anadromous fish runs in the Eel River system, including chinook salmon, coho salmon, and steelhead. The South Fork Eel River is a component of the National Wild and Scenic Rivers System (NWSRS).

The 6,895-acre Red Mountain RNA/ACEC is designated and managed for protection of unique botanical and soils values, old-growth forest, raptor habitat, and anadromous fisheries. Most of the Red Mountain RNA/ACEC is also a wilderness study area (WSA).

The 3,775-acre Elder Creek RNA/ACEC is managed to protect the Elder Creek and Fox Creek watersheds. The RNA/ACEC is managed cooperatively with the University of California's 4,000-acre Heath and Marjorie Angelo Coast Range Reserve. The Angelo Coast Range Reserve was formerly named the Northern California Coast Range Preserve.

Covelo Vicinity

The Covelo Vicinity MA encompasses public lands in southern Trinity and northeastern Mendocino Counties along the southern boundary of the Six Rivers National Forest and western boundary of the Mendocino National Forest. The entire MA lies within the Eel River watershed, including the main stem Eel River, North Fork Eel River, and Middle Fork Eel River; all are components of the NWSRS. Large blocks of public land acreage in the Covelo Vicinity MA lie in the areas of Willis Ridge; Indian and Fish Creeks; and Thatcher Creek, Elk Creek, Deep Hole Creek, and Eden Creek. Public lands in the northern and western parts of the MA are in small blocks and scattered parcels in the Woodman Creek, Shell Rock Creek, North Fork Eel River, Casoose Creek, and Antone Creek watersheds.

The MA encompasses a variety of vegetation types; chaparral communities are predominant on ridges in the larger blocks of public lands with pockets of oak grasslands/woodlands and mixed conifers along drainages. One of the most extensive known stands of Sargent cypress occurs in the Eden Creek area. Late-successional forest habitats are found in remnant patches on isolated parcels of public land. The MA overall habitat diversity including habitats for black bear, wild turkey, black-tailed deer, mountain and California quail, and late-successional forest dependent species. Anadromous fish species use many streams in the MA.

The MA includes the Eden Valley, Thatcher Ridge, and Big Butte WSAs and BLM lands in the Yolla Bolly/Middle Eel Wilderness. The Little Darby area is managed as an environmental education area and used by local schools.

Scattered Tracts

The Scattered Tracts MA includes small blocks and isolated parcels of public lands in Humboldt, Trinity, Mendocino, and Sonoma Counties. Scattered Tracts parcels have historically received minimal management by BLM because of lack of access, small parcel size, and influence from adjacent land uses. Old-growth and late-successional forest habitats on public lands in the Scattered Tracts MA are found in remnant patches; the largest old-growth stand is in the Gilham Butte block. Public lands in this MA provide a variety of habitats; species include peregrine falcon, black-tailed deer, black bear, wild turkey, and blue grouse, as well as northern spotted owl and other late-successional forest dependent species. Anadromous fish species, salmon and steelhead, use streams in the MA. BLM ownership along waterways in the MA is limited. Gilham Butte (2,550 acres) and Jaqua Buttes (1,080 acres) are designated RNAs/ACECs to protect old-growth values.

Management Areas Not Addressed

This plan amendment/EA does not address management of the Samoa Peninsula, Butte Creek, and King Range Vicinity MAs. Decisions for these MAs stand as adopted in the 1992 Record of Decision (ROD) for the Arcata RMP, which is available for review in the ARA Office.

PURPOSE AND NEED FOR THE PROPOSED PLAN AMENDMENT

The following sections describe the federal and state policies and planning efforts that provided the impetus for the proposed Arcata plan amendment.

Decisions in the Arcata RMP

Management of public lands in the ARA is guided by the Arcata RMP, which was adopted in 1992. The Final Arcata RMP/Environmental Impact Statement (EIS) evaluated land use alternatives for seven MAs. Issues analyzed in the RMP/EIS included:

- northern spotted owls and other old-growth forest values,
- availability of timber to market,
- land tenure adjustment,

- botanical values (including wetlands) and passive recreation in the Samoa MA, and
- off-road vehicle (ORV) recreation use in the Samoa MA.

The final RMP/EIS was released in September 1989. BLM received 11 protests in the ensuing 30-day protest period. The protests focused on ORV use on Samoa Peninsula, management of forested tracts and spotted owl habitat, and land tenure adjustment.

In June 1989, the U.S. Fish and Wildlife Service (USFWS) published a proposal to list the northern spotted owl as a threatened species under the provisions of the Endangered Species Act (ESA). Subsequent federal and state actions concerning regional planning efforts for spotted owls and old-growth habitat occurred while protests on the final RMP/EIS were being processed.

On July 23, 1990, the listing for the spotted owl became effective and USFWS began work on a recovery plan and identification of critical habitat. Under ESA, critical habitat is defined as specific areas that support biological conditions essential to the conservation of the species and that may require special management considerations or protection. Federal agencies are required to ensure that any action they authorize, fund, or implement not destroy or adversely modify designated critical habitat. The final critical habitat designation for 6.9 million acres in Washington, Oregon, and northern California was published on January 15, 1992. USFWS issued the Draft Recovery Plan for the Northern Spotted Owl in April 1992; the Final Draft Recovery Plan was released in December 1992.

The California Board of Forestry (Board) regulates timber harvest on state and private lands in California. Harvest activities on state and private forest lands could result in direct mortality to the northern spotted owl or could eliminate or degrade its habitat. In September 1990, recognizing the role of private lands in owl recovery, the Board formed a working group for the purpose of developing a regional habitat conservation plan (HCP) to address habitat requirements. HCPs as outlined in the ESA are usually directed toward single ownerships, which, with an approved HCP, can have "take" of owls through legal timber harvest as long as it is in compliance. The Board attempted to expand the HCP provision across the entire range of the owl under a strategy which sought to enhance, or parallel, the federal strategy.

On September 19, 1991, BLM and nine original participating federal and state agencies in California developed an interagency memorandum of understanding (MOU), "The Agreement on Biological Diversity", to develop guiding principles and policies, design a statewide strategy to conserve biological diversity, and coordinate implementation of the strategy through regional and local institutions. Since its creation, county governments as well as additional federal and state agencies have become signatories to the MOU.

The final listing, designation of critical habitat, and opportunities to coordinate BLM planning with interagency regional planning efforts prompted the ARA to reconsider RMP decisions and land use allocations affecting the spotted owl and old-growth forest values.

ARA issued the ROD for the Arcata RMP in April 1992. The ROD designated five RNA/ACECs to protect old-growth values in the Lacks Creek, Red Mountain, Covelo Vicinity, and Scattered Tracts MAs. The ROD stipulated that there would be no new offerings for timber harvest (no green timber sales) and no land disposals, thereby preserving forest management and land tenure adjustment options for these MAs pending the outcome of regional planning efforts for spotted owl habitat and subsequent completion of an RMP amendment. Decisions and land use allocations not affecting spotted owls and old-growth issues were adopted in the ROD.

In July 1993, the Board terminated the HCP because funding sources were not available to implement the preferred plan and new federal policies for coordinated owl management on U.S. Forest Service (USFS) and BLM lands were being considered. These new federal policies are discussed in the following section.

President's Northwest Forest **Plan**

In April 1993, President Clinton convened the Forest Conference in Portland, Oregon, to address the human and environmental needs served by the federal forests of the Pacific northwest and northern California. At the President's direction, an interagency, interdisciplinary team was assembled to prepare a balanced, comprehensive and long-term policy for the management of federally administered lands within the range of the northern spotted owl. On July 1, 1993, President Clinton announced his proposed "Forest Plan for a Sustainable Economy and a Sustainable Environment", consisting of strategies for forest management, economic development, and agency coordination. The forest management and implementation portion of the strategy was analyzed in the Draft Supplemental EIS (SEIS) on Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl issued in July; the final SEIS was made available to the public in February 1994.

On April 13, 1994, the Secretaries of the U.S. Department of Agriculture (USDA) and U.S. Department of the Interior (USDI) issued a ROD for the final SEIS. The ROD outlines management direction consisting of extensive standards and guidelines, including land allocations, that compose a comprehensive ecosystem management strategy for the 24-million-acre planning area. In this RMP amendment/EA, the management direction outlined in the ROD is called the Northwest Forest Plan (NWFP). The NWFP amends the planning documents of all national forests and BLM districts within the range of the northern spotted owl, including the Arcata RMP.

The basic elements of the NWFP are land allocation categories and the Aquatic Conservation Strategy. The NWFP land allocations identify a network of designated areas managed primarily to protect and enhance habitat for the northern spotted owl and other late-successional and old-growth forest related species and nondesignated areas referred to as the matrix. The Aquatic Conservation Strategy was developed to restore and maintain the ecological health of watersheds and aquatic ecosystems, and to protect salmon and steelhead habitat within the range of Pacific Ocean anadromy.

The major components of the NWFP as they affect the Arcata plan amendment area are summarized below and in Table 1-2.

Land Allocation Categories

Five of the seven NWFP land allocation categories apply to the Arcata plan amendment area. All land allocations have specific management direction regarding how those categories are to be managed, the rules or limits governing actions, and the principles specifying the environmental conditions or levels to be achieved and maintained; this management direction is known as "standards and guidelines". In some areas, land allocations overlap.

Congressionally Reserved Areas are lands that have been reserved by act of Congress for specific land allocation purposes. The NWFP cannot and does not alter any of these congressionally mandated land allocations. Management of these lands follows direction written in the applicable legislation or adopted plans. Direction from the NWFP standards and guidelines also applies where it is more restrictive or provides greater benefits to late-successional forest-related species, unless contrary to legislative or regulatory language or intent. Congressionally Reserved Areas in the Arcata plan amendment area include the Yolla Bolly/Middle Eel Wilderness and designated Wild and Scenic Rivers.

Late-Successional Reserves (LSRs) are designed to serve as habitat for late-successional and old-growth-related species including the northern spotted owl. They are to be managed to protect and enhance old-growth forest conditions. LSRs, in combination with other allocations and standards and guidelines, will maintain a functional, interactive, late-successional and old-growth forest ecosystem.

No programmed timber harvest is allowed inside LSRs. Thinning or other silvicultural treatments may occur in stands up to 80 years old if the treatments are beneficial to the creation and maintenance of late-successional forest conditions. Salvage guidelines are intended to prevent negative effects on late-successional habitat. Nonsilvicultural activities within LSRs are allowed where such activities are neutral or beneficial to the creation and maintenance of late-successional habitat.

Table 1-2. Northwest Forest Plan Allocations for the Arcata Plan Amendment Area

Management Area	Acres		Reserve Lands			Key Watersheds
	Late Successional Reserves	Matrix	Congressionally Reserved ^a	Administratively Withdrawn ^b	Riparian Reserves ^c	
Lacks Creeks	4,100	0	• Redwood National Park Protection Zone	• Lacks Creeks RNA/ACEC 1800 acres)	Yes	No
Red Mountain	34,344	1,320	• South Fork Eel River Wild and Scenic corridor • main stem Eel River "Recreational" Wild and Scenic corridor at Jewett Creek	• Red Mountain RNA/ACEC 16,895 acres) • Elder Creek RNA/ACEC 13,775 acres	Yes	Tier 1 for South Fork Eel River and Cedar Creek Watersheds 122,000 acres
Covelo Vicinity	24,000	42,500	• Voila Bally/Middle Eel Wilderness 17,009 acres) • Eel River, North Fork Eel River, and Middle Fork Eel River Wild and Scenic corridors	No	Yes	Tier 1 for Thatcher Creek Watershed 13,152 acres)
Scattered Tracts	10,320	5,785	• Klamath River Wild and Scenic corridor • Van Duzen River "Recreational" Wild and Scenic corridor • main stem Eel River "Recreational" Wild and Scenic corridor	• Laqua Butte RNA/ACEC 11,080 acres) • Gilham Butte RNA/ACEC 12,550 acres	Yes	Tier 1 for Mattole River Watershed 11,240 acres of Gilham Butte)

• Wild and Scenic River corridors are also partially or wholly within Riparian Reserves.

^b Administratively Withdrawn areas are also Late Successional Reserves.

• Riparian Reserves are areas along all streams, wetlands, ponds, lakes, and unstable or potentially unstable areas where the conservation of aquatic and riparian-dependent terrestrial resources receives primary emphasis.

Administratively Withdrawn Areas are areas designated in existing agency plans where management emphasis precludes timber harvest and that are not included in calculations of allowable sale quantity (ASQ). The NWFP specifies that the management guidelines for administratively withdrawn areas apply where they are more restrictive or provide greater benefits to late-successional and old-growth forest-related species than the provisions of the forest plan standards and guidelines. Administratively Withdrawn Areas in the Arcata plan amendment area include RNA/ACECs. All administratively withdrawn areas in the Arcata plan amendment area are within designated LSRs.

Riparian Reserves are areas along all streams, wetlands, ponds, lakes, and unstable or potentially unstable areas where the conservation of aquatic and riparian-dependent terrestrial resources receives primary emphasis. The main purpose of the reserves is to protect the health of the aquatic system and its dependent species; the reserves also provide incidental benefits to upland species. These reserves will help maintain and restore riparian structures and functions, benefit fish and riparian-dependent nonfish species, enhance habitat conservation for organisms dependent on the transition zone between upslope and riparian areas, improve travel and dispersal corridors for terrestrial animals and plants, and provide for greater connectivity of late-successional forest habitat.

The standards and guidelines designate initial reserve widths for protected riparian areas, as well as specific requirements for timber management, road construction and maintenance, grazing, recreation, minerals management, fire/fuels management, research, and restoration activities. Riparian Reserves occur in LSRs, Administratively Withdrawn Areas, and matrix in the Arcata plan amendment area.

Matrix is the federal land outside the categories of designated areas. The matrix includes the forested areas in which most timber harvest and other silvicultural activities will be conducted. The matrix also contains nonforested areas that may be technically unsuited for timber production.

Aquatic Conservation Strategy

The key components of the Aquatic Conservation Strategy are riparian reserves, key watersheds, watershed analysis, and watershed restoration. Riparian Reserves are a category of land allocation described above.

Key Watersheds are a system of large refugia comprising watersheds that are crucial to at-risk fish species and stocks and provide high quality water. Tier 1 Key Watersheds contribute directly to conservation of at-risk anadromous salmonids, bull trout, and resident fish species and also have high potential and highest priority for watershed restoration.

Watershed analysis is a systemic procedure to characterize watersheds, guide management prescriptions and monitoring programs, set and define criteria for modifying interim Riparian Reserve widths, and develop restoration. Watershed analysis is required in Key Watersheds before resource management. For example, timber harvest, including salvage, cannot occur in key Watersheds or Riparian Reserves without a watershed analysis.

Watershed restoration programs, based on watershed analysis and planning, will be developed to aid recovery of fish habitat, riparian habitat, and water quality. Components of restoration programs could include control and prevention of road-related runoff and sediment production, restoration of the condition of riparian vegetation, and restoration of in-stream habitat complexity.

Relationship to Recovery of the Northern Spotted Owl

The USFWS' final draft recovery plan identifies a network of Designated Conservation Areas (DCAs) on federal forestlands to provide primary habitat for the northern spotted owl. Each DCA includes areas of currently existing suitable owl habitat (also referred to as nesting, roosting, and foraging habitat) combined with areas of younger forests; these younger stands will be protected so they can mature into owl habitat. The largest DCAs are designed to support a population of 20 or more pairs of owls in habitat conditions that allow successful breeding and rearing of young. The DCA network is configured to allow owls to disperse from one DCA to another. DCAs are to be managed to improve northern spotted owl habitat.

The NWFP management direction and standards and guidelines are intended to constitute the Forest Service and BLM contribution to the recovery of the northern spotted owl. The NWFP standards and guidelines include elements of the final draft recovery plan. The SEIS concluded that the NWFP meets the conservation measures for federal lands in the final draft recovery plan. NWFP implementation actions will undergo consultation, either formal or informal, as appropriate. Consultation for the northern spotted owl is not required for activities consistent with NWFP standards and guidelines if those activities will not result in incidental take. Consultation that may be required but that does not involve take is expected to be informal. Where incidental take would occur, incidental take statements will be provided through formal consultation.

Implementation

The responsibility for implementing the NWFP management direction rests with the managers of the USFS and BLM units in the Pacific Northwest planning area. Implementation of the ecosystem management strategy outlined in the NWFP will require a high degree of cooperation and collaboration. Interagency groups established to ensure

the coordinated and effective implementation of the NWFP and to support preparation and revision of Forest plans and BLM RMPs include an Interagency Steering Committee, Regional Interagency Executive Committee, Regional Ecosystem Office, Research and Monitoring Committee, and Province Teams. The Regional Interagency Executive Committee will review proposed Forest plans and BLM RMPs, including the proposed Arcata plan amendment, to ensure consistency with the objectives of the NWFP.

The ROD facilitates integrated ecosystem management by requiring a variety of planning assessments, analyses, and activities designed to address various components of ecosystem management. The standards and guidelines recognize that assessments of ecosystem issues may require analysis beyond existing political or administrative boundaries and provides for province-level, or bioregional, analysis and coordination in addition to watershed analyses. Province-level "planning" would be coordinated through the interagency groups to help interpret or amend existing Forest Plans or BLM RMPs. The standards and guidelines also require preparation of management assessments for each large LSR (or group of smaller LSRs) before habitat manipulation activities are designed and implemented. The management assessment may be developed as components of agency planning documents, province-level planning, or stand-alone documents.

The ROD for the Arcata RMP directed that a plan amendment be prepared addressing land tenure and forest management in the Lacks Creek, Red Mountain, Covelo Vicinity, and Scattered Tracts MAs after completion of regional planning efforts for spotted owl habitat. The purpose of the Arcata plan amendment is to address these issues within the framework of the NWFP.

Redwood National Park Expansion Act

The Redwood National Park Expansion Act of 1978 (PL 95-250) was enacted to protect existing irreplaceable resources in Redwood National Park from damaging upslope and upstream land uses, to provide a land base sufficient to ensure preservation of significant examples of the coastal redwood in accordance with the original intent of Congress, and to establish a more meaningful park for the use and enjoyment of visitors. Within the area outside the boundaries of Redwood National Park, the "Park Protection Zone", the Secretary of Interior is authorized to acquire lands and interests in lands in order to protect downstream resources. Any lands so acquired shall be managed in a manner that will maximize the protection of the resources of Redwood National Park and in accordance with FLPMA.

The Secretary is also authorized to initiate and provide funds, equipment, and personnel for the development and implementation of a program for the rehabilitation of areas within and upstream from the park contributing significant sedimentation because of

past logging disturbances and roads. In connection with this, the Secretary shall undertake and publish studies on erosion and sedimentation originating within the hydrographic basin of Redwood Creek. The Lacks Creek MA is within the Park Protection Zone.

Plan Amendment Objectives and Scope

The four MAs addressed in this plan amendment contain important late-successional/old-growth forest, watershed, wildlife, fisheries, and recreational values. Public lands in these MAs are recognized as integral to the success of the NWFP for management of habitat for late-successional and old-growth forest-related species within the range of the northern spotted owl. ARA has identified the need to develop specific management objectives and direction for land tenure adjustments and forest lands within the context and framework of the NWFP land allocations and standards and guidelines.

The overall objective of the plan amendment is to provide high-quality resource management direction for the public lands that responds to the planning issues and management concerns, and meets the specific needs of the resources. The plan amendment selected for implementation will:

- identify and incorporate NWFP land allocations and management direction for the four MAs in the plan amendment area,
- establish more specific resource condition objectives and land allocations and identify suitable management activities for the four MAs in the plan amendment within the context of the NWFP,
- identify areas where BLM should manage and acquire lands in support of regional ecosystem and watershed management strategies, and
- identify parcels of land that may be disposed of through exchange to consolidate public lands into larger and more effective management blocks.

PLAN AMENDMENT PROCESS

The BLM process to amend a resource management plan follows the same procedure that is used to develop a new plan. The steps described in the planning regulations and followed in preparing this proposed RMP amendment/EA are summarized below. Publication of this document is part of Step 7, "Selection of the Preferred Alternative".

- **Step 1. Identification of Issues.** This step identifies resource management concerns, environmental concerns, and opportunities that can be resolved through the planning process. The selection of issues provides a focus for the remainder of the plan amendment and environmental review process. Public participation in this process, called scoping, has included two workshops and notification of all affected or interested parties. A Notice of Intent (NOI) to prepare the plan amendment was published in the Federal Register on August 13, 1992. The following section of this chapter contains a more detailed discussion of the issues selected for this plan amendment and EA.
- **Step 2. Development of Planning Criteria.** This step identifies the laws, regulations, policy, and management guidance that will govern the consideration and resolution of each issue and the selection of alternatives.
- **Step 3. Collection of Inventory Information.** This step collects the data needed to resolve resource management and environmental issues that will be addressed in the plan amendment and EA. Data for the analysis was obtained primarily from existing sources.
- **Step 4. Analysis of the Management Situation.** This step requires deliberate assessment of the current situation. It includes a description of the current BLM management guidance, a discussion of existing problems and opportunities for solving them, and a consolidation of existing data needed to analyze and resolve the identified issues. This data forms the basis for the Affected Environment, the description of the Current Management (No Action) Alternative, and the development of realistic alternative actions. This step included an evaluation of the management implications of the NWFP.
- **Step 5. Formulation of Alternatives.** This step prepares several complete reasonable resource management alternatives. The Current Management (No Action) Alternative describes present management of the Lacks Creek, Red Mountain, Covelo Vicinity, and Scattered Tracts MAs, as amended by the NWFP. The Watershed Management/Old-Growth Retention Alternative describes management strategies to respond to the planning issues and management concerns identified in Step 1 for these MAs.
- **Step 6. Estimation of Effects.** This step analyzes the physical, biological, economic, and social impacts of implementing each alternative. The analysis focuses on the environmental issues identified during Step 1 of this process.
- **Step 7. Selection of the Preferred Alternative.** This step compares the impacts of each alternative and selects the preferred alternative. The selection and

analysis of alternatives is documented in the proposed RMP Amendment/EA, which is circulated for public review.

- Step 8. Selection of the Plan Amendment. This step analyzes public comments, modifies the alternatives as appropriate, and selects the alternative to be adopted as part of the RMP. The proposed plan amendment and final EA is distributed to the public in the final RMP Amendment/EA document. A 60-day review by the Governor and a 30-day public protest period is allowed before the RMP amendment is adopted. An ROD and approved RMP amendment is published after consideration of any protests.
- Step 9. Monitoring and Evaluation. This step involves monitoring and evaluating the resource conditions as the approved RMP amendment is implemented. If monitoring shows that resource issues are not being satisfactorily resolved or that the desired results outlined in the adopted plan are not being met, the RMP may be amended again or totally revised.

PLANNING ISSUES, CRITERIA, AND MANAGEMENT CONCERNS

The BLM planning process is issue driven; BLM planning regulations equate land use planning with problem solving and issue resolution (43 CFR 1600). The development of management proposals is based on the issues identified through public input; resource monitoring; and statutory, regulatory, or policy mandate. An issue is defined as an opportunity, conflict, or problem regarding the use or management of public lands and resources.

Planning criteria are the standards, rules, and measures used to guide data collection, alternative formulation, and final plan selection. Planning criteria are taken from appropriate laws and regulations, BLM manuals and directives, and concerns expressed in meetings and in consultations with the public and with other agencies.

Management concerns are nonissue-related procedures or land use allocations found in need of change, review, or action during the land use planning process. Management concerns focus on use conflicts, requirements, or conditions that have land use allocation implications and cannot be resolved administratively. During initial public scoping, management concerns did not appear to meet the criteria to qualify as planning issues but were identified for resolution in the Arcata plan amendment.

Issue 1: Management of Forest Lands, Including Old-Growth and Late-Successional Forest Ecosystems

ARA forested lands contain residual old-growth and late-successional forests within an intensively managed, predominately privately owned forest matrix. Historically, these public lands were managed to provide a sustained yield of forest products from the available forest land base. Over the past 15-20 years, public and agency attitudes toward sustained yield forestry have evolved away from a strictly economic-based orientation toward integrated forest management regimes designed to protect unique ecosystems and species and retain structural features of late-successional forests and their associated aquatic ecosystems. The public has expressed a willingness to support a less intensively managed forests in favor of these values for public lands in the ARA. As late-successional forest dependent wildlife species such as the northern spotted owl and marbled murrelet have become federally listed as threatened and as similar habitat for other species has become increasingly scarce, the retention of these habitats in a relatively undisturbed state has become the subject of regional, state, and local planning efforts. These planning efforts all perceive a role for public lands in maintaining these habitats. Achieving the goals of the NWFP requires evaluation of existing ARA planning decisions and management direction to identify opportunities and constraints for implementing integrated ecosystem management.

Needed Decisions

To resolve this issue, answers are needed to the following questions:

- In LSRs, which public lands should BLM retain to enhance and facilitate management of late-successional and old-growth ecosystems?
- In LSRs, where are the priority areas for timber stand improvement?
- Which public lands should be designated as RNAs to protect old-growth values? What management objectives, strategies, and development or use constraints need to be established for these areas?
- Which public lands in the matrix should be retained for forest management? What should be the management objectives for these lands?

Planning Criteria

To formulate decisions, BLM will consider the following:

- Size and configuration of NWFP land allocations
- NWFP standards and guidelines
- Potential for enhancing and accelerating late-successional and old-growth forest characteristics
- Size and location of previously entered stands, including cutover acquired lands
- Size and location of identified old-growth stands
- Existing designations, including ACECs, RNAs, Wild and Scenic Rivers, and WSAs
- Potential for enhancing wildlife habitat
- Opportunities to support regional ecosystem and watershed management strategies
- Public input, including individuals, organizations, and the scientific community.

Issue 2: Disposal and Acquisition of Lands

In some areas, the ARA contains a fragmented land base that may not lend itself to effective management because of parcel size, location, or difficult access. Historically, such parcels have been used in a large-scale exchange program to consolidate public lands in the King Range National Conservation Area and to provide public access or enhance resource values on smaller blocks of public land in the Lacks Creek, Mattole River, and Red Mountain areas. Land tenure adjustment opportunities remain that could benefit public land management. There is general public support for the concept of consolidating and managing larger blocks for both management efficiency and habitat values. Some publics express a reluctance to convert any public lands into private ownership because of the perceived loss of remnant habitats, unique genetic material, or potential contributions to future reserve strategies.

Needed Decisions

To resolve this issue, answers are needed to the following questions:

- Which lands should BLM dispose of to facilitate management of public lands or to meet the needs of regional planning strategies?
- Which lands should BLM acquire (by exchange, purchase, or donation) to improve public land management and enhance regional ecosystem and watershed planning efforts?

Planning Criteria

To formulate decisions, BLM will consider the following:

- Existing resource values and land uses
- Long-term public land management goals
- Regional, state, and local conservation strategies for ecosystem and watershed management
- Public input, including individuals, organizations, and the scientific community
- Land and resource management efficiency
- Surrounding land ownership pattern and potential for consolidation with other public land parcels
- Existing and required public and administrative access
- Effects on other resource values and land uses

Priority for acquisitions will be those areas needed to:

- bring under federal administration lands with important late-successional and old-growth forest, watershed, wildlife, soil, and botanical values best managed for the public benefit and protected as public land;
- ensure the survival or recovery of special status animal or plant species;
- provide for access to large blocks of federal land; and

- consolidate surface and subsurface ownership in areas identified for retention.

When selecting lands for disposal, priority will be given to:

- public lands whose size, location, or other physical characteristics make them difficult or uneconomical for BLM to manage.

Issue 3: Watershed Management

Throughout the ARA, intermingled land ownership patterns result in numerous landowners within single watersheds. State and regional planning efforts, as well as specific legislation, identify goals for management of specific watersheds for both private and public lands. The NWFP, state identification of sensitive watersheds, California Department of Fish and Game (DFG) "Zero Net Discharge" legislation, and the Redwood National Park Expansion Act all point to the need for comprehensive watershed management. BLM recognizes the need to exercise appropriate mechanisms for cooperative management across ownerships or for the consolidation of private and public lands to decrease the complexity of managing within a watershed.

Coordinated watershed management is also consistent with the coordinated resource management planning process as envisioned by the interagency MOU, "Agreement on Biological Diversity" (September 19, 1991).

Needed Decisions

To resolve this issue, answers are needed to the following questions:

- What are the priority areas for watershed management? Are there areas where cooperative watershed management among landowners is mandated by existing legislation? Are there areas where cooperative watershed management in accordance with existing regulations would benefit natural resources and serve the public good through more efficient management? What management objectives, strategies, and development or use constraints need to be established for these areas?
- Within areas identified as appropriate for watershed management, are there opportunities to increase management flexibility through consolidation of land ownership?

Planning Criteria

To formulate decisions, BLM will consider the following:

- Key watersheds identified in the NWFP
- Amount of public land within the watershed
- Number of landowners and potential cooperators within the watershed
- Source of regulatory burden for watershed management, such as federal legislation, state standards, and watershed group consensus

Issue 4: Areas of Critical Environmental Concern

Public lands in the plan amendment area possess old-growth and late-successional forest, rare botanical, watershed, and anadromous fisheries values; specific areas within these MAs have been designated as RNA/ACECs to protect these values. These values are also recognized in the NWFP land use allocations. Other opportunities to protect these values may exist within the management framework of the NWFP.

Needed Decisions

To resolve this issue, answers are needed to the following questions:

- Are there public lands in the plan amendment area with resource values requiring special management and suitable for designation as ACECs? What management objectives, strategies, and development or use constraints need to be established for these lands?

Planning Criteria

To formulate decisions, BLM will consider the following:

- Resource values
- Manageability of an area to preserve its resource value
- Current and potential land uses

- Existing special area designations and management objectives in the MA
- Effects of designation on other resources and uses
- Effects of nondesignation on resources values
- Social and economic effects
- Public interest and attitudes
- Consistency of designation with the NWFP
- Consistency of designation with resource plans of other federal, state, and local governments and the Indian tribes
- Consultation with federal, state, and local agencies; the scientific community; and individuals

Management Concern 1: Access

Land ownership patterns in the MAs create access barriers to public lands. Many parcels of public land are not legally accessible by the public or by BLM for administrative purposes. These lands are often subject to trespass uses. BLM's general policy is to provide public access to all public lands, or in the case of negotiated access rights, to obtain a minimum of administrative access to ensure that the public interest is not being compromised on those parcels and some level of management can take place. Obtaining access easements for public or administrative use is not always feasible or cost-effective. Land acquisition to secure access to identified resource values, or disposal of isolated public land parcels with minimal resource values, may be in the best interest of the public.

Needed Decisions

To resolve this management concern, answers are needed to the following questions:

- Where should BLM provide access to or across public land and what type of access is needed?
- What actions should BLM take to provide access to or across public land?

Planning Criteria

To formulate decisions, BLM will consider the following:

- Resource values
- Extent of public land and the size of public land parcels
- Availability and type of existing access
- Public needs and preferences for access
- Agency administrative needs for access
- Effects of the availability of access on existing resources and uses
- Based on existing information, a preliminary assessment of access feasibility (i.e., potential for development of access through consolidation of public land, development of alternative routes, and negotiated or purchased easements)

Management Concern 2: Minor Forest Products

There is a public demand for minor forest products such as posts, poles, fuelwood, and hardwood, which may become available on an irregular basis as a result of forest development projects or through natural processes such as insect infestations, windthrow, and fire. For example, windthrow blocking roads or trails must be removed in a timely manner to restore public use. BLM has the responsibility to ensure proper authorization for removal of minor forest products and to act in the public interest regarding commercial versus private utilization of these resources. Other minor forest products could include grasses, salal, and mushrooms. For these products, commercial versus private utilization, as well as the maintenance of sustainable levels of use, are management concerns.

Needed Decisions

To resolve this management concern, answers are needed to the following question:

- Under what conditions should BLM make minor forest products available to the public?

Planning Criteria

To formulate answers for the needed decisions identified above, BLM will consider:

- NWFP standards and guidelines
- Consistency with an MA's land use allocations and resource condition objectives
- BLM's ability to effectively administer minor forest products sales and control trespass

Management Concern 3: Off-Highway Vehicle Designations

BLM policy requires all public land in the ARA to be designated open, limited, or closed to off-highway vehicle (OHV) use (FLPMA, 43 CFR 8340, and Executive Order 11644). OHV designations are completed through the planning process; the approval of a resource management plan, plan revision, or plan amendment constitutes formal designation of off-road vehicle use areas.

Needed Decisions

To resolve this management concern, answers are needed to the following question:

- What public land should be designated as open, limited, or closed to vehicle use?

Planning Criteria

To formulate answers for the needed decisions identified above, BLM will consider:

- Effects of OHV use on other resource values and uses
- BLM administrative needs
- Manageability of an area to accomplish the objectives of a designation

ISSUES NOT ANALYZED

The following resource issues were examined, but dropped from further study and analysis because it was determined that the alternatives would not significantly affect or have an impact on them. No further discussion of these resources will be presented in this EA.

- Air Quality
- Mineral and Energy Resources
- Paleontological Resources
- Livestock Grazing
- Cultural Resources and Traditional Native American Resources
- Visual Resources
- Wilderness
- Recreation
- Public Safety
- Noise
- Social and economic values

Chapter 2. Plan Amendment Alternatives

INTRODUCTION

Chapter 2 describes the two alternatives analyzed in this document: the Current Management (No Action) Alternative and the Watershed Management/Old-Growth Retention Alternative. Each alternative represents a complete and feasible plan to guide future management of the public land and resources in the following ARA MAs: Lacks Creek, Red Mountain, Covelo Vicinity, and Scattered Tracts.

Chapter 2 includes a section describing continuing management guidance and actions common to both alternatives. Regardless of the alternative chosen as the approved plan amendment for ARA, BLM will follow this management guidance.

Chapter 2 ends with a discussion of alternatives considered but dismissed from detailed analysis.

CONTINUING MANAGEMENT GUIDANCE AND ACTIONS

The continuing management guidance and actions are a summary of basic management policy that will continue without change under the selected plan amendment. Public land, resources, and programs not affected by the resolution of issues and management concerns will be managed as outlined in this section. It is based on detailed discussions of the Existing Management Section of the Management Situation Analysis.

Management guidance for resource programs includes laws, Executive Orders, regulations, Department of the Interior manuals, BLM manuals and instruction memoranda (Washington, California State Office, and Ukiah District Office). Valid planning decisions and recommendations included in referenced planning documents and environmental studies, including the NWFP ROD and standards and guidelines, are available for review in the ARA Office. Together, these form the basis for the Continuing Management Guidance and Actions that will continue for public land resources and programs in the Lacks Creek, Red Mountain, Covelo Vicinity, and Scattered Tracts Mas.

General Management Policy

FLPMA establishes the basic public land policy and guidelines for administration and management under which the BLM operates. FLPMA provides the following general management policy applicable to the Mas addressed in this plan amendment/EA.

1. Management will be on the basis of multiple-use and sustained yield [Section 102(a)(7)].
2. Public lands identified for disposal are difficult and uneconomic to manage as part of the public lands and are not suitable for management by another federal department or agency [Section 203(a)(1)].
3. Public lands are to be retained in federal ownership unless disposal serves the national interest [Section 102(a)(1)].
4. Public lands will be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; that will provide food and habitat for fish and wildlife and domestic animals; and that will provide for outdoor recreation and human occupancy and use [Section 102(a)(8)].
5. Public lands will be managed in a manner which recognizes the nation's need for domestic sources of minerals, food, timber, and fiber from the public lands including implementation of the Mining and Minerals Policy Act of 1970, as it pertains to the public lands [Section 202(c)(3)].
6. The BLM will give priority to the designation and protection of ACECs [Section 102(a)(12)].
7. The BLM will weigh long-term benefits to the public against short-term benefits [Section 202(c)(7)].

Environmental Management

In compliance with NEPA and Council on Environmental Quality (CEQ) regulations, BLM will prepare site-specific environmental reviews before actions proposed in this plan amendment/EA are implemented. The environmental reviews provide site-specific assessments of the impacts of implementing these actions. As appropriate, these reviews are

documented in categorical exclusion reviews, BAs and decision records, or EISs and RODs. Additionally, BLM will ensure that clearances for threatened and endangered species and cultural resources are conducted as a part of the environmental review process. The review determines mitigation needed to reduce or eliminate the adverse impacts of implementing a proposed action. All environmental documents are open to public review.

Public lands not discussed in this document, but which are later acquired or identified because of resurveys or survey error, will follow the resource condition objectives and land use allocations specified for the management area.

Air Quality

The Clean Air Act, as amended in 1990, requires federal agencies to comply with all federal, state and local air pollution requirements (Section 118). The BLM is required to comply with the California State Implementation Plan (SIP) for achievement of National Ambient Air Quality Standards (NAAQS) for criteria pollutants, Prevention of Significant Deterioration (PSD) goals for the protection of air quality and visibility in wilderness areas and national parks, and local Air Pollution Control Districts' rules and regulations.

Management actions potentially affecting air quality, such as prescribed fire, will be evaluated site specifically to ensure conformance with the SIP, PSD goals, and local programs such as smoke management requirements. BLM must secure permits from responsible agencies for projects impacting air quality. Specific decisions will not be made in the selected plan amendment.

Minerals

Mineral exploration and development is encouraged on public land in keeping with the BLM's multiple resource use concept. Overall guidance on the management of mineral resources appears in the General Mining Law of 1872; Mining and Minerals Policy Act of 1970; Section 102(a)(12) of FLPMA, as amended; National Materials and Minerals Policy, Research and Development Act of 1980; and BLM's Mineral Resources Policy of May 29, 1984.

Locatable Minerals

The 43 CFR 3802 and 3809 regulations provide for mineral exploration and development in conjunction with other resource development. BLM will work with mine

operators to achieve plan approval. Where an operator does not have the technical resources to develop reclamation measures and measures to prevent unnecessary degradation, BLM will provide technical assistance. Mining within ARA will be administered on a case-by-case basis.

Development work, extraction, and patenting will be allowed in designated wilderness areas only on valid claims existing before designation.

Before BLM can approve mining plans of operation submitted for work in a designated wilderness area, a BLM mineral examiner must verify that a valid claim exists. The mineral examination and mineral report must confirm that minerals have been found and the evidence is of such character that a person of ordinary prudence would be justified in the further expenditure of his labor and means, with a reasonable prospect of success in developing a valuable mine.

Saleable Minerals

The Material Sale Act of 1947 and 43 CFR 3600 provide for the disposal and regulation of mineral materials. Sales of mineral materials to the public will be administered on a case-by-case basis. Saleable minerals are sold at market prices. Free use permits will continue to be issued to state and federal agencies, local communities, and nonprofit organizations as the need arises.

Leasable Minerals

The Mineral Leasing Act of 1920, Geothermal Steam Act of 1970, and 43 CFR 3100 to 3500 provide the regulatory framework for issuing mineral leases. These regulations apply where public interest exists for the development of oil, gas, sodium, potassium, and geothermal energy. Where required, stipulations will be attached to leases to mitigate impacts on sensitive species, cultural areas, and other resources susceptible to impacts from leasing-related activities.

Existing Plans and Decisions

The 1992 Arcata RMP allows all public lands (including split estate lands) in the four MAs addressed in this plan amendment to remain available for mineral leasing and mineral material sales, and open to entry under the Mining Law of 1872 except where specifically restricted or withdrawn. Because of the scattered nature of public land, low economic mineral potential, and lack of interest in mineral development within the resource area, restrictions and stipulations for mineral development will be determined on a case-by-case

basis. The process for reviewing hardrock mineral development proposals will include considerations of California's Surface Mining and Reclamation Act (SMARA), and coordination with lead agencies as defined by SMARA. All approvals of mineral actions must be consistent with MA Resource Condition Objectives.

The Red Mountain RNA/ACEC management plan (USDI BLM 1989) withdrew the ACEC from entry for mineral materials sales.

The 1992 Arcata RMP withdrew the Elder Creek RNA/ACEC from entry for mineral materials sales. The RMP also directed that the Elder Creek RNA/ACEC be withdrawn from entry for locatable minerals under the 1872 Mining Law; the petition for withdrawal has been submitted to the director of the BLM for approval.

Lands

It is BLM policy to make public land and its resources available for use and development to meet national, regional, and local needs, consistent with national objectives. FLPMA provides authority for land ownership adjustments by sale, exchange, withdrawal and other means. The act further requires that adjustments conform with existing land-use plans. The Arcata RMP provides the following areawide decisions and guidance for the lands program.

Manageability of Public Lands

Manageability of public lands will consider:

- safety of the public and BLM personnel with regard to road maintenance, illegal land uses, and other considerations;
- relative cost-effectiveness of managing individual tracts;
- fiscal ability of BLM to effectively manage lands and interests (including easements) in the long term;
- alternative management scenarios, such as creative partnership with other agencies and organizations; and
- willingness of other organizations and agencies to implement their land use plan decisions.

Disposal and Exchange

Site-specific inventories and analyses for threatened and endangered species, historic properties (cultural resources), and mineral values will be completed prior to disposal of public lands and interests.

BLM will not dispose of lands with resources of high national interest, including WSAs, RNAs, and ACECs, to nonfederal agencies. Disposal of the habitat of endangered, threatened, or sensitive species to nonfederal agencies or nonprofit organizations (e.g., county and state agencies or The Nature Conservancy) may be considered only if the protection and conservation that would be afforded the habitat following transfer of title equals or exceeds the level afforded by federal ownership. Such determination would be made by the state director. Disposal of the habitat of officially listed endangered or threatened species would occur only after consultation with the USFWS pursuant to Section 7 of the ESA.

Land exchanges involving LSRs will be considered if they provide benefits equal to or better than current conditions. Land exchanges will be considered to improve area, distribution, and quality (e.g., connectivity, shape, contribution to biodiversity) of LSRs, especially where public and private lands are intermingled. Such exchanges would require an LSR assessment for conformance with NSFP standards and guidelines.

Disposal refers to surface rights only. Every effort will be made to avoid creating split-estate when selling or exchanging lands. A policy of simultaneous disposal of subsurface rights will be followed with exceptions. Subsurface rights will be evaluated and appraised in each exchange proposal. These rights will be retained where known significant resources are present or exchanged with consideration in the appraisal price.

Acquisition

The acquisition areas identified under the alternatives in this plan amendment are high priority areas that give the BLM direction for land and resource consolidation in order to improve manageability and cost-effectiveness. These proposed acquisitions are not intended to be an exhaustive list of every acquisition target. Acquisition depends on willingness for sale or exchange. Opportunities that arise and meet the resource condition objectives will be considered.

In instances where the legal descriptions for Special Designations are down to section only, the intent is to automatically include under the designation lands that may be acquired in those sections.

Desert Land Entries and Indian Allotments

No public lands in the planning area are suitable or available for agricultural entry, including Indian Allotments (43 CFR 2530) because of the rugged topography, small tract size, unsuitable soils, and lack of access. No public lands are desert in character (43 CFR 2520); therefore, no public lands are available for disposal under the desert lands laws.

Rights-of-Way

Rights-of-way (ROW) proposals will be evaluated on a case-by-case basis. Rights-of-way determinations cannot be made at this planning level with any degree of credibility. Federal tracts do not control ROWs such as highways or utility corridors. Proposals will be addressed on a site-specific basis.

Access

BLM's general goal is to obtain access to all public lands when feasible. Where specific access routes have not been identified in the plan amendment alternatives, access that is necessary to meet the resource condition objectives and fully implement the land use allocations will be acquired.

Livestock Grazing

ARA's grazing program is managed under provisions of the Taylor Grazing Act of 1934, FLPMA, and the Public Rangelands Improvement Act (PRIA) of 1978. These acts authorize the issuing of grazing leases, unauthorized use detection and abatement, use supervision, livestock grazing management, range improvement facilities and treatments, and other actions.

The management of livestock grazing will follow prescriptions of the Yokayo Grazing ROD (USDI BLM 1983a) that is incorporated by reference and allotment management plans (AMPs) that specify grazing systems, management facilities, and land treatments. Livestock grazing will also be managed to ensure consistency with management objectives for LSRs and the Aquatic Conservation Strategy. Evaluation of existing and proposed livestock grazing will be included in watershed analyses for Key Watersheds and management assessments for LSRs. AMPs will be revised or developed to reflect any needed changes as determined through monitoring studies and allotment evaluation.

Unless specifically prohibited under an alternative, all manageable public land is available for livestock grazing. The Red Mountain RNA/ACEC and Elder Creek RNA/ACEC are not available for livestock grazing. Public lands in the Covelo Vicinity MA are not available for new livestock grazing leases.

Watershed Resources

Management actions will be conducted in manner that conforms to regional and state water quality control board objectives and standards that have been developed as required by the 1987 Water Quality Act Amendments to the Federal Water Pollution Control Act. Best management practices (BMPs) will be developed as needed under the guidance of the California BLM 208 Water Quality Management Plan and the state's Nonpoint Source Program, and in coordination with the responsible regional water quality control board.

Management actions will also comply with the NWFP Aquatic Conservation Strategy and objectives and standards and guidelines for Key Watersheds, LSRs, and Riparian Reserves, where applicable. Long-term management within Key Watersheds requires watershed analyses; short-term management actions cannot proceed before watershed analysis. The water quality protection measures identified in the NWFP are in many cases more stringent than formally certified and approved BMPs. Those BMPs or NWFP standards and guidelines providing the greater water quality protection and benefits will apply.

Vegetation

Any herbicide use will be consistent with procedures and limitations outlined in the California Vegetation Management ROD (USDI BLM 1988b). Herbicide use will also comply with the applicable management objectives and standards and guidelines of the NWFP. Those standards and guidelines providing the greater benefits to late-successional forest-related species will apply.

Forest Resources

Forest resources, including timber and minor forest products, will be managed in accordance with NWFP land allocations, standards and guidelines, and Aquatic Conservation Strategy. The Record of Decision for Amendments to Forest Service and Bureau of Land

Management Planning Documents Within the Range of the Northern Spotted Owl and Standards and Guidelines for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl (USDA and USDI 1994a) is incorporated by reference. The NWFP standards and guidelines supersede the provisions of the Sustained Yield Unit 13 (SYU-13) Timber Management Plan (USDI BLM 1981a).

The following summarizes major provisions in the management direction; refer to the complete text of the ROD and standards and guidelines for details.

Late-Successional Reserves

LSRs will be managed to protect and enhance old-growth forest conditions. No programmed timber harvest is allowed inside LSRs. Thinning and other silvicultural treatments are subject to review by the Regional Ecosystem Office to ensure that the treatments are beneficial to the creation and maintenance of late-successional forest conditions. Stand and vegetation management of any kind, including prescribed burning, is considered a silvicultural treatment.

Salvage is defined as the removal of trees from an area following a stand-replacing event such as those caused by wind, fires, insect infestations, volcanic eruptions, or diseases. Salvage guidelines are intended to prevent negative effects on late-successional habitat while permitting some commercial wood volume removal. Salvage activities are subject to Regional Ecosystem Office review.

Nonsilvicultural activities within LSRs are allowed where such activities are neutral or beneficial to the creation and maintenance of late-successional habitat.

Riparian Reserves

Timber harvest, including fuelwood cutting, is prohibited in Riparian Reserves. However, salvage, fuelwood cutting, and silvicultural practices may be allowed if required to attain Aquatic Conservation Strategy objectives.

Matrix

Matrix is the federal land outside the categories of designated areas. The matrix includes the forested areas in which most timber harvest, other silvicultural activities, and traditional land management activities will be conducted. The matrix also contains

nonforested areas. Although management activities are generally not restricted within the matrix, the following timber harvest standards and guidelines apply in the matrix:

- provide appropriate amounts of coarse woody debris;
- emphasize green-tree and snag retention;
- modify site treatment practices, particularly the use of fire and pesticides, and modify harvest methods to minimize soil and litter disturbance;
- provide for retention of old-growth fragments in watersheds where little remains; and
- manage stands surrounding known owl activity centers to reduce risks of natural disturbance.

Management following stand-replacing events provides greater consideration of economic benefits regarding salvage.

Matrix lands are overlain with interim Riparian Reserves. Occupied marbled murrelet sites and known northern spotted owl activity centers within the matrix are managed as "unmapped" LSRs. The "survey and manage" standard and guideline for specified amphibians, mammals, bryophytes, mollusks, vascular plants, fungi, lichens, and arthropods also applies within the matrix.

In the plan amendment area, some matrix lands are identified for disposal subject to the NWFP standards and guidelines and site-specific NEPA analysis. Larger blocks of matrix land will be retained for management in the public interest consistent with existing land use plan decisions such as WSAs, Wild and Scenic River eligibility, dispersed recreation, and wildlife management.

Matrix lands in the plan amendment area contain approximately 5,000 acres of the original ARA commercial forest land (CFL) base, mostly in scattered, small parcels. Although site-specific commodity production opportunities may be available on forested matrix lands following fire, or manipulation of previously entered stands, the forested matrix parcels do not provide economical units for sustained, regulated timber harvest. Prescribed burning for fuels management or seral stage management to improve wildlife habitats may be conducted subject to NWFP standards and guidelines.

Riparian Resources

Legal authority for BLM management of riparian-wetland areas is based on numerous laws and Executive Orders, including the Taylor Grazing Act, ESA, FLPMA, the Emergency Wetland Resources Act of 1986, Water Quality Act of 1987, Executive Order 11988 (Floodplain Management) and Executive Order 11990 (Protection of Wetlands). On January 22, 1987, BLM issued its riparian area management policy, which defined the term riparian area, set management objectives, and outlined specific policy direction. This policy is the basis for BLM Manual 1737 (Riparian-Wetland Area Management), and the Bureau-Wide Riparian-Wetland Initiative for the 1990s.

Management actions will comply with the NWFP Aquatic Conservation Strategy, objectives, and standards and guidelines for Riparian Reserves. The standards and guidelines designate interim reserve widths for protected riparian areas; watershed analysis is required to revise the reserve widths. Timber management, road construction and maintenance, grazing, recreation, minerals management, fire/fuels management, research, and restoration activities will be subject to the specific requirements in the Riparian Reserve standards and guidelines. Those standards and guidelines providing the greater benefits to late-successional forest-related species and attainment of the Aquatic Conservation Strategy objectives will apply.

Fire Management

The California Department of Forestry and Fire Protection (CDF) is responsible for fire suppression on BLM lands within the plan amendment area. Deviations from the existing suppression policy will be made on a site-specific basis for wilderness, ACECs, and NWFP-designated areas. Fire management evaluation and planning are required components of watershed analyses and LSR management assessments; until these are completed, fire prescriptions and suppression activities will be guided by the MA resource condition objectives, existing activity plans, and NWFP land allocation objectives and standards and guidelines.

Prescribed fire is generally allowed if consistent with resource condition objectives and NWFP standards and guidelines. The use of prescribed fire to achieve management objectives would be subject to development of a watershed analysis, prescribed fire plan, and NEPA review prior to initiating the action. Specific decisions regarding the use of prescribed fire will not be made in the selected plan amendment.

Wildlife

Legislation, including FLPMA, ESA, PRIA, and the Sikes Act, directs BLM to manage habitat to meet wildlife needs. BLM's responsibility is to recognize opportunities to maintain, improve, and expand wildlife habitat for both consumptive and nonconsumptive use and name critical wildlife resources deserving special attention. BLM is also directed to assist state agencies in completing fish and wildlife resource plans.

Habitat management plans (HMPs) are activity level plans developed in an effort to improve wildlife habitat. Existing HMPs will continue to be implemented as funding allows. Existing HMPs are on file and open to public review at the ARA office. HMPs are periodically evaluated to determine whether management direction and actions are adequate and whether HMP objectives are being met. BLM updates and revises HMPs jointly with the DFG.

The only existing HMP for the plan amendment area is the Cedar Creek HMP (USDI BLM 1983). The Red Mountain ACEC plan also includes wildlife management objectives. BLM will continue to cooperate with DFG with regard to Deer Herd Management Plans.

Special-Status Species

ESA is the authority to conserve endangered and threatened species on public lands. Section 4(f) directs the Secretary of the Interior to develop and implement recovery plans for the conservation and survival of endangered species. Section 7(a)(1) requires each federal agency to carry out proactive measures to recover listed species, and Section 7(a)(2) requires each federal agency to avoid jeopardizing the continued existence of listed species through their actions.

BLM policy for special-status species of plants and animals is contained in BLM Manual Section 6840. Special-status species include officially listed species (threatened or endangered species), species that are proposed or candidate species for listing, state-listed species, and species listed as "sensitive" by the BLM state director.

California BLM Manual Supplement 6840.2 (State-Listed Plants and Animals) provides BLM policy and guidance for the conservation of plants and animals, and the habitats on which they depend, which are officially listed as rare or endangered pursuant to California state law.

BLM must carry out management consistent with multiple use for conservation of special-status species and their habitats and must ensure that actions authorized, funded, or carried out do not contribute to the need to list any of these species as threatened or endangered. Any federally authorized, funded, or implemented actions that may affect federally listed or proposed species are reviewed in cooperation with USFWS.

ARA will continue to avoid jeopardizing the existence of any federally listed or state-listed or proposed species, and will actively promote species recovery and work to continue to improve the status of candidate and sensitive species.

Plant Species

Management actions in the Red Mountain MA will comply with the provisions of the USFWS recovery plan for the MacDonald's rockcress (*Arabis macdonaldiana*), a federally listed as endangered plant species (USDI USFWS 1984).

Animal Species

The nonhero spotted owl (*Strix occidentalis caurlna*) is federally listed as threatened. Management actions will comply with the protective measures of the Final Draft Recovery Plan for the Northern Spotted Owl (USDI USFWS 1992a).

The American peregrine falcon (*Falco peregrinus anarum*) is federally listed as endangered. Management actions will comply with the Pacific States Peregrine Falcon Recovery Plan protection measures (USDI USFWS 1982).

The marbled murrelet (*Brachyramphus marmoratus*) is federally listed as a threatened species. Management actions will comply with the recovery plan when completed [USDI USFWS (in preparation)].

The northern bald eagle (*Haliaeetus leucocephalus*) is federally listed as endangered in California. Management actions will comply with the Pacific States Bald Eagle Recovery Plan {USDI USFWS 1986).

Cultural Resources

Federal laws such as the National Historic Preservation Act (NHPA) of 1966 as amended, the Archaeological and Historic Preservation Act of 1974, the Archaeological Resources Protection Act (ARPA) of 1979 as amended, the American Indian Religious

Freedom Act (AIRFA) of 1978, the Native American Graves Protection and Repatriation Act (NAGPRA) of 1990, and FLPMA provide for the protection and management of cultural resources.

These laws are implemented through federal regulations that provide guidance for the cultural resource program in meeting the requirements of the law. These regulations, as amended, determine how the NHPA shall be implemented by federal agencies, State Historic Preservation Officers (SHPOs), and the Advisory Council on Historic Preservation.

In addition to federal regulations, instruction manuals and memoranda are issued at various departmental levels to provide both general and specific guidance for the management of cultural resources. Current instruction memoranda issued at the national, state, and district levels are retained in the ARA files and are incorporated by reference.

Cultural resource values will be assessed on a site specific basis, generally in response to other resource objectives. All management actions will comply with the NHPA, which provides for protection of significant cultural resources. An appropriate level of inventory will be done for all actions with the potential to affect these resources.

Sociocultural resources will be managed in accordance with AIRFA and NAGPRA and with relevant sections of the regulations, which take into account concerns of Indian tribes in the implementation of ARPA. The BLM will make a reasonable and good faith effort to identify and consider Native American concerns where actions might affect sociocultural or religious values.

Recreation

Recreation programs are managed according to multiple use principles unless otherwise specified by law or BLM policy. The mission of the program is to ensure the continued availability of quality outdoor recreation opportunities and experiences that are not readily available from other sources. Recreation use is managed to protect the health and safety of visitors; to protect natural, cultural, and other resources; to encourage public enjoyment of public lands; and to resolve user conflicts.

A range of outdoor recreation opportunities will continue to be provided except where specifically restricted. Developed recreation sites, interpretive sites, trails, and roads will continue to be maintained and developed where needed to enhance recreation opportunities and allow public use. Dispersed recreation opportunities will be emphasized where primitive conditions are to be maintained.

Recreation program management actions will comply with the NWFP Aquatic Conservation Strategy and objectives, and standards and guidelines for Key Watersheds, LSRs, and Riparian Reserves, where applicable.

Wild and Scenic Rivers

The Wild and Scenic Rivers Act of 1968 (PL 90-542, as amended) established a method of providing federal protection for certain of our remaining free-flowing rivers and preserving them and their immediate environments for the use and enjoyment of present and future generations.

Designated components of the National Wild and Scenic Rivers System (NWSRS) within the plan amendment area include segments of the main stem Eel River, South Fork Eel River, North Fork Eel River, Middle Fork Eel River, Klamath River, and Van Duzen River. Public lands along these rivers are scattered, and generally in small blocks or isolated parcels.

Designated river segments will be managed in accordance with the NWSRS; Final Revised Guidelines of Eligibility, Classification and Management of River Areas (47 FR 39454, September 7, 1982) (Wild and Scenic River Guidelines) (Appendix A) pending development of formal management plans and designation of corridor boundaries. The Wild and Scenic River Guidelines define the "river corridor" as the area measured horizontally, 1/4 mile from normal high water line on either side of the river. The Middle Fork of the Eel River Management Plan was completed in 1988 (USDI BLM 1988). The South Fork Eel River Management Plan has been released in draft form (USDI BLM 1993).

Management actions within designated river corridors will also comply with the NWFP Aquatic Conservation Strategy and objectives and standards and guidelines for Key Watersheds, LSRs, and Riparian Reserves, where applicable.

Those features of the interim guidance or standards and guidelines providing greater benefits to late-successional forest-related species and attainment of Aquatic Conservation Strategy objectives will apply.

Eligible Rivers

The BLM is mandated to evaluate potential additions to the NWSRS through the RMP process. The three-step evaluation process involves evaluation of eligibility, determination of potential classification, and conducting a suitability study/legislative EIS. ARA has completed the eligibility and potential classification steps of the process. A

detailed description of ARA's evaluation process and results are included in Appendix A. The remaining step will be completed in a separate plan amendment/EIS.

River segments that are eligible for inclusion in the NWSRS will be managed in accordance with the interim guidance for protection of wild and scenic values; associated BLM lands within 14 mile of the river will be managed as if the river were an actual component of the NWSRS until the suitability issue is resolved.

Management actions within the eligible river corridors will also comply with the NWFP Aquatic Conservation Strategy and objectives and standards and guidelines for Key Watersheds, LSR and Riparian Reserves, where applicable.

Those features of the interim guidance or standards and guidelines providing greater benefits to late-successional forest-related species and attainment of Aquatic Conservation Strategy objectives will apply.

Wilderness

There are four WSAs and one designated wilderness area in the plan amendment area. These areas are listed in Table 2-1.

Wilderness studies and legislative EISs have been prepared for these four WSAs. Wilderness suitability recommendations will not be re-evaluated in this plan amendment. Wilderness recommendations for the WSAs will be carried forward under every alternative analyzed in this plan amendment. These recommendations will be forwarded to Congress for action.

All wilderness study areas will be managed under BLM's Interim Management Policy and Guidelines for Lands Under Wilderness Review to protect their wilderness values, until designated wilderness or released by Congress for other uses. Those areas released from wilderness review will be managed by the decisions in this plan amendment. Any areas designated wilderness during the life of this plan will be managed in accordance with BLM's wilderness management policy (BLM Manual 8560) and the enacting legislation. If the decision of Congress differs from the recommendations, another plan amendment may be required.

As changes in land ownership occur, newly acquired areas would be inventoried and studied as necessary through the RMP process.

Public lands in the Big Butte WSA and Yolla Bolly/Middle Eel Wilderness Area will be transferred to the USFS under all alternatives. Public lands in the Yolla Bolly/Middle

Table 2-1. Wilderness Study Areas and Wilderness Areas in the Plan Amendment Area

Management Area	Name	Number	Acres	Status	Reference
Red Mountain	Red Mountain WSA	CA-050-132	6,173	recommended nonsuitable	Final EIS, Wilderness Recommendations for the Arcata Resource Area, Red Mountain WSA (USDI BLM 1988a).
Covelo Vicinity	Eden Valley WSA	CA-050-214	6,674	recommended nonsuitable	Final EIS, Preliminary Wilderness Recommendations for the Arcata Resource Area, Eden Valley WSA and Thatcher Ridge WSA (USDI BLM 1987).
Covelo Vicinity	Thatcher Ridge WSA	CA-050-212	17,187	recommended nonsuitable	Final EIS, Preliminary Wilderness Recommendations for the Arcata Resource Area, Eden Valley WSA and Thatcher Ridge WSA (USDI BLM 1987).
Covelo Vicinity	Big Butte WSA	CA-050-211	2,391	recommended nonsuitable	Draft EIS, Wilderness Recommendations for California Section 202 Wilderness Study Areas (USDI BLM 1987a).
Covelo Vicinity	Yolla Bolly/Middle Eel Wilderness	N/A	7,009	designated	California Wilderness Act of 1984

Eel Wilderness Area are presently managed in accordance with the enacting legislation, the California Wilderness Act of 1984, by the Covelo Ranger District of the Mendocino National Forest through an MOU with the ARA.

Visual Resources

Because of the fragmented land ownership patterns and remoteness and inaccessibility of public lands in the planning area, the Arcata RMP did not make planning decisions designating visual resource management (VRM) classes. VRM classes are considered to be inventory standards. Visual resources will continue to be evaluated as part of resource management activity and project planning. VRM classes will be determined on a site-specific basis through standard VRM inventories, and contrast ratings will be used to mitigate projects that may significantly impact visually sensitive areas.

GENERAL DESCRIPTION OF THE ALTERNATIVES

Development of Alternatives

Both NEPA and the BLM planning regulations require the formulation of a range of alternatives. Each alternative represents a complete and reasonable plan for management of the public lands and resources for the next 10 years. One alternative must represent no action, meaning no change from present management guidance. Other alternatives must provide a reasonable range of choices for management of the public lands. Generally, the range of alternatives varies from resource protection to resource production; however, the management direction and land use allocations set forth in the NWFP generally limit resource production opportunities in the Mas addressed in this RMP amendment/EA.

The alternatives were developed to provide different solutions to the planning issues and management concerns described in Chapter 1. The public, including state and federal agencies and Native American tribes, was invited to provide comments and suggestions for consideration in developing the alternative plans. Public scoping sessions were held in Redway, California, on December 8, 1992, and Arcata, California, on December 9, 1992, to gather public suggestions and comments. The alternative development process included an evaluation of the management implications of the NWFP and a reassessment of management opportunities and constraints. The public's suggestions and comments were reconsidered in light of the NWFP amendments to the Arcata RMP during the final development of the alternative plans evaluated in this EA.

The alternatives developed for each MA are generally defined in the following sections. The Watershed Management/Old-Growth Retention Alternative is the BLM's Preferred Alternative. Specific descriptions of the alternatives for each MA are presented later in this chapter.

Alternative 1. Current Management {No Action}

The Current Management (No Action) Alternative represents continuation of present management as amended by the management direction set forth by the NWFP. Public lands in the plan amendment area would be managed in accordance with the NWFP land allocations and standards and guidelines (Table 1-2). An ecosystem approach to forest management would be implemented to enhance, maintain, and restore natural forest and aquatic ecosystem processes to provide habitat that will support populations of native species (particularly those associated with late-successional and old-growth forests) and protection for fish and other riparian-dependent species and resources. Silvicultural techniques would be utilized to establish and accelerate development of the old-growth characteristics. Minor forest products would be made available to the public as a byproduct of silvicultural activities.

Land tenure adjustment opportunities would be limited to disposal of smaller, isolated parcels that are considered nonessential to the success of the NWFP and regional, state, and local planning and management strategies and acquisition of private lands to enhance cooperative management (Table 2-2).

Five existing ACECs would be retained to protect old-growth forest, botanical, soils, anadromous fisheries, and water quality values (Table 2-3).

Alternative 2. Preferred Alternative (Watershed Management/Old-Growth Retention)

The Watershed Management/Old-Growth Retention Alternative emphasizes the identified role of public lands in forest management strategies at the regional, state, and local (watershed) levels through specific and detailed resource condition objectives and land use allocations.

Public lands in the plan amendment area would be managed in accordance with the NWFP land allocations and standards and guidelines (Table 1-2). An ecosystem approach to forest management would be implemented to enhance, maintain, and restore natural forest and aquatic ecosystem processes to provide habitat that will support populations of

Table 2-2. Land Tenure Allocations by Alternative

Management Area	Alternative I Current Management			Alternative 2 Watershed Management/Old-Growth Retention		
	Retain	Acquire (Surface Acres)	Dispose	Retain	Acquire (Surface Acres)	Dispose
Lacks Creek	4,100	2,480 ^a	0	4,100	12,389 ^b	0
Red Mountain	32,344	7,000	3,320	34,484	5,480	1,180
Covelo Vicinity	57,100	0	9,400 ^c	56,670	0	9,830 ^C
Scattered Tracts	16,105	800	undetermined ^d	14,055	800	2,050
Total	109,649	10,280	12,720	109,309	18,669	13,060

^a The 1992 ROD for the Arcata RMP identified 1,800 acres for acquisition. The acreage above reflects an updated acreage calculation for the area of proposed acquisitions.

^b The boundaries of the 12,389-acre acquisition area are on legal subdivisions. The acquisition area encompasses the Lacks Creek watershed.

^c Disposal acres include transfer of 9,400 acres comprising the Big Butte WSA and BLM lands in Yolla-Bolly/Middle Eel Wilderness.

^c Disposal of scattered tracts could occur if consistent with bio-regional planning efforts.

Table 2-3. Areas of Critical Environmental Concern for Alternative 1 • Current Management {No Action}

Management Area	Name	Acres		Velu81	Management Summary
		Federal	Acquired ⁸		
Lacks Creek	Lacks Creek RNA/ACEC	800	0	378 acres of old-growth forest ^a	Research and cone collecting; control fire, disease, and insects; no timber stand improvement or harvest; closed to OHVsc
Red Mountain	Red Mountain RNA/ACEC	6,895	0	Unique botanical values associated with red soils; Cedar Creek has anadromous fishery and 788 acres of old-growth forest ^a	No mineral materials sales, no livestock grazing, closed to OHVsc,d
	Elder Creek RNA/ACEC	3,775	520	Elder Creek and Fox Creek watersheds in near pristine condition; 913 acres old-growth forest ^b	Cooperate with adjacent landowner (Univ. Of CAI), closed to OHVs, restrict recreation uses, no new road construction, prescribed fire plan, no timber harvest, no livestock grazing, no mineral materials sales, mineral withdrawalc,e
Scattered Tracts	Gilham Butte RNA/ACEC	2,550	800	977 acres old-growth forest ^b ; recreation uses	Research and cone collecting; control fire, disease, and insectsc
	Jaqua Butte RNA/ACEC	1,080	0	175 acres old-growth forest ^b	Research and cone collecting; control fire, disease, and insectsc

a Nonfederal acreage will be acquired if available.

b "Old-growth" acreage is derived from a "suitable" owl nesting/roosting/foraging habitat model using Wildlife Habitat Relationships (WHR) typing of forested lands in the Ukiah District. Those timber stands in which trees contributing to the canopy layer average a minimum of 24" diameter breast height (DBH) and in which the canopy layer is continuous over a minimum of 40% of the stand are used in this definition. It is recognized that the definition includes a broader range of conifer sizes than many old-growth definitions but may exclude some sites dominated by mature hardwood.

c Source: Management area decisions in Arcata RMP ROD (USDIBLM 1992).

d Source: Activity Plan for the Red Mountain ACEC (RNA) (USDIBLM 1989 (unpublished)).

⁸ Source: Nonhero California Coast Range Preserve ACEC Plan Element, Red Mountain Management Framework Plan (USDIBLM 1981 (unpublished)).

native species (particularly those associated with late-successional and old-growth forests) and protection for fish and other riparian-dependent species and resources. Silvicultural techniques would be utilized to establish and accelerate development of the old-growth characteristics. Minor forest products would be made available to the public as a byproduct of silvicultural activities.

Land tenure adjustment opportunities are identified that will enhance the contribution public lands can make to the regional strategies by blocking up habitat areas and shifting the burden for recovery of listed or identified sensitive species onto public lands. Land tenure adjustment scenarios are designed to enhance opportunities for cooperative management or simplify management complexity at the watershed scale (Table 2-2). Land tenure adjustment will also be used for enhancement and management of listed species and other compatible resources such as recreation, wilderness, and cultural.

Four existing ACECs would be retained and one expanded (Lacks Creek RNA/ACEC) to protect old-growth forest, botanical, soils, anadromous fisheries, and water quality values. Two watershed ACECs would be designated to restore and maintain natural processes in the ACEC watersheds; proposed acquisitions within the ACEC watershed boundaries would enhance BLM's ability to effectively manage the watersheds (Table 2-4).

Specific Alternatives for Each Management Area

The descriptions of the alternatives consist of three planning elements. Resource Condition Objectives are the major themes that guide management of the specific areas. They are necessary to develop land use allocations and to address unforeseen proposals. Land Use Allocations are the general quantifications of allowable land and resource uses.

Management Actions are general implementation actions needed to ensure that planning objectives are met, to ensure that necessary refinements to the plan will be made, and to guide BLM budgeting and programming. Management actions alert the public to the specific followup actions necessary to implement the plan so that everyone is aware of the costs, complexity, time constraints, and other requirements to achieve plan objectives. Management actions are not land use decisions. There is no intent to provide a comprehensive list of future management actions in the RMP amendment. Actions, priorities, and schedules will be added, deleted, or modified over the life of the plan.

The descriptions of the alternatives for each MA are presented in the following sections. Maps of the alternatives for the Lacks Creek and Red Mountain MAs follow each alternative description. Maps for the Covelo Vicinity and Scattered Tracts MAs are inserted in the map pocket at the end of this document.

Table 2-4. Areas of Critical Environmental Concern for Alternative 2- Watershed Management/Old-Growth Retention (Preferred Alternative)

Management Area	Name	Acres		Values	Management Summary
		Federal	Acquired ¹		
Lacks Creek	Lacks Creek Watershed ACEC	2,978	11,065 ^b	Within Redwood National Park watershed; anadromous fishery; 1,041 acres of old-growth forest (includes Lacks Creek RNA ACEC of 11,065 acres); special status species	Manage as an LSR; manage watershed for protection of downstream resources
	Lacks Creek RNA/ACEC	1,620	0	893 acres of old-growth forest	Research and cone collecting; control fire, disease, and insects; no timber stand improvement or harvest; closed to OHVs
Red Mountain	South Fork Eel River Watershed ACEC	10,784	2,408 ^b	Anadromous fishery; 3,192 acres low elevation of old-growth Douglas fir (includes Elder Creek RNA/ACEC of 11,065 acres)	Manage as a Tier 1 Watershed and LSR
	Red Mountain RNA/ACEC	6,895	520	Unique botanical values associated with red soils; Cedar Creek has anadromous fishery and 788 acres of old-growth forest	No mineral materials sales, no livestock grazing, closed to OHVs
	Elder Creek RNA ACEC	3,775	0	Elder Creek and Fox Creek watersheds in near pristine condition; 913 acres old-growth forest	Cooperate with adjacent landowner (Univ. of CA), closed to OHVs, restrict recreation uses, no new road construction, prescribed fire plan, no timber harvest, no livestock grazing, no mineral materials sales, mineral withdrawal
Scattered Tracts	Gilham Butte RNA/ACEC	2,550	800	977 acres old-growth forest; recreation uses	Research and cone collecting; control fire, disease, and insects
	Jaqua Butte RNA ACEC	1,080	0	175 acres old-growth forest	Research and cone collecting; control fire, disease, and insects

^a Non-Federal acreage will be acquired if available.

^b Acquisition acres within the proposed watershed ACECs are included in the total acquisition acres shown in Table 2-2.

^c "Old-growth" acreage is derived from a "suitable" owl nesting/roosting/foraging habitat model using Wildlife Habitat Relationships (WHR) typing of forested lands in the Ukiah District. Those timber stands in which trees contributing to the canopy layer average a minimum of 24" DBH and in which the canopy layer is continuous over a minimum of 40% of the stand are used in this definition. It is recognized that the definition includes a broader range of conifer sizes than many old-growth definitions but may exclude some sites dominated by mature hardwood.

^d Source: Management area decisions in Arcata RMP ROD IUSDIBLM 19921.

^e Source: Activity Plan for the Red Mountain ACEC/RNA (USDIBLM 1989 (unpublished)).

^f Source: Northam California Coast Range Preserve ACEC Plan Element, Red Mountain Management Framework Plan (USOILBLM 1981 (unpublished)).

LACKS CREEK MANAGEMENT AREA
 ALTERNATIVE 1. - CURRENT MANAGEMENT (NO ACTION)

Management Summary:

- Maintain existing pattern of public land ownership.
- Prevent short-term degradation of late-successional forest values.

LAND TBNURB AILLOCATIONS	
Rdllbl	4,101J tJDU 1111/rk
.....	StJJ tiDU 6111JfiD/rk
Acquire	2,480 GeTe&
.....	Daens

NORTHWEST FOREST PLAN LAND AILLOCATIONS	
Late Successional Reserve ..	4,100 acres
Willenh«l	0 GeTel
MillrU	0 tJDU

I. RESOURCE CONDITION OBJECTIVES

A. Late-Successional/Old-Growth Forest Ecosystems

1. Carry out forest management activities in LSRs that improve, create, or increase wildlife habitat and biodiversity, as well as rehabilitate the existing watershed and provide protection (insects, disease, fire) to the forest resource.
2. Provide minor forest products (e.g., firewood, seeds, poles) to the market in accordance with the NWFP objectives and standards and guidelines for LSRs.
3. Improve cost effectiveness of public land management by consolidation of ownership.
4. Protect old-growth values within the 800-acre RNA/ACEC.

B. Watersheds and Aquatic Ecosystems

1. Protect, restore, and maintain aquatic ecosystems to protect habitat for fish and other riparian-dependent species and resources.

D. LAND USE ALLOCATIONS

A. Northwest Forest Plan Allocations

1. Manage 4,100 acres as a LSR as part of a regional network of existing older forests providing a distribution, quantity, and quality of old-forest habitat and to provide habitat for viable, well distributed populations of species. These late-successional forest areas are not subject to programmed timber harvest. Management standards and guidelines are designed to improve habitat in younger stands or to produce stand structure and components associated with late-successional conditions..
2. Manage areas along all permanently flowing streams, lakes, wetlands, and intermittent streams as Riparian Reserves.
3. Manage the area for various forest values. About 200 acres of streamside buffers and old-growth reserve areas will be removed from the suitable CFL of 3,300 acres for a net available CFL of about 3,100 acres.

Tree planting, brush and hardwood release, and precommercial thinning will be concentrated within this 3,100-acre area as part of the forest improvement program associated with the forest management objective as outlined in Resource Condition Objective A.1.

B. Special Area Designations

1. Manage the 800-acre Lacks Creek RNA/ACEC for the preservation of old-growth values.
 - T.8 N., R. 3 E., HM, Portions of Sees. 22, 23, 26, & 27 (Figure 2-1).

C. Land Acquisition and Disposal

1. Public lands are not available for disposal.
2. Pursue acquisition of 2,480 acres of commercial forest land within the management area for forest and wildlife habitat management.

D. Off-Highway Vehicle Designations (43 CFR 8340)

1. Public lands within the management area are designated as closed, except for the Pine Ridge public access roads No. 5111 and 5111.10.

E. Recreation

1. Public lands are available for dispersed recreation.

m. MANAGEMENT ACTIONS

1. Prepare a watershed activity plan to reflect (not exclusively):
 - Monitoring Redwood Creek in conjunction with Redwood National Park
 - Rehabilitation of Lacks Creek drainage
 - Fire management, including suppression
 - Management of an 800-acre old-growth RNA/ACEC
 - NWFP watershed analysis guidelines
2. Include this management area in forest improvement/rehabilitation plans in coordination with Redwood National Park.
3. Prepare Federal Register notices for OHV designations.
4. Sign entrance to public lands regarding OHV designations.
5. Acquire nonexclusive/permanent access to all public lands without access for forest enhancement, protection and rehabilitation.
6. Contact surrounding landowners about acquisitions (re: Land Use Allocation C.2.)
7. Prepare land report(s) to address:
 - Specific acquisition methods (regarding No. 6 above)
 - Site-specific requirements and problemsareas.
8. Monitor spotted owls. Continue to inventory habitat conservation/critical habitat
9. Post boundaries.

T8N

HOPPA VALLEY INDIAN RESERVATION

LACKS CREEK

REDWOOD CREEK

SCALE 1:78000

R3E
R4E

Lacks Creek Management

No Action

Area

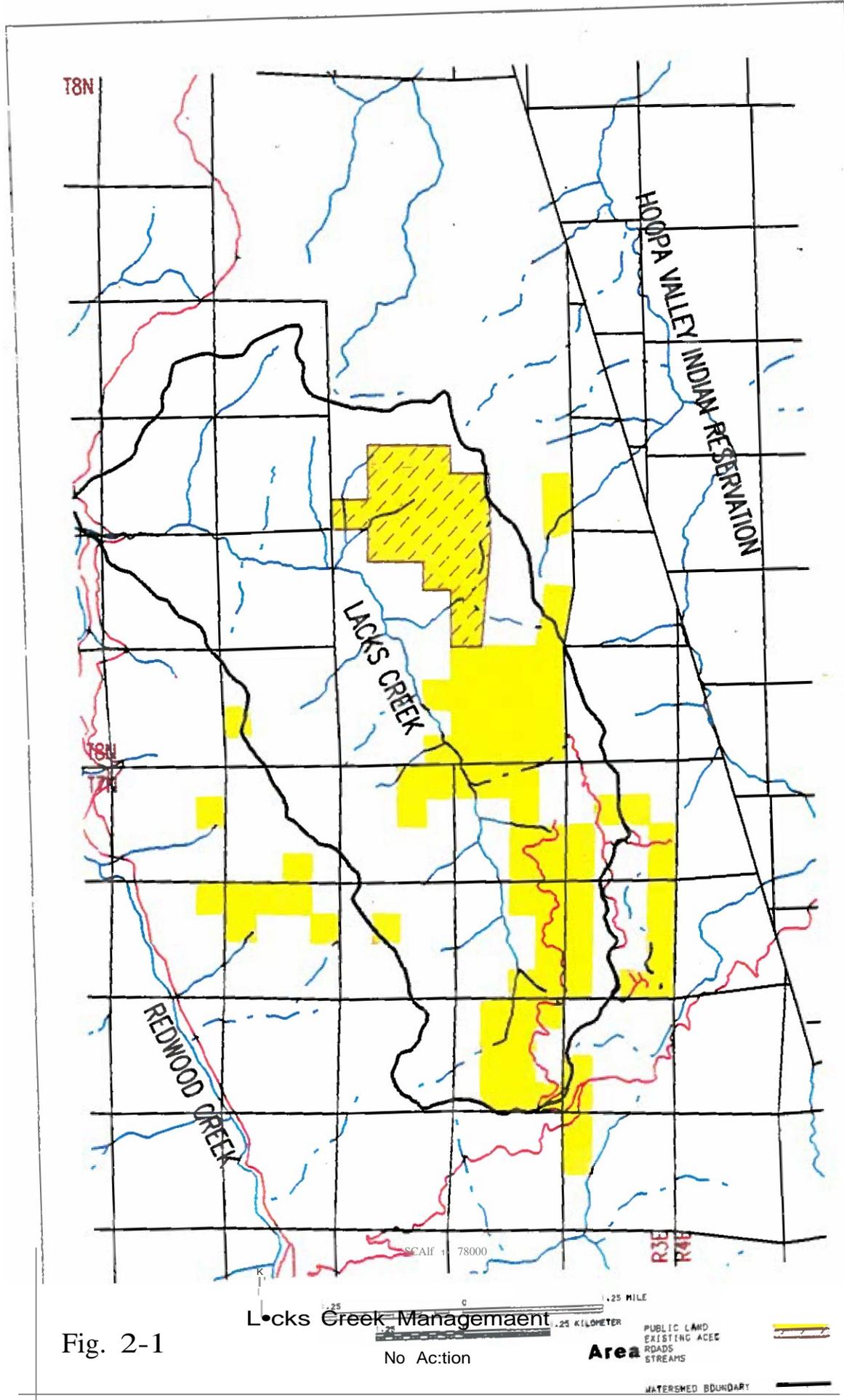
PUBLIC LAND
EXISTING ACEC
ROADS
STREAMS

WATERSHED BOUNDARY

Fig. 2-1

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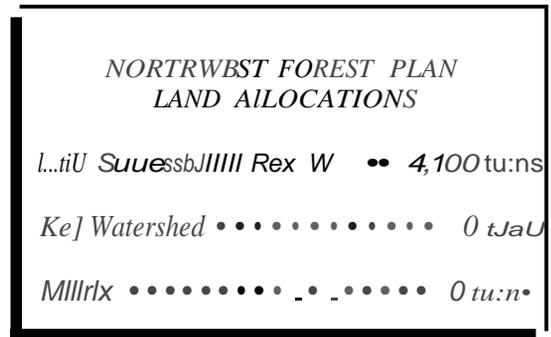
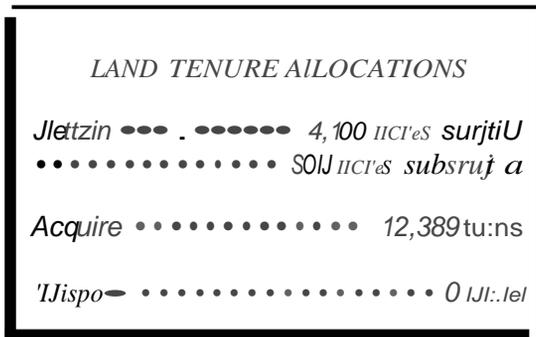
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LACKS CREEK MANAGEMENT AREA
 ALTERNATIVE 2. WATERSHED MANAGEMENT/OLD GROWTH
 RETENTION (PREFERRED ALTERNATIVE)

Management Summary:

- Emphasize watershed management for the Lacks Creek/Redwood Creek drainage.
- Retain all old-growth values and restore mature forest ecosystems.



I. RESOURCE CONDITION OBJECTIVES

A. Late-Successional/Old-Growth Forest Ecosystems

1. Protect significant old-growth stands:

- From influences that could alter or disrupt the intrinsic values or ecological systems of these areas
- To preserve the full range of genetic and behavioral diversity for old-growth associated plants and animals and special status species
- To provide research and higher education opportunities for scientists and teachers
- To allow natural physical and biological processes to prevail

2. Re-establish and accelerate development of mature forest structural characteristics on previously entered stands for long-term restoration of this element of biological diversity.

3. Provide minor forest products to the public as they become available through facility/road maintenance and forest development as described in No. 2 above.

B. Watershed and Aquatic Ecosystems

1. Minimize sedimentation into the hydrographic basin of Redwood Creek by consolidating ownership and through coordinated management consistent with the Redwood National Park Expansion Act of 1978 (Public Law 95-250).

C. Special-Status Species

1. Provide core habitat for wildlife to recover federally listed species and to conserve special-status species so that no BLM action contributes to the need for listing.

II. LAND USE ALLOCATIONS

A. Forest Land Allocations (Including Northwest Forest Plan Allocations)

1. Manage 4,100 acres as an LSR as part of a regional network of existing older forests providing a distribution, quantity, and quality of old-forest habitat and to provide habitat for viable, well distributed populations of species. These late-successional forest areas are not subject to programmed timber harvest. Management standards and guidelines are designed to improve habitat in younger stands or to produce stand structure and components associated with late-successional conditions.

2. On previously entered forest stands (including acquired cutover lands), actively regenerate new stands and promote forest development in established young stands on approximately 550 acres that do not currently provide mature forest structure. Minor forest products such as poles, firewood, and seeds will be made available in conjunction with habitat improvement projects.

B. Special Management Areas and Designations

1. Expand existing 800-acre RNA/ACEC designation to include approximately 720 additional surface acres in T.8N., R.3W., sections 34, 35.

2. Designate 2,987 acres of public land within the Lacks Creek watershed as the Lacks Creek Watershed ACEC. Acquired lands within the watershed will be included in the watershed ACEC.

C. Land Acquisition and Disposal

1. Retain all lands in public ownership.

2. Identify a Lacks Creek acquisition project boundary which includes the entire Lacks Creek watershed. Pursue opportunities for acquisition over an area of approximately 12,389 acres in the Lacks Creek watershed to enhance old-growth and watershed rehabilitation opportunities and improve the effectiveness of federal and state conservation strategies for the northern spotted owl.

D. Off-Highway Vehicle Designations (43 CFR 8340)

1. Public lands within the management area are designated as closed, except for the Pine Ridge public access road No. 5111 and maintained spur roads from that road.

E. Recreation

1. Public lands are available for dispersed recreation.

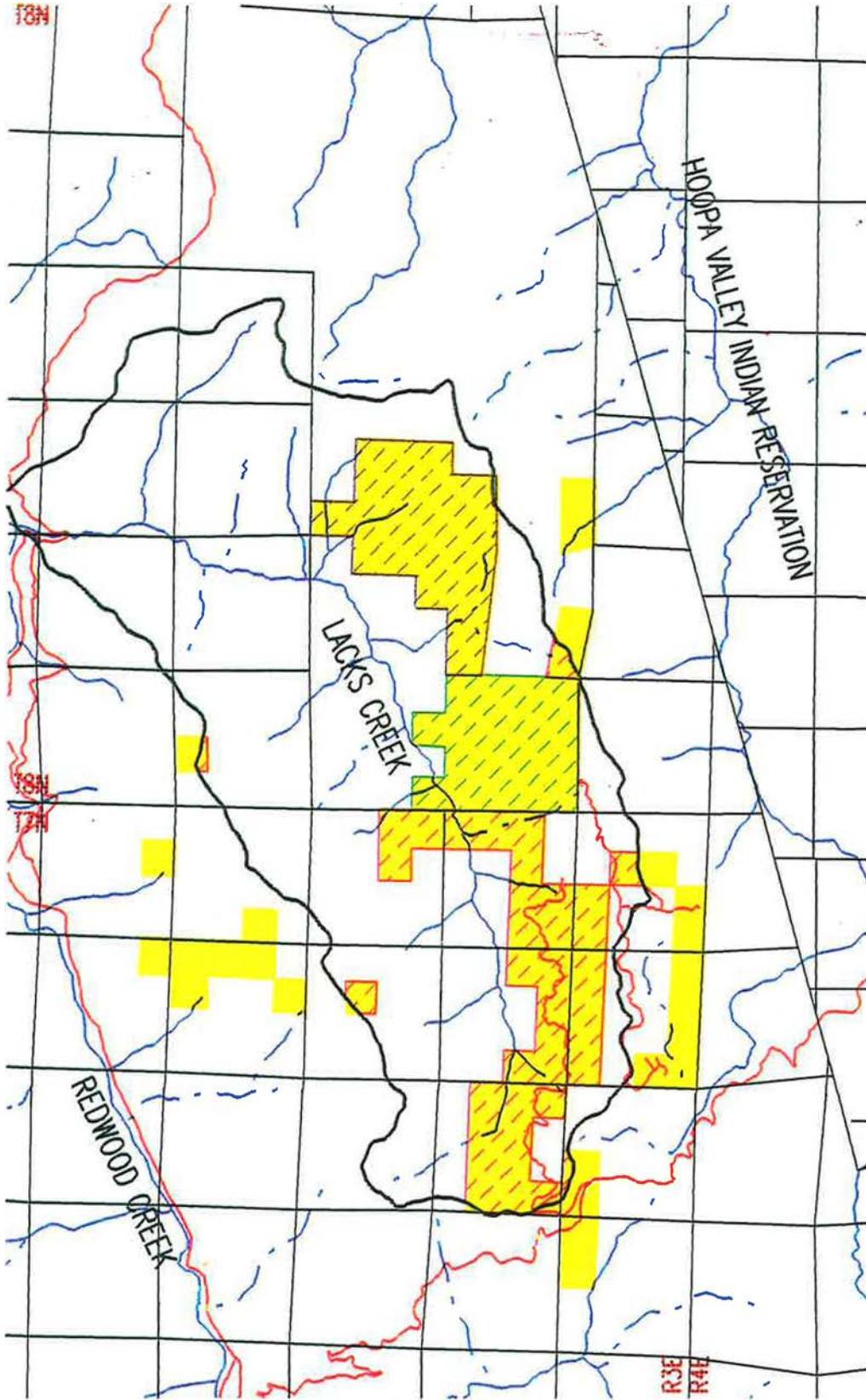
F. Access

1. A general goal of obtaining public access to all public lands will be followed when feasible. Specific access on existing roads is required to the northeast corner of the MA (T.8N., R.3E., Section 23, W $\frac{1}{2}$,SW $\frac{1}{4}$), and, if land acquisitions described in Land Use Allocation C.2. above are not completed, to the Beaver Ridge parcels.

m. MANAGEMENT' ACTIONS

1. Complete Federal Register notices for:
 - Amended OHV designations
 - Amended RNA/ACEC designations
2. Complete a watershed analysis in coordination with Redwood National Park.
3. Prepare a watershed activity plan that includes:
 - Silvicultural activities in previously entered stands for developing suitable habitat for late-successional forest species where those conditions do not now exist (5-year late-successional forest development/improvement plan
 - Management actions, which could include silvicultural activities, for protecting or enhancing old-growth values within the RNA/ACEC
 - Management of the RNA/ACEC to enhance recreational, educational, research, and aesthetic values

- Cooperative management with the Redwood National Park to rehabilitate the Redwood Creek watershed and insure compliance with P.L. 95-250
 - Monitoring of northern spotted owl use
4. Prepare land reports and easement justification reports to address specific acquisition needs and site-specific requirements and problems.
 5. Sign entrance to public lands regarding OHV designations.
 6. Post boundaries of public lands.



Lacks Creek: Hi: gemen L: H: mun NSION

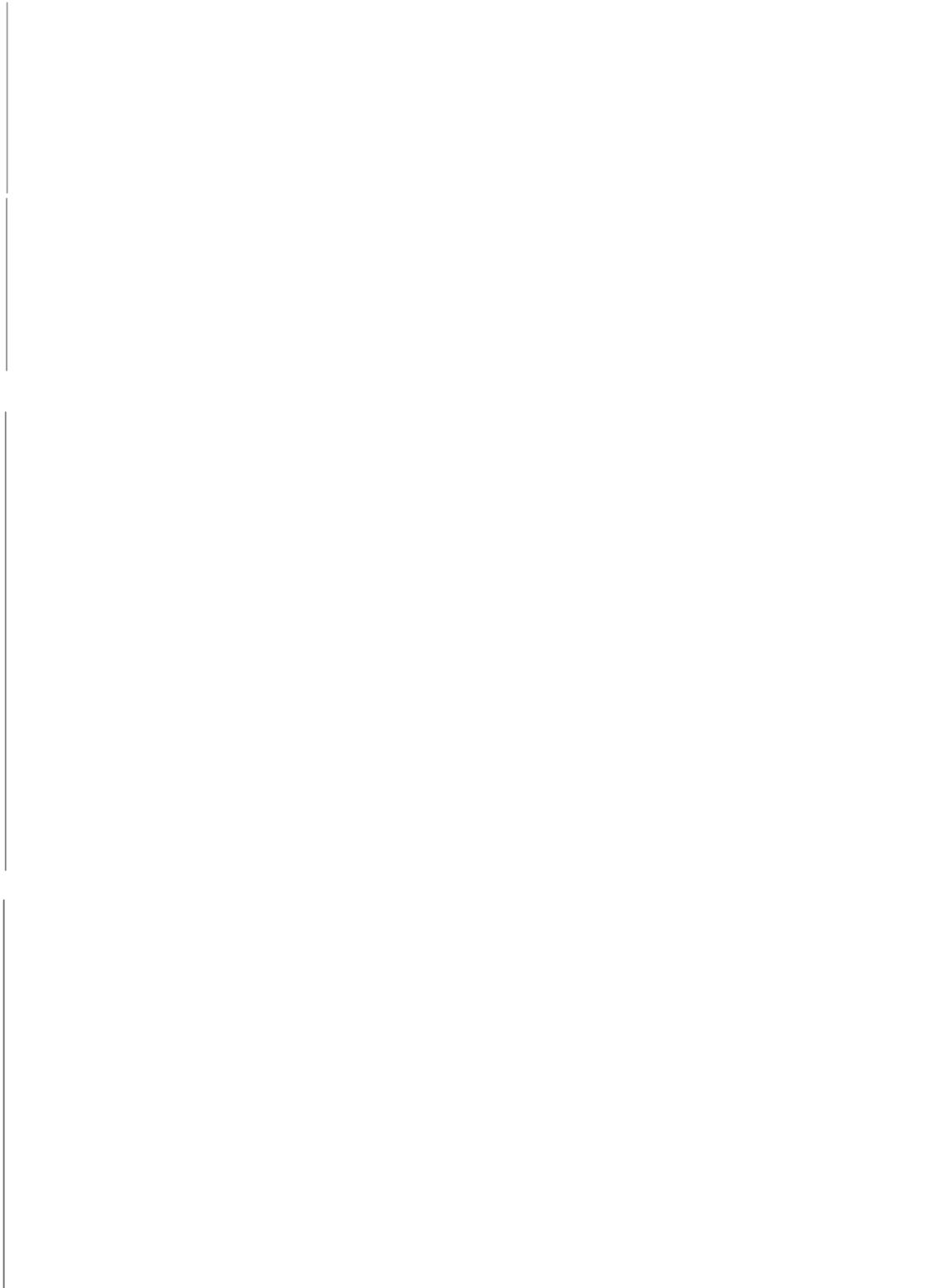
Fig. 2-2

Preferred Alternative

*ATERSHED ACEC EXPANS. lz=z:::::z:J

ROADS
S:REAHS

ATERSHED BOUNDARY

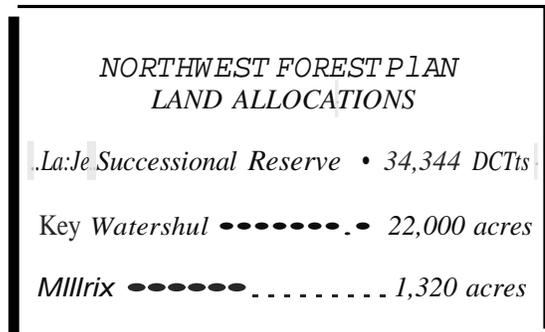
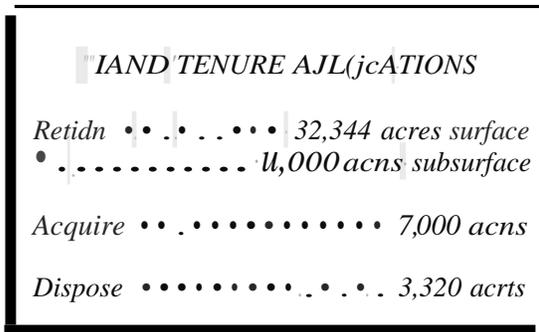


RED MOUNTAIN MANAGEMENT AREA

ALTERNATIVE 1.- CURRENT MANAGEMENT (NO ACTION)

Management Summary:

- Maintain existing pattern of public land ownership.
- Prevent short-term degradation of late-successional forest values.



I. RESOURCE CONDITION OBJECTIVES

A. Late-Successional/Old-Growth Forest Ecosystems

1. Enhance old-growth forest characteristics and related wildlife species. Provide islands of old-growth, mixed-evergreen forest.
2. Carry out forest management activities that improve, create, or increase wildlife habitat and biodiversity, and provide protection to the forest resource (e.g., insects, disease, and fire).

B. Watersheds and Aquatic Ecosystems

1. Enhance riparian habitat and anadromous fish streams.

C. Special-Status Species

1. Enhance and facilitate protection of unique botanical values, particularly MacDonaldis rockcress (*Arabis macdona/diana*).
2. Protect nests and foraging habitat of peregrine falcons.

D. Special Management Areas

1. Protect and enhance natural and recreational values along the federally designated portions of the South Fork Eel River Wild and Scenic River corridor.
2. Enhance the natural values within the Elder Creek RNA/ACEC.
3. Facilitate and encourage scientific research of the unique soils on Red Mountain.

E. Land Tenure and Management

1. Improve cost-effectiveness of public land management by consolidation of ownership.

II. LAND USE ALLOCATIONS

A. Forest Land Allocations (Including Northwest Forest Plan Amendments)

1. Manage 34,344 acres as LSR as part of a regional network of existing older forests providing a distribution, quantity, and quality of old-forest habitat and to provide habitat for viable, well distributed populations of species. These late-successional forest areas are not subject to programmed timber harvest. Management standards and guidelines are designed to improve habitat in younger stands or to produce stand structure and components associated with late-successional conditions.
2. Manage 22,000 acres in South Fork Eel River and Cedar Creek watersheds as Tier 1 - Key Watersheds.
3. Manage areas along all permanently flowing streams, lakes, wetlands, and intermittent streams as Riparian Reserves.
4. Manage 1,320 acres as matrix.
5. Implement forest management activities on about 16,000 acres, which includes tree planting, brush and hardwood release, and precommercial thinning as part of the forest improvement program.
6. Remove suitable CFL in the following areas from the timber production base:
 - Elder Creek RNA/ACEC
 - Cedar Creek portion of the Red Mountain ACEC (T.23N., R.17W., MDM, Section 1)
 - Wild and Scenic River corridor

B. Special Management Areas and Designations

1. Manage the South Fork of the Eel River Wild and Scenic River corridor in accordance with the Wild and Scenic River Guidelines until a management plan is completed.
2. Continue to manage the Red Mountain RNA/ACEC (6,895 acres) for the protection of *Arabis*, old-growth forest, raptor habitat, and salmonid populations in accordance with the ACEC plan element prepared in 1989.
3. Continue to manage the Elder Creek RNA/ACEC (3,775 acres of BLM land in the upper reaches of the Elder Creek watershed) in accordance with the ACEC plan element prepared in 1981. Continue to manage the RNA/ACEC in cooperation with the University of California's Angelo Coast Range Reserve.
5. The Red Mountain RNA/ACEC is not available for mineral material sales. The Elder Creek RNA/ACEC is to be withdrawn from entry under the 1872 Mining Law and is not available for mineral leasing or material sales.
6. RNA/ACECs are not available for livestock grazing.

C. Land Acquisition and Disposal

1. Retain 32,344 acres of public lands within the MA.
2. Actively pursue acquisition of:
 - Approximately 3,500 acres of commercial forest land within the management area for forest management. This would include wildlife habitat enhancement and biodiversity as outlined in Resource Condition Objective A.2. and Land Use Allocation A.5.
 - Up to 2,600 acres of land in the Charlton Creek and Bell Springs Creek watersheds to protect peregrine falcon nesting sites and foraging areas.
 - 900 acres of land along the South Fork Eel River between Elkhorn Ridge and Brushy Mountain to protect riparian values.

Identified acquisitions will be consistent with regional conservation planning at the state and federal levels.

3. The following 3,320 acres will be assessed for disposal on a case-by-case basis, consistent with regional conservation planning at the federal and state levels.

- T.4S., R.5E., HM, Sections 14, 15, 22, 27, 33, 34
- T.5S., R.5E., HM, Sections 2-4, 8, 14, 15, 17-19, 20, 22, and 23
- T.5S., R.4E., HM, Sections 25-27, 32, 33
- T.24N., R.15W., MDM, Sections 11, 12
- T.23N., R.15W., MDM, Sections 17, 18, 20

D. Off-Highway Vehicle Designations (43 CFR 8340)

1. Public lands within the Wild and Scenic River corridor, Elder Creek RNA/ACEC, and Red Mountain RNA/ACEC are designated CLOSED.
2. All other public lands: Vehicles are LIMITED to roads; roads are defined as transportation facilities designed for highway vehicles having four or more wheels.

E. Recreation

1. Public lands are available for dispersed recreation. (There are some restrictions on recreational uses within the Elder Creek RNA/ACEC that still apply: no shooting, hunting or fishing, camping, equestrian use.)

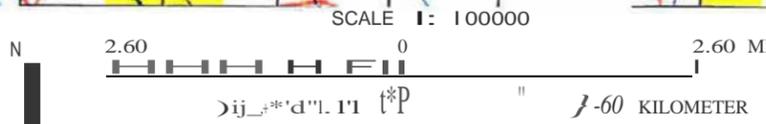
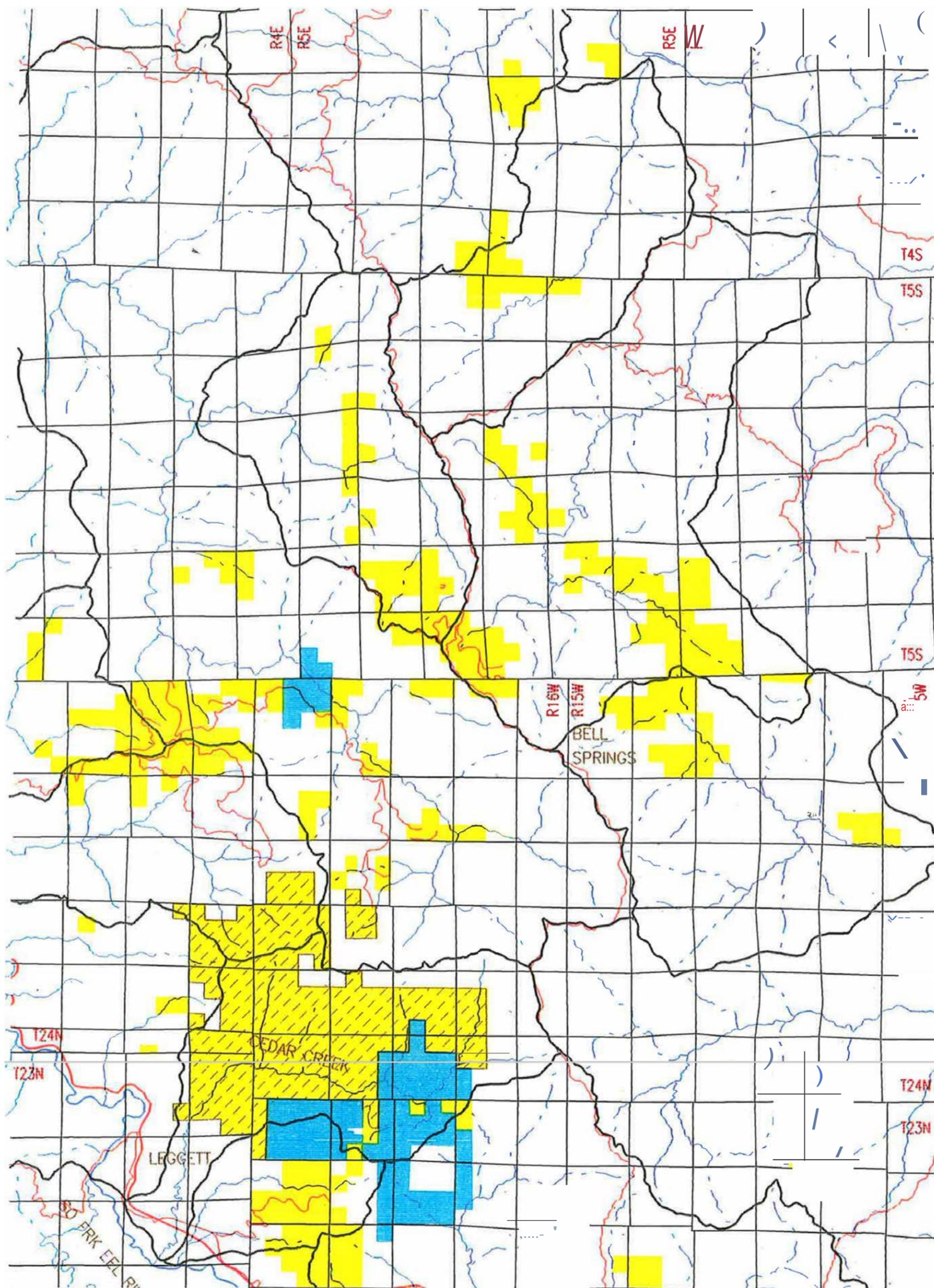
F. Sensitive Species

1. Protect sensitive species according to the BLM California Sensitive Species Policies.

iii. MANAGEMENT ACTIONS

1. Implement *Arabis* recovery plan.
2. Fully implement ACEC plans for Red Mountain and Elder Creek.
3. Complete and implement South Fork Eel River Management Plan for the portion of South Fork of the Eel River administered by BLM. Complete remaining management plans on the Eel River utilizing an interagency cooperative management planning approach. Provide interim management protection to these river corridors until management plans are completed.
4. Prepare watershed analyses for key watersheds.
5. Publish Federal Register notices for OHV designations.

6. Sign entrance to public lands regarding OHV designation.
7. Acquire easements to public lands without adequate access.
8. Monitor peregrine falcons, spotted owls and other unique resources. Continue inventory of habitat conservation/critical habitat areas.
9. Post boundaries.



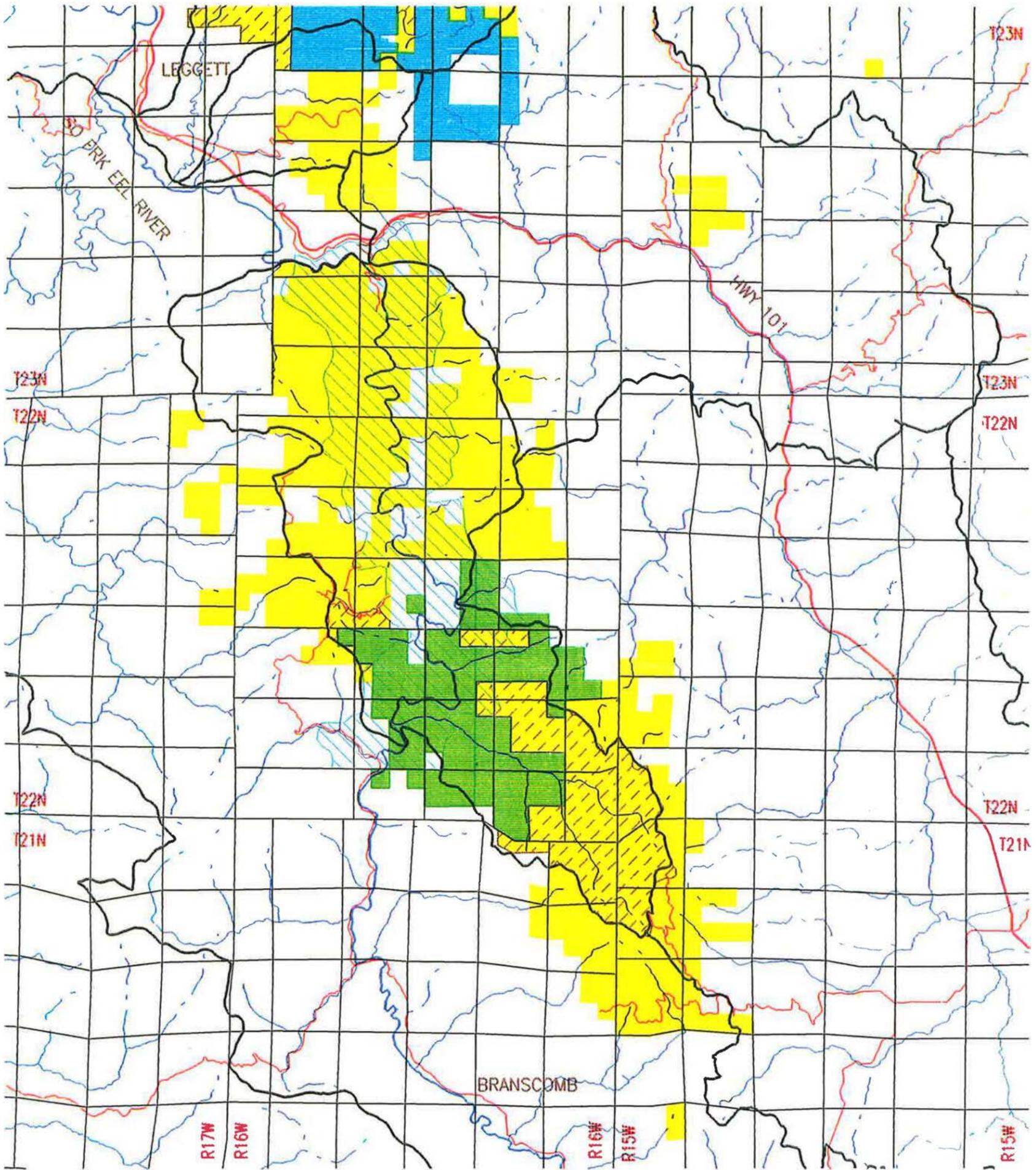
Red Mountain Management Area

No Action

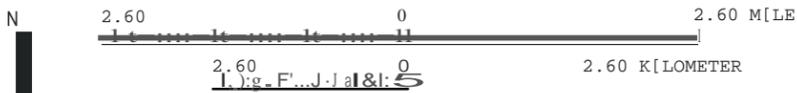
North

- PUBLIC LAND
- STATE LAND
- UCB CDAST RANGE RESERVE
- EXISTING ACEC
- WILD & SCENIC RVR CORRIDOR
- ROADS
- STREAMS
- WATERSHED BOUNDARY

Fig. 2-3



SCALE 1: 100000



Red Mountain Management Area

No Action

South

- PUBLIC LAND
- STATE LAND
- UCB COAST RANGE RESERVE
- EXISTING ACEC
- WILD & SCENIC RVR CORRIDOR
- ROADS
- STREAMS
- WATERSHED BOUNDARY

Fig. 2-3

**RED MOUNTAIN MANAGEMENT AREA
ALTERNATIVE 2.- WATERSHED MANAGEMENT/OLD-GROWTH
RETENTION (PREFERRED ALTERNATIVE)**

Management Summary:

- Emphasize anadromous fisheries and cooperative watershed management on South Fork Eel River and Cedar Creek.
- Retain all old-growth values and restore mature forest ecosystems.
- Maximize contribution of public lands to regional plans for managing biological diversity.
- Manage habitats for endangered plants and animals within larger ecosystems.

<i>LAND TENURE ALLOCATIONS</i>	
<i>Relliill</i>	34,484 acres surfa«
.....	14,000 acres slibsurfaa
<i>jAtq;;ui</i>	5,480 acres
.....	1,180 aeres

<i>NORTHWEST FOREST PLAN LAND AILOCATIONS</i>	
<i>IDJe 'Silc«ssioruil Resetw</i>	34,344 acres
<i>KeJ Watershed</i>	22,000 acres
<i>Matrix</i>	1,320 acres

I. RESOURCE CONDITION OBJECTIVES

A. Late-Successional/Old-Growth Forest Ecosystems

1. Protect existing old-growth stands from influences that could alter or disrupt the intrinsic values, stability, or ecological processes of these systems.
2. Re-establish and accelerate development of mature forest structural characteristics on previously entered stands and acquired cutover lands for long-term restoration of this element of biological diversity.
3. Establish the management area as a lowland Douglas-fir population center for the northern spotted owl, maintaining habitat for a minimum of twenty pair sites.
4. Restore ecological processes that maintain late successional forest ecosystems.
5. Provide minor forest products (firewood, seeds, poles) to the market in accordance with NWFP objectives and standards and guidelines for LSR and matrix.

B. Watershed and Aquatic Ecosystems

1. Maintain and restore ecological functions and processes that operate in watersheds to create anadromous fish habitat in those watersheds with highest restoration potential (South Fork Eel River and Cedar Creek).

C. Special-Status Species

1. Enhance and facilitate protection of unique botanical resources - particularly *Arabis macdona/diana*.
2. Secure and enhance priority historic peregrine falcon nest sites through acquisition into a system of sites in state, federal, or other public ownership.

D. Special Management Areas

1. Protect and enhance natural and recreational values along the federally designated portions of the South Fork Eel River Wild and Scenic River corridor.
2. Designate approximately 10,800 acres within the South Fork Eel River as a watershed ACEC. The watershed ACEC includes 3,192 acres of the Elder Creek RNA/ACEC.

E. Management

1. Through land tenure adjustment and direct acquisition, enhance management opportunities for achieving objectives A-D above.

II. LAND USE ALLOCATIONS

A. Forest Land Allocations (Including Northwest Forest Plan Amendment)

1. Manage 34,344 acres (approximately 97%) as LSR as part of a regional network of existing older forests providing a distribution, quantity, and quality of old-forest habitat and to provide habitat for viable, well distributed populations of species. These late-successional forest areas are not subject to programmed timber harvest. Management standards and guidelines are designed to improve habitat in younger stands or to produce stand structure and components associated with late-successional conditions.
2. Manage 1,320 acres as matrix.
3. Manage 22,000 acres Key Watersheds.

4. Employ a concept/strategy of ecosystem management that includes late-successional forest/northern spotted owl core habitat and other private lands that lie within a zone of influence of the existing pattern of public land ownership. Participate with private landowners to provide habitat management options to meet both federal and state habitat conservation strategies and improve public land management. Through cooperative management planning utilize acquisition/exchange, cooperative management agreements, conservation easements, direct financial incentives, mitigation banking, and so forth to meet habitat management objectives. These areas include:
 - Approximately 8,500 acres of potential late successional forest/northern spotted owl core habitat in the McCoy Creek, East Branch South Fork Eel River, Tom Long Creek, Charlton Creek, Tenmile Creek, and South Fork Eel River watersheds
 - Approximately 2,500 acres of endangered plant habitat adjacent to the Red Mountain ACEC in the Cedar Creek and Red Mountain Creek watersheds
 - Approximately 50,000 acres of private lands providing potential connectivity between late successional forest blocks
 5. On acquired lands and previously entered forest stands actively regenerate new stands and promote forest development in established young stands that do not currently provide mature forest structure.
 6. Identify opportunities to re-create, to the extent possible, the structural and compositional features of late-successional forests in even-aged stands through silviculture.
 7. Develop cooperative management partnerships to meet habitat improvement objectives and provide incidental forest products. These products may result from thinnings of overstocked conifer or hardwood stands, site preparation for small-scale conversion of young hardwood stands to increase the conifer component, road and other facility maintenance, or salvage following catastrophic events.
- B. Aquatic Conservation Strategies (Northwest Forest Plan Amendment)
1. Manage the South Fork Eel River and its tributaries from/including Low Gap Creek to Elder Creek as key watersheds. For all permanent and intermittent tributaries to the South Fork Eel that lie outside of the "wild" river designation, establish the following interim horizontal stream buffers as interim riparian reserves:
 - Fish-bearing streams - 300 feet either side of the channel

- Nonfish-bearing streams - 150 feet either side of the channel
 - Intermittent streams and landslide prone areas - 100 feet either side of the stream channel or to the extent of landslide or landslide prone areas
 - Buffering applies to the South Fork Eel River and tributaries from/including Low Gap Creek to/including Elder Creek. Actual buffering widths will be determined by watershed analysis. Riparian Reserves are subject to specific standards and guidelines to protect salmon and steelhead stocks.
2. Manage Cedar Creek as a key watershed with interim riparian buffering as described above.
 3. Recognize permanent riparian buffers (300, 150, 100 feet) on all other streams in the management area. No watershed analysis is necessary.
- C. Special Management Areas and Designations
1. Manage the South Fork Eel River Wild and Scenic River corridor in accordance with the Wild and Scenic River Guidelines until a management plan is completed.
- D. Land Acquisition and Disposal
1. Actively pursue direct acquisition of high-priority habitats for anadromous fisheries habitat restoration, key watershed management, Wild and Scenic River corridor management, and other specific endangered species habitats. These include:
 - Up to 1,240 acres of land in the Charlton Creek and Bell Springs Creek watersheds and 480 acres in the Tenmile Creek watershed to protect peregrine falcon nesting sites and foraging areas
 - 3,960 acres of land along in the South Fork Eel River watershed between and including Low Gap Creek and Elder Creek (acreage includes 2,480 acres within the watershed ACEC boundary)
 2. Retain all lands in public ownership except for approximately 1,180 acres lying in nine parcels outside of identified Late-Successional Reserves and Key Watersheds. These parcels of public land are identified as matrix lands in the NWFP.

- E. Off-Highway Vehicle Designations (43 CFR 8340)
1. Public lands within the Wild and Scenic River corridor, Elder Creek ACEC, and Red Mountain ACEC are designated as CLOSED. On all other public lands vehicles are LIMITED to roads designed for highway vehicles having four or more wheels.

F. Recreation

1. Public lands are available for dispersed recreation. (There are some restrictions on recreational uses within the Elder Creek ACEC.)

G. Access

1. Pursue a general-goal of obtaining public access to all public lands when feasible. Specific access on existing roads for public and/or administrative purposes will be pursued as follows:

- North Jewett parcel T.4S.,R.5E., Sec.22
- South Jewett parcel T.4S.,R.5E., Sec.33
- Island Mountain parcel T.5S.,R.5E., Sec.26
- Red Mountain (trail access) T.24N.,R.16W., Sec.19,20
- South Fork Eel River T.23N.,R.16W., Sec.29

H. Livestock Grazing

1. RNA/ACECs are not available for livestock grazing.

III. MANAGEMENT ACTIONS

1. Complete required inventory for archaeological, botanical, wildlife, and other resources on lands identified for disposal.
2. Contact owners of lands identified for direct acquisition. Develop funding proposals and acquisition/exchange alternatives.
3. Participate in watershed associations and private/public cooperative resource management planning to secure habitats for late successional forest species, to implement regional forest ecosystem management strategies. Monitor northern spotted owl occupancy on public lands.
4. Develop MOU with California Department of Fish and Game for management of Cedar Creek watershed.

5. Complete 5-year project planning schedule for late-successional forest development.
6. Establish cooperative management partnerships for sustainable forestry practices in South Fork Eel River watershed to promote habitat development projects and provide local supply of alternative forest products.
7. Prepare watershed analyses for South Fork Eel River and Cedar Creek that:
 - Establish criteria for determining riparian reserve widths
 - Identify transportation needs and restoration priorities
 - Refine management guidelines to fit specific landscape conditions and limitations
 - Establish forestry and watershed restoration goals and priorities
 - Establish monitoring programs to insure riparian management objectives are met
8. Complete Federal Register notices for amended OHV designations.
9. Complete a South Fork Eel River Management Plan.
10. Prepare land reports and easement justification reports to address specific acquisition needs and site-specific requirements and problems.

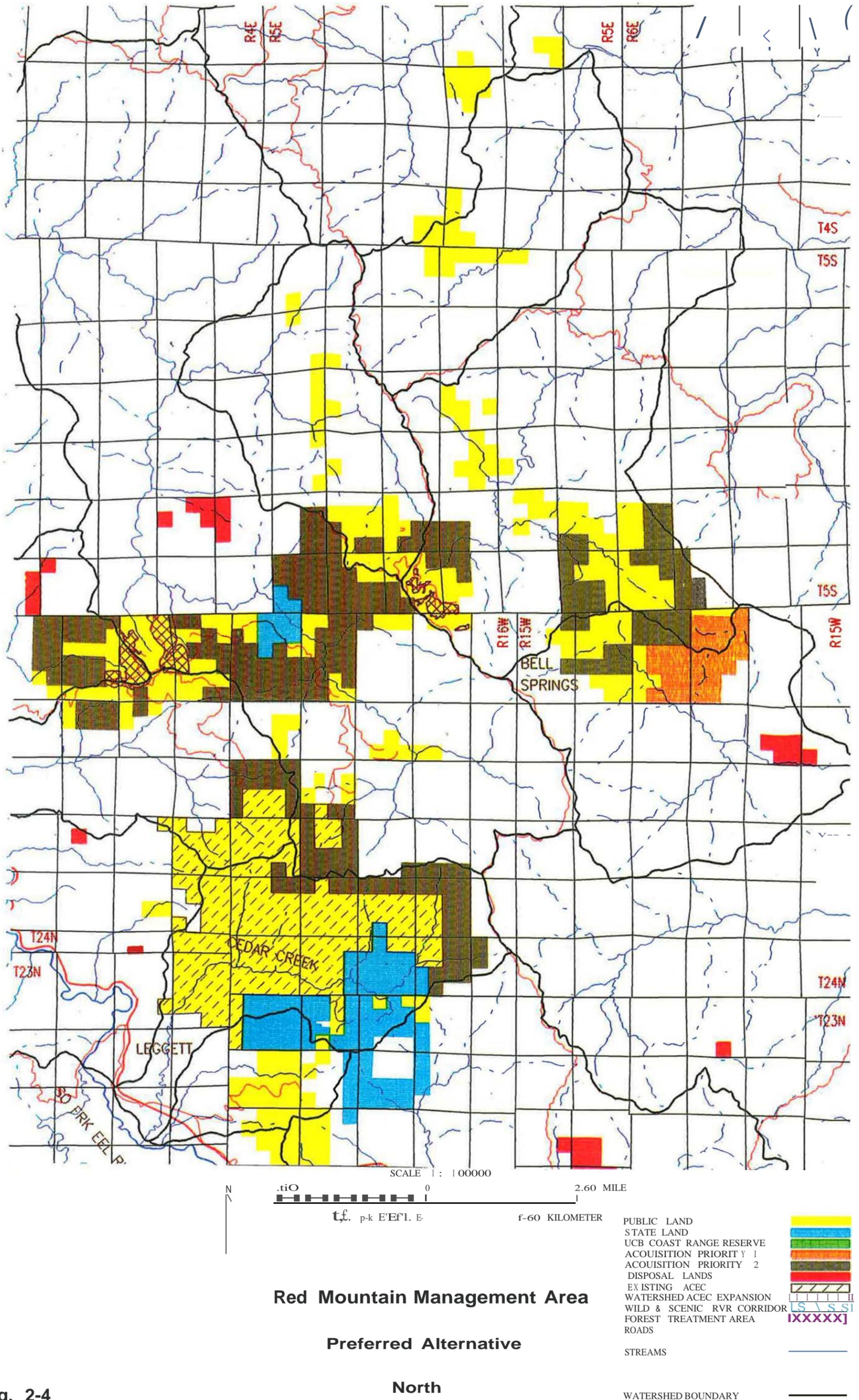
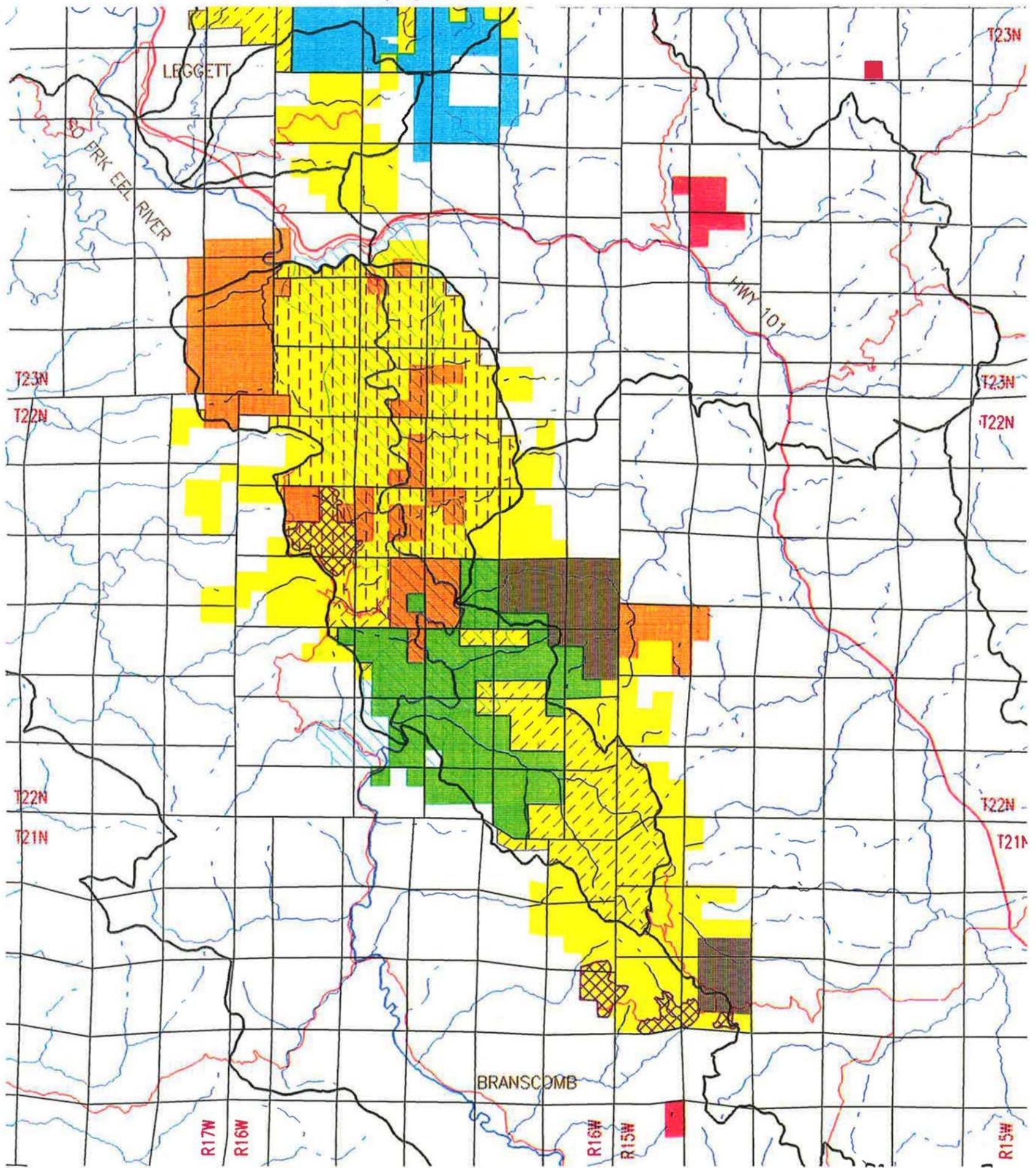


Fig. 2-4

North



SCALE 1: 100000



Red Mountain Management Area

Preferred Alternative

South

- PUBLIC LAND
- STATE LAND
- UCB COAST RANGE RESERVE
- ACQUISITION PRIORITY 1
- ACQUISITION PRIORITY 2
- DISPOSAL LANDS
- EXISTING ACEC
- WATERSHED ACEC EXPANSION
- WILD & SCENIC RVR CORRIDOR
- WILDEST TREATMENT AREA
- ROADS
- STREAMS
- WATERSHED BOUNDARY

Fig. 2-4

COVELO VICINITY MANAGEMENT AREA

ALTERNATIVE 1. - CURRENT MANAGEMENT (NO ACTION)

Management Summary:

- Maintain existing pattern of public land ownership.
- Prevent short-term degradation of late-successional forest values.

<i>LAND TENURE ALLOCATIONS</i>	
<i>Retain</i>	<i>57,100 acres surface</i>
	<i>30,000 acres subsurface</i>
<i>Acquire</i>	<i>0 acres</i>
<i>Transfer</i>	<i>9,400 acres</i>

<i>NORTHWEST FOREST PLAN LAND ALLOCATIONS</i>	
<i>Late Successional Reserve</i>	<i>24,000 acres</i>
<i>Key Watersheds</i>	<i>3,152 acres</i>
<i>Matrix</i>	<i>42,500 acres</i>

I. RESOURCE CONDITION OBJECTIVES

A. Watersheds and Aquatic Ecosystems

1. Protect and enhance natural and recreational values along the federally designated portions of the mainstem, North, and Middle Forks of the Wild and Scenic Eel River Corridor. Outstanding and remarkable attributes include anadromous fisheries, scenic quality, and recreational values.

B. Land Tenure and Management

1. Enhance manageability of public lands, acquire critical wildlife habitats, protect other significant resource values, and improve cost-effectiveness of resource management by consolidation of public lands in areas of high visibility with significant federal ownership.
2. On request, assist in meeting the State of California's in-lieu entitlement.

II. LAND USE ALLOCATIONS

A. Forest Land Allocations (Including Northwest Forest Plan Amendments)

1. Manage 24,000 acres as LSR as part of a regional network of existing older forests providing a distribution, quantity, and quality of old-forest habitat and to

provide habitat for viable, well distributed populations of species. These late-successional forest areas are not subject to programmed timber harvest. Management standards and guidelines are designed to improve habitat in younger stands or to produce stand structure and components associated with late-successional conditions.

2. Manage 3,152 acres in the Thatcher Creek watershed as a Tier-1 Key Watershed.
3. Manage areas along all permanently flowing streams, lakes, wetlands, and intermittent streams as Riparian Reserves.
4. Manage 42,500 acres as matrix.
5. Implement forest management activities within an area of approximately 9,450 acres of CFL in LSRs and the matrix that could include tree planting, brush and hardwood release, and precommercial thinning as part of the forest improvement program. Investment in forest improvement activities will be kept to a minimum to maintain the health of the forest.

B. Special Management Areas and Designations

1. Retain and manage the area known as Little Darby.
2. Manage the main stem and North and Middle Forks of the Eel River Wild and Scenic River corridor in accordance with the Wild and Scenic River Guidelines.

C. Land Acquisition and Disposal

1. Transfer the Big Butte Wilderness and WSA (9,400 acres) to the Mendocino National Forest to improve wilderness management. The remainder of the initial 45,000 acres identified for transfer to the USFS (35,600 acres) will be retained in public (BLM) ownership.

Scattered tracts considered nonessential for these federal and state regional planning efforts may be considered for disposal on a case-by-case basis to meet Resource Condition Objective B.1.

D. Off-Highway Vehicle Designations (43 CFR 8340)

1. Vehicles are LIMITED to roads; roads are defined as transportation facilities designed for highway vehicles having four or more wheels.

E. Recreation

1. Public lands are available for dispersed recreation.

F. Livestock Grazing

1. Public lands are not available for new livestock grazing leases.

iii. MANAGEMENT ACTIONS

1. Contact potential selectors for disposal of public lands and resources (not exclusively):
 - U.S. Forest Service
 - Surrounding landowners
2. Complete management plans for the main stem and North Fork of the Eel River utilizing an interagency cooperative management planning approach. Provide interim management protection to these river corridors until plans are completed. Manage the Middle Fork of the Eel River in accordance with the 1988 management plan.
3. Prepare a watershed analysis for the Thatcher Creek Tier 1 Key Watershed.
4. Pursue legislation modifying boundaries of the Mendocino National Forest. Manage contiguous lands under cooperative agreements until legislation is consummated.
5. Prepare Land Report(s) to address:
 - Specific disposal methods and timeframes (regarding management action No.1 above)
 - Site-specific inventories and requirements for cultural resources, mineral reports, and T&E species
5. Prepare Federal Register notices for OHV designations.
6. Continue inventory of habitat conservation/critical habitat areas.

COVELO VICINITY MANAGEMENT AREA
 ALTERNATIVE 2.- WATERSHED MANAGEMENT/OLD-GROWTH
 RETENTION (PREFERRED ALTERNATIVE)

Management Summary:

- Emphasize anadromous fisheries and cooperative watershed management on Eel River, Middle Fork Eel River, and North Fork Eel River and major tributaries.
- Re-establish the role of fire as a viable process for ecosystem management.
- Maximize contribution of public lands to regional plans for managing biological diversity.
- Manage habitats for endangered plants and animals within larger ecosystems.

<i>LAND TENURE ALLOCATIONS</i>	
<i>Retain</i>	<i>56,670 acres surface</i>
<i>.</i>	<i>30,000 acrts subsurface</i>
<i>Acquire</i>	<i>0 acres</i>
<i>Dispose</i>	<i>9,830 acres</i>

<i>NORTHWEST FOREST PLAN LAND ALLOCATIONS</i>	
<i>LaJe Successional Reserve</i>	<i>24,000 acres</i>
<i>Key WaJenhed</i>	<i>3,152 acres</i>
<i>Matrix</i>	<i>42,\$00 acres</i>

I. RESOURCE CONDITION OBJECTIVES

A. Late Successional/Old Growth Forest Ecosystems

1. Protect existing old-growth stands from influences that could alter or disrupt the intrinsic values, stability, or ecological processes of these systems.
2. Re-establish ecological processes such as fire to maintain terrestrial habitats emphasizing management of brushlands to maintain diversity and of forest communities to manage fir encroachment and maintain pine component.
3. Re-establish and accelerate development of mature forest structural characteristics on previously entered stands and acquired cutover lands for long-term restoration of this element of biological diversity.
4. Restore ecological processes that maintain late-successional forest ecosystems.

5. Identify opportunities to re-create, to the extent possible, the structural and compositional features of late-successional forests in even-aged stands through silviculture.

6. Provide minor forest products to the public as they become available through facility/road maintenance and forest development.

B. Watersheds and Aquatic Ecosystems

1. Maintain and restore ecological functions and processes that operate in watersheds to create anadromous fish habitat in those watersheds with highest restoration potential (Thatcher Creek).

C. Special Management Areas

1. Protect and enhance natural and recreational values along the federally designated "wild" and "scenic" segments of the Middle Fork Eel River as outlined in the Middle Fork Eel River Management Plan.

D. Land Tenure and Management

1. Improve management efficiency on the public lands and between agencies through administrative transfer and through disposal of scattered lands considered nonessential in regional strategies for ecosystem management.

E. Recreation

1. Provide recreational opportunities along federally designated portions of Wild and Scenic River corridors as outlined in the Middle Fork Eel River Management Plan. Elsewhere provide dispersed recreation opportunities consistent with habitat management objectives.

II. LAND USE ALLOCATIONS

A. Forest Land Allocations

1. Manage 24,000 acres as LSR as part of a regional network of existing older forests providing a distribution, quantity, and quality of old-forest habitat and to provide habitat for viable, well distributed populations of species. These late-successional forest areas are not subject to programmed timber harvest. Management standards and guidelines are designed to improve habitat in younger stands or to produce stand structure and components associated with late-successional conditions. These blocks of land include:

- Casoose Creek 2,700 acres
- White Rock Creek 2,400 acres
- Woodman Creek 1,800 acres
- Dingman 3,700 acres
- Willis Ridge 4,500 acres
- Brushy Mountain 7,000 acres
- Little Darby 1,100 acres
- Lake Mountain 900 acres

2. Manage 3,152 acres as Key Watershed.
3. Manage 42,500 as matrix lands.
4. On acquired lands and previously entered forest stands actively regenerate new stands and promote forest development in established young stands that do not currently provide mature forest structure. Develop cooperative management partnerships to meet habitat improvement objectives and provide incidental forest products. These products may result from thinnings of overstocked conifer or hardwood stands, site preparation for small-scale conversion of young hardwood stands to increase the conifer component, road and other facility maintenance, or salvage following catastrophic events.

B. Aquatic Conservation Strategies (Northwest Forest Plan Amendment)

1. Establish Thatcher Creek and its tributaries as a Tier-1 Key Watershed. For all permanent and intermittent tributaries to Thatcher Creek, establish the following interim horizontal stream buffers as interim riparian reserves:
 - Fish-bearing streams - 300 feet either side of the channel
Nonfish-bearing streams - 150 feet either side of the channel
 - Intermittent streams and landslide prone areas - 100 feet either side of the stream channel or to the extent of landslide or landslide prone areas

Criteria for establishing actual buffering widths will be determined by watershed analysis. Riparian Reserves are subject to specific standards and guidelines to protect salmon and steelhead stocks.

2. Delineate permanent buffers (300, 150, 100 feet) on all other streams in the management area. No watershed analysis is necessary.
3. Develop cooperative management relationships with private landowners, state, and other federal agencies to effect coordinated management consistent with

restoration of anadromous fisheries of the Eel River, Middle Fork Eel River, and North Fork Eel River.

C. Special Management Areas

1. Delineate A mile "wild" and "scenic" buffers to designated segments of the Eel River, Middle Fork Eel River, and North Fork Eel River as identified in the Middle Fork Eel River Management Plan and in interim management provisions of the Wild and Scenic River Act.

D. Land Acquisition and Disposal

1. Retain lands in public ownership with the following exceptions:
 - Transfer administration of 9,400 acres in the Big Butte wilderness and adjacent Section 202 Wilderness Study Area parcels to the Mendocino National Forest to improve management efficiency.
 - Offer 11 parcels of public land for disposal totaling approximately 430 acres.

E. Off-Highway Vehicle Designations (43 CFR 8340)

1. Public lands within the Wild and Scenic River corridor are designated as CLOSED. On all other public lands vehicles are LIMITED to roads designed for highway vehicles having four or more wheels.

F. Recreation

1. Public lands are available for dispersed recreation.

G. Access

1. Pursue public access to all public lands when feasible. Specific access on existing roads for public and/or administrative purposes is needed to major blocks of public land as follows:
 - Brushy Mountain block T.20N.,R.13W.,Sec. 2
 - Willis Ridge block T.20N.,R.13W.,Sec.17
 - Eden Valley block T.20N.,R.12W.,Sec.10
 - Travis Ranch block T.SS.,R.8E.,Sec.27

H. Livestock Grazing

1. Public lands are not available for new livestock grazing leases.

iii. MANAGEMENT ACTIONS

1. Participate in watershed associations and private/public cooperative resource management planning to secure habitats for late successional forest species, implement regional forest ecosystem management, and consolidate management on large watersheds with multiple ownership.
2. Develop MOU with Mendocino National Forest for management of the Thatcher Cedar Creek watershed and development of watershed analysis.
3. Complete 5-year project planning schedule for late-successional forest development.
4. Prepare watershed analysis for Thatcher Creek that:
 - Establishes criteria for establishing riparian reserve widths
 - Refines management guidelines to fit specific landscape conditions and limitations
 - Establishes forestry and watershed restoration goals and priorities
 - Establishes monitoring programs to ensure riparian management objectives are met
5. Complete Federal Register notices for amended OHV designations.
6. Implement Middle Fork Eel River Management Plan.
7. Prepare land reports and easement justification reports to address specific needs and site-specific requirements and problems.

Management standards and guidelines are designed to improve habitat in younger stands or to produce stand structure and components associated with late-successional conditions.

2. Manage 1,240 acres of the Gilham Butte public land block as part of the Mattole River Tier 1 -Key Watershed.
3. Manage areas along all permanently flowing streams, lakes, wetlands, and intermittent streams' Riparian Reserves.
4. Manage 5,785 acres as matrix.
5. Implement minimal forest improvement practices on approximately 1,200 acres to maintain the forest in a healthy state until such time as parcels are disposed of or identified as critical threatened and endangered habitat.

B. Special Management Areas and Designations

1. Manage Gilham Butte (2,550 acres) and !aqua Butte (1,080 acres) as RNA/ACECs for the preservation of old-growth values. The Gilham Butte and !aqua Butte RNA/ACECs are available for nonconsumptive research and cone collecting. Control fire, disease, and insects to prevent spreading to other lands and to protect the existing forest conditions.
2. Manage the Eel and Van Duzen River Wild and Scenic River corridors in accordance with the Wild and Scenic River Guidelines.

C. Land Acquisition and Disposal

1. Retain Gilham Butte and !aqua Butte, in the Arcata Resource Area, and Eagle Peak/Greenough Ridge and The Cedars, in the Clear Lake Resource Area.

Dispose of scattered tracts of public lands considered nonessential in bio-regional planning efforts on a case-by-case basis to meet Objective B. ■ above.

2. Acquire 800 acres around Gilham Butte for recreational uses.

D. Off-Highway Vehicle Designations (43 CFR 8340)

1. Public lands within the MA's Wild and Scenic River corridors are designated CLOSED.

E. Recreation

1. Public lands are available for dispersed recreation.

iii. MANAGEMENT ACTIONS

1. Prepare Federal Register notices for OHV designations.
2. Contact potential selectors for disposal of public lands and resources.
3. Contact surrounding landowners for acquisition regarding Land Use Allocation C.2.
4. Prepare Land Report(s) to address specific disposal acquisition methods.
5. Acquire public access and construct a trail between Humboldt Redwoods State Park, Gilham Butte, and the King Range National Conservation Area for recreational and educational uses. Acquire public access into Eagle Peak and The Cedars for recreational and educational uses.
6. Prepare ACEC Activity Plans for Gilham and Iaqua Buttes to address site-specific needs, access, research proposals, and priorities.
7. Complete management plans for the Eel and Van Duzen Rivers utilizing an interagency cooperative management planning approach. Provide interim management protection to these river corridors until plans are completed.
8. Continue inventories of areas identified as LSR/critical habitat.

SCATTERED TRACTS MANAGEMENT AREA
 ALTERNATIVE 2.- WATERSHED MANAGEMENT/OLD-GROWTH
 RETENTION (PREFERRED ALTERNATIVE)

Management Summary:

- Improve management efficiency on the public lands.
- Maximize contribution of public lands to regional plans for managing biological diversity.
- Manage habitats for endangered plants and animals within larger ecosystems.

LAND TENURE ALLOCATIONS	
Retain	14,055 acres surface
.	82,800 acres subsurface
Acquire	800 acres
Dispose	250 acres

NORTHWEST FOREST PLAN LAND ALLOCATIONS	
<i>Late Successional Reserve</i>	10,320 acres
<i>Key Watershed</i>	1,240 acres
<i>Matrix</i>	5,785 acres

I. RESOURCE CONDITION OBJECTIVES

A. Late-Successional/Old-Growth Forest Ecosystems

1. Maximize contribution of public lands to regional plans for managing biological diversity.

B. Land Tenure and Management

1. Improve cost-effectiveness of public land management by consolidation of federal ownership.
2. Improve recreational opportunities between Humboldt Redwoods State Park and King Range National Conservation Area.

C. Special Management Areas

1. Protect and enhance natural and recreational values along the federally designated portions of the Eel and Van Duzen Rivers' Wild and Scenic River corridors.

IT. LAND USE ALLOCATIONS

A. Forest Land Allocations (Including Northwest Forest Plan Amendment)

1. Manage 10,320 acres as LSR as part of a regional network of existing older forests providing a distribution, quantity, and quality of older forest habitat and to provide habitat for viable, well-distributed populations of species. These late-successional forest areas are not subject to programmed timber harvest. Management standards and guidelines are designed to improve habitat in younger stands or to produce stand structure and components associated with late-successional conditions. These blocks of land include:

● Gilham Butte	2,550 acres
● Jaqua Butte	1,080 acres
● Coleman Creek	440 acres
● Cameron Creek	40 acres
● Greenough Ridge/Montgomery Woods	960 acres
● Impassable Rocks/Eagle Peak	1,880 acres
● Pine Ridge	3,370 acre

2. Manage 1,240 acres of the Gilham Butte public land block as part of the Mattole River Tier 1 -Key Watershed.
3. Manage areas along all permanently flowing streams, lakes, wetlands, and intermittent streams Riparian Reserves.
4. Manage 5,785 as matrix lands.
5. Provide minor forest products to the public as they become available through facility/road maintenance and forest development.

B. Aquatic Conservation Strategies

1. Establish permanent buffers (300, 150, 100 feet) on all streams in the management area. No watershed analysis is necessary.

C. Land Acquisition and Disposal

1. Subject to clearances for special resources, dispose of scattered tracts of public lands considered nonessential in the late successional reserve forest system in identified in Land Use Allocation A.1. above.
2. Acquire 800 acres around Gilham Butte for recreational uses.

- D. Off-Highway Vehicle Designations (43 CFR 8340)
 - 1. Public lands within the management area are designated as LIMITED. Vehicles are restricted to roads designed for highway vehicles having four or more wheels. Public lands within Wild and Scenic River corridors are designated CLOSED.
- E. Recreation
 - 1. Public lands are available for dispersed recreation.
 - 2. Develop a connecting trail system through Humboldt Redwoods State Park, Gilham Butte, and King Range National Conservation Area.
- F. Access
 - 1. Obtain public access to all public lands identified for retention when feasible.
 - 2. Develop public access to support E2. above through acquisition of lands (800 acres) and through acquisition of public access where necessary.

iii. MANAGEMENT ACTIONS

- 1. Complete Federal Register notices for amended OHV designations.
- 2. Develop schedule for completing resource clearances for identified disposal parcels.
- 3. Prepare land reports to address specific acquisition needs at Gilham Butte.
- 4. Acquire public access into Gilham Butte, The Cedars, and Eagle Peak.
- 5. Prepare RNA/ACEC Activity Plans for Gilham and Jaqua Buttes to address site-specific needs, access, and so forth.

ALTERNATIVES CONSIDERED BUT ELIMINATED FROM DETAILED ANALYSIS

This section describes alternatives identified through the scoping process that were considered by BLM but dismissed from detailed analysis for various reasons described below. Generally, these alternatives were not within the scope of the plan amendment/EA or would not meet the plan amendment objectives.

Management of Forest Lands, Including Old-Growth and Late-Successional Ecosystems

Public comments received in scoping requested that the Elkhorn Ridge, Hoaglin Valley, and Mina timber sales be discussed in the plan amendment and that the Elkhorn Ridge timber sale should not be treated as a "sold sale". These timber sales were identified in SYU-13 timber management plan programmatic EIS and ROD (USDI BLM 1981a).

A site-specific EA for the Hoaglin Valley timber sale was completed in 1989. The timber sale was sold in 1990 and harvested in 1992. This sale area is within the matrix in the Covelo Vicinity MA. Forest resources on the Hoaglin Valley public land parcels will be managed in accordance with the NWFP standards and guidelines for the matrix. Future forest management activities on these parcels will be evaluated in site-specific environmental reviews in compliance with NEPA.

The Elkhorn Ridge timber sale EA was completed in 1985 and the timber sale sold to Eel River Sawmills in October 1987. In 1989, opponents of the sale filed suit and a federal district court in San Francisco issued a temporary restraining order to stop all operations on the sale pending further proceedings in the case. BLM subsequently agreed to reassess the sale through additional environmental review; a draft EIS on the sale was released in 1990. During this process, the northern spotted owl and marbled murrelet were federally listed as threatened species under the ESA and critical habitat designated for the owl. Based on these events and public comments on the draft EIS, BLM prepared a supplemental draft EIS which was released in January 1993. On May 27, 1994, BLM issued the decision to not allow harvest of the Elkhorn Ridge timber sale; this decision involves termination of the timber sale contract. BLM is currently involved in negotiations to resolve Eel River Sawmills' rights under the timber sale contract. (USDI BLM 1994.)

The Elkhorn Ridge timber sale area is within the Red Mountain MA and will be managed as a LSR and Tier 1 Key Watershed in accordance with the NWFP land allocations and standards and guidelines.

The Mina timber sale area is within the matrix in the Covelo Vicinity MA. In 1988, the sale was marked and sale volume calculated; the Mina timber sale has not been sold. The sale area, as laid out in 1988 does not comply with the NWFP standards and guidelines such as those for Riparian Reserves and known spotted owl activity centers. The Mina sale area will be managed in accordance with the NWFP standards and guidelines for the matrix. Future forest management activities on these parcels will be evaluated in site-specific environmental reviews in compliance with NEPA.

Wilderness Consideration for the South Fork Eel River Watershed

Public comments received in scoping requested re-evaluation of lands in the South Fork Eel watershed, including lands that are now in state ownership, for potential wilderness values; this alternative would require consideration of state lands as equivalent to public lands and available to meet the size criterion for wilderness suitability and designation.

BLM conducted initial and intensive inventories for wilderness values on ELM-administered lands in the South Fork Eel River watershed in 1978 and 1979, respectively, and concluded that the Brush Mountain, Elkhorn Ridge, and Cahto Peak units did not meet the criteria for further wilderness study. BLM's decisions were appealed to the Interior Board of Land Appeals (IBLA); IBLA upheld BLM's decisions. BLM conducted another wilderness inventory in August of 1989 to re-evaluate wilderness values within the South Fork Eel River watershed based on BLM's acquisition of private lands between Elkhorn Ridge and Brush Mountain. BLM again concluded that public lands in the watershed did not meet the criteria for further wilderness study. The inventory decision was again appealed and upheld by IBLA. (USDI BLM 1993.)

BLM has reviewed public lands in the South Fork Eel River watershed for wilderness values as directed by FLPMA. BLM has no authority to study state lands for wilderness suitability or designation. This alternative is outside BLM's jurisdiction to implement, as well as outside the scope of this plan amendment/EA.

Consideration of Wild and Scenic River Eligibility

Public comments received in scoping requested that wild and scenic river eligibility for waterways in the ARA be considered in this plan amendment. As described in the "Continuing Management Guidance and Actions" section of this chapter and Appendix A, ARA has completed the eligibility and potential classification steps of the evaluation process to identify potential additions to the NWSRS. The suitability study will be conducted and analyzed in a separate plan amendment/legislative EIS.

Re-evaluation of RMP Decisions for the Samoa Peninsula Management Area

Public comments received in scoping requested that the Samoa Peninsula MA be included in the plan amendment to allow for planning to provide protection and recovery for two plant species listed as endangered under the ESA, beach layia (*Layia camosa*) and Menzies wallflower (*Erysimum menziesii*). This alternative is outside the scope of this plan amendment/EA which is limited to a review of decisions related to forest management and land tenure adjustments. The Samoa Peninsula MA does not include forest lands. Land tenure adjustment alternatives were evaluated in the 1989 final RMP/EIS and land tenure decisions made in the 1992 ROD for the Arcata RMP. Land use allocations for OHV designations were made in the 1992 ROD and amended for the Manila Dunes parcel in a January 1995 plan amendment. Habitat for these endangered plant species will be managed in accordance with Section 7 of the ESA and BLM policy for management of special status species.

Chapter 3. Affected Environment

INTRODUCTION

This chapter describes the resources of the plan amendment area that affect or are affected by the resolution of the issues and management concerns identified in Chapter 2. Descriptions are only as detailed as needed for the reader to understand the effects of implementation.

Much of the information in this chapter summarizes more detailed material which is contained in the Management Situation Analysis and other valid planning documents which are available for review in the ARA Office.

The descriptions of needed forest improvement activities were developed by reviewing and evaluating ARA timber program operations inventories to identify stand improvement opportunities consistent with NWFP management objectives for late-successional habitats. The operations inventories reflect the historic goal to aggressively manage the forest resource to achieve a stocked, regulated condition from which a sustained yield could be harvested over time. The operations inventories were reviewed to identify treatment opportunities to reestablish processes inherent in a functioning forest ecosystem and accelerate development of old-growth forest characteristics.

Where impacts to a resource are slight or nonexistent, resource descriptions are omitted.

PLAN AMENDMENT AREA OVERVIEW

The Arcata plan amendment area is within the California Coast Range physiographic province which includes the coastal area of northwestern California south to Marin County. Most of the land in the province is privately owned; other landowners include BLM, USFS, National Park Service (NPS), California State Parks, CDF, and American Indian tribes.

Redwood forests and mixed forests of Douglas-fir and hardwoods dominate the California Coast Range province; the province includes a coastal fog belt containing the last remaining stands of old-growth redwoods. Public lands within the plan amendment area are dominated by low elevation mixed evergreen forests of Douglas-fir and hardwoods. Historic

logging and wildfires on both private and public lands has resulted in a highly fragmented mosaic of cutover areas, thinned stands, and young plantations, interspersed with uncut natural stands.

Human-caused and natural influences affecting watersheds and water quality in the province and plan amendment area are well-known and documented. The California Coast Range physiographic province was formed by accretion of rocks onto the continent. Stream channels generally follow the northwest/southeast orientation of these rocks. Relatively rapid tectonic uplift has caused hillslopes to become highly dissected and incised by stream channels, creating inner gorges. Weak rocks are highly fractured along numerous faults and contacts, and are weathered to deep soils that are subject to extensive earthflows, or landslides. Sediment yield in this physiographic province is among the highest in the world.

Poor land use practices exacerbate the natural landslide phenomenon. Slide areas affected by road construction or past logging tend to be larger and introduce larger quantities of sediment into stream channels. Sedimentation affects stream morphology by filling pools and generally widening streams. These effects lead directly to loss of beneficial uses such as salmon habitat through loss of pool refugia, increase in overall stream temperature, and siltation of spawning gravels. Watershed management is complicated by multiple landowners with diverse land use and resource management objectives within watersheds.

Considerable numbers of northern spotted owls inhabit private lands in the California Coast Range Province, as well as federally managed lands. In northern California, the owl is fairly common in some types of relatively young forest, especially where those forests are structurally similar to older forests, or where patches of older forest remain within a matrix of younger stands. On lands administered by BLM, late-successional and old-growth forests are typically highly fragmented by past logging, resulting in a mosaic of stands of younger trees and older stands. On private and state lands, late-successional and old-growth forests tend to occur in small patches surrounded by cutover areas and young stands.

USFWS designated critical habitat for the northern spotted owl in 1992. The critical habitat designation consists of individual critical habitat units (CRUs) distributed across the range of the northern spotted owl. USFWS determined that the primary constituent elements essential to the conservation of the owl are those physical and biological features that support nesting, roosting, foraging, and dispersal behavior. CRUs were designated based on the following concepts:

- development and maintenance of large contiguous blocks of habitat for clusters of reproductive pairs of owls;
- management of the habitat blocks to minimize forest fragmentation and improve habitat quality;

- placement of habitat blocks to facilitate dispersal; and
- maintenance of a rangewide distribution of habitat to facilitate recovery of the spotted owl.

CHUs are designated to serve both a local role and a rangewide role in contributing to the conservation of the species.

The USFWS' final draft recovery plan identifies a network of Designated Conservation Areas (DCAs) on federal forestlands to provide primary habitat for the northern spotted owl. Each DCA includes areas of currently existing suitable owl habitat (also referred to as nesting, roosting, and foraging habitat) combined with areas of younger forests; these younger stands will be protected so they can mature into owl habitat. The largest DCAs are designed to support a population of 20 or more pairs of owls in habitat conditions that allow successful breeding and rearing of young. The DCA network is configured to allow owls to disperse from one DCA to another.

In some areas of the range, federal lands are not adequate to allow full implementation of a spotted owl conservation strategy; the final draft recovery plan identifies the shortage of federal lands in the California Coastal Range province as a constraint to owl recovery. In coastal DCAs, only Redwood National Park (unsurveyed for owls) and the Red Mountain MA are projected to provide sufficient habitat to support twenty pairs of owls. The final draft recovery plan states that the continued presence of owls depends upon a contribution from state and private lands or on a consolidation of federal ownership to increase habitat available for nesting pairs. The shortage of federal lands in the California Coastal Range province highlights the need to protect existing habitat and accelerate development of habitat characteristics in younger forests and previously entered stands.

LACKS CREEK

The Lacks Creek MA is several miles west of the Hoopa Valley Indian Reservation and approximately five miles southeast of Redwood National Park in western Humboldt County. The MA includes 4,100 acres of public land and 500 acres of split estate. The majority of BLM lands in this MA are in a contiguous block along the west slopes of Pine Ridge in the upper reaches of Lacks Creek drainage.

Watershed

The Lacks Creek MA is within the Redwood Creek watershed and the Redwood National Park Protection Zone established by the Redwood National Park Expansion Act. BLM entered into an interagency agreement with Redwood National Park in 1985 to coordinate on all projects within the Lacks Creek drainage and to protect downstream resources in support of the Redwood National Park Expansion Act. Through a subsequent MOU, BLM imposed a ten-year (1981-1991) moratorium on timber harvest in the Lacks Creek watershed; the moratorium was intended to provide for completion of baseline studies of erosion and sedimentation.

The NPS conducted a baseline study of sediment routing in tributaries of the Redwood Creek basin. High gradient tributary streams to Redwood Creek, such as those tributaries within the Lacks Creek watershed, transport sediment rapidly and contain small amounts of stored sediment. This is in contrast to Redwood Creek which receives these large amounts of sediment and stores very high quantities of sediment in the stream channel. The study found, in general, that the frequency of landsliding on logged versus unlogged slopes was similar; however, slides occurring in cutover areas were substantially larger and accounted for nearly 80% of the total volume of sediment. It also noted that failures associated with roads were the most frequent and produced the most sediment from logging-related activities. The study found no significant differences in erosion from cable versus tractor yarding methods in clearcut areas. Tractor yarded, selectively logged areas on moderate slopes were the least important in producing sediment. The report showed a high correlation between timber harvesting and increases in frequency and volume of landsliding. Conditions in the Lacks Creek watershed support a high potential for slope failure which is exacerbated by timber harvest. (USDI NPS 1982.)

Forest Ecosystems

Most of the Lacks Creek MA is forested, species are primarily Douglas-fir (*Pseudotsuga menziesii*) and mixed hardwoods. The NWFP allocates the entire block as LSR.

Approximately 1,300 acres in the MA meet the definition of old-growth/late seral stage forest; approximately 1,041 of these acres are within the boundary of the 11,065-acre Lacks Creek watershed (Table 2-4). Most of the old-growth forests on private lands between the Six Rivers National Forest and the Redwood National Park have been harvested. The only significant old-growth in this area is on BLM public lands in the Lacks Creek drainage. An 800-acre block of public land in the northern part of the MA is designated as the Lacks Creek RNA/ACEC for the preservation of old-growth forest values.

There are approximately 550 acres requiring silvicultural treatments to achieve NWFP ecosystem management objectives. Treatments could include site preparation, planting, seedling protection, timber stand improvement including thinning and release projects to meet habitat objectives, and hardwood conversion to re-establish the conifer component on some sites. Current operations inventories include approximately 75 acres of planting and seedling protection, 395 acres of thinning and release projects, and 80 acres of hardwood conversion. All treatment areas are within previously entered forest stands outside of the existing and proposed RNA/ACEC boundaries.

Lands acquired through exchange in 1983 and 1984 have not been completely inventoried for rehabilitation/silvicultural needs.

Lands identified for acquisition (Figure 2-1) under the Current Management Alternative are high site, well-stocked commercial forest land.

Wildlife, Fisheries, and Special Status Species

The MA provides habitat for the federally threatened northern spotted owl and associated old-growth species, black-tailed deer, and black bear. Black bear are common in the area. The MA may provide habitat for the marbled murrelet. Lacks Creek provides habitat for steelhead and salmon; approximately one mile of Lacks Creek crosses BLM land in the MA.

The management area provides approximately 1,300 acres of suitable owl habitat (nesting/roosting/foraging). Approximately 378 acres are within the existing Lacks Creek RNA/ACEC; an additional 515 acres of suitable habitat are within the proposed addition to the RNA/ACEC under the Watershed Management/Old-Growth Retention Alternative. Through the 1992 nesting season, the area supported five owl territories. Two nest territories and two territorial single male owls occur on public land. The additional territory is a nest site on adjacent private land for which public lands provide the majority of habitat.

All regional planning efforts for recovery of the northern spotted owl include the Lacks Creek MA as providing core habitat. The NWFP allocates the entire block as LSR. The entire block is identified as critical habitat (CHU CA-47) and as a DCA (CD-3) in the final draft recovery plan (USDI 1992a). The final draft recovery plan projects that federal lands in the MA will support two nesting pairs in the long term.

The proximity of Lacks Creek to Redwood National Park and the presence of significant remnant old-growth forest creates a potential for use by the federally threatened marbled murrelet. The area has not been surveyed for the presence of these seabirds.

RED MOUNTAIN

The Red Mountain MA encompasses public lands in southeastern Humboldt and northwestern Mendocino Counties. The MA includes 35,664 acres of public land and 14,000 acres of split estate. The majority of public land acreage in the Red Mountain MA is in three large blocks in the following areas: Red Mountain, Elkhorn Ridge-Brush Mountain, and Cahto Peak. Public lands in the northern part of the MA are in small blocks and scattered parcels in the Charlton Creek, Bell Springs Creek, Pipe Creek, Jewett Creek, and Tom Long Creek watersheds.

The South Fork Eel River is a component of the NWSRS.

The 6,895-acre Red Mountain RNA/ACEC is designated and managed for protection of unique botanical and soils values, old-growth forest, raptor habitat, and anadromous fisheries. Most of the Red Mountain RNA/ACEC is also a WSA.

The 3,775-acre Elder Creek RNA/ACEC is managed to protect the Elder Creek and Fox Creek watersheds. The RNA/ACEC is managed cooperatively with the University of California's 4,000-acre Heath and Marjorie Angelo Coast Range Reserve. The Angelo Coast Range Reserve was formerly named the Northern California Coast Range Preserve.

For a more detailed discussion of the affected environment in the Elkhorn Ridge-Brush Mountain and Cahto Peak public land blocks, and the South Fork Eel River, refer to the Supplement to the Draft EIS South Fork Eel River Management Plan and Elkhorn Ridge Timber Sale (USDI BLM 1993).

Watershed

The entire Red Mountain MA lies within the Eel River watershed including the main stem Eel River, South Fork Eel River, and East Branch South Fork Eel River. Table 3-1 identifies public land ownership in watersheds in the MA.

Cedar Creek and four major tributaries drain approximately 9,974 acres, 5,256 of which are public land. This drainage system includes 31.3 miles of perennial and intermittent stream channels. Public lands include approximately 16.75 miles (54%) of channels including 5.3 miles of the main stem. Summer flows from Cedar Creek account for approximately 17% of the South Fork Eel River low flow measured at Leggett.

The South Fork Eel River and its tributaries upstream from Leggett (excluding Cedar Creek) drain approximately 128,000 acres including approximately 17,000 acres of public

Table 3-1. Watersheds within the Red Mountain Management Area

Watershed	Tributary To:	Stream Order	Total Acres	Public Land Acres	Percent Public Land (%)	Number of Landowners		
						Total	Controlling 50% of Surface Acreage	Controlling 80% of Surface Acreage
Jewett Creek	Eel	4	12,731	504	4	NA	NA	NA
Pipe Creek	Eel	4	8,972	593	7	49	2	6
Chamise Creek	Eel	5	17,958	2,734	15	116	7	28
Tom Long Creek	East Branch South Fork Eel	4	8,446	1,306	15	70	6	27
Bell Springs Creek	Eel	4	11,607	1,007	9	23	1	4
East Branch South Fork Eel	Eel	5	40,092	2,419	6	NA	NA	NA
McCoy Creek	South Fork Eel	4	4,378	676	15	32	2	8
Red Mountain Creek	South Fork Eel	4	7,700	1,850	24	30	2	4
Cedar Creek	South Fork Eel	4	9,838	5,252	53	51	1	7
Big Dann Creek	South Fork Eel	3	3,068	1,063	35	NA	NA	NA
South Fork Headwater (above Leggett)	Eel	6	77,607	14,013	18	NA	NA	NA
South Fork Headwater (Low Gap to Elder)	Eel	6	17,236	10,180	59	26	1	3
Rattlesnake Creek	South Fork Eel	5	24,327	1,250	5	NA	NA	NA

land. Public lands include approximately 7.75 miles of the South Fork Eel River, five miles of other perennial streams, and nineteen miles of intermittent streams.

The NWFP identifies the South Fork Eel River and Cedar Creek as Tier 1 Key Watersheds totaling approximately 22,000 acres of public land.

In the other watersheds in the MA, public lands comprise only small intermittent and perennial headwater stream segments (Table 3-1).

Vegetation and Forest Ecosystems

The MA encompasses a variety of vegetation types including old-growth Douglas fir, redwood forest, chaparral, riparian, and the unique flora associated with the red soils of Red Mountain.

Two major forest types are found on public land in the Elkhorn Ridge/Brush Mountain and Cahto Peak public land blocks (referred to as the South Fork Eel River management area): the mixed evergreen forest and the redwood forest. The majority of the northern part and a small part of the southern part of the South Fork Eel management area is mixed evergreen forest (Douglas-fir/tanoak/madrone community); late-successional and old-growth stands are scattered throughout the area. The redwood forest, a mix of redwood (*Sequoia sempervirens*) and Douglas-fir (redwood/Douglas-fir community), is confined to a narrow band adjacent to the river and tributaries on north-facing slopes. Chaparral communities are found mainly on hot, south-facing slopes and ridgetops including coastal mixed shrub, manzanita-black oak, and chamise-buckbrush. The entire South Fork Eel management area is designated a LSR.

The Red Mountain public land block is composed of two distinct types of vegetation: typical north coast range mixed evergreen forest in the southwestern part of the block, and the unique flora associated with the area's red soils in the central and northeast parts of the block. Vegetation associated with the red soils includes open-canopied forest with a mixture of ponderosa pine, Jeffrey pine, sugar pine, and incense cedar; a prominent shrub layer is found beneath the tree canopy. The Red Mountain block is designated a LSR.

The Red Mountain ACEC/RNA was designated in 1984 to support the protection of a federally endangered plant, MacDonald's rockcress (*Arabis macdona/diana*). This specialized habitat also provides habitat for three rare plant species which are candidates for federal listing as threatened or endangered. They include *Eriogonum kelloggii*, *Sedum laxum eastwoodiae*, and *Silene campanulata campanulata*. These plant species are all associated with the area's red soils.

Small blocks of public land north of the Red Mountain block also support mixed evergreen forest with scattered stands of old-growth and late-successional Douglas-fir; these are designated as LSR. Ten isolated public land parcels in the Red Mountain MA are in the matrix (Figure 2-4).

There are approximately 2,900 acres in LSRs requiring silvicultural treatments to achieve NWFP ecosystem management objectives including reforestation of previously entered stands, release of overstocked sites to accelerate growth into late successional forest structure, and limited re-establishment of a conifer component on sites dominated by hardwood. Current operations inventories include 577 acres of site preparation and planting to re-establish stands, 2,323 acres of brush and hardwood control, and light thinning on previously planted sites to maintain plantings and diversify stand structure and promote growth. Established mature hardwood sites would not receive treatment in most cases.

Wildlife, Fisheries, and Special Status Species

Species occurring in the MA include the federally-threatened northern spotted owl and other old-growth forest related species, the federally-endangered bald eagle and peregrine falcon, and other significant species including black bear and black-tailed deer.

Anadromous fish species utilize many streams in the MA. Cedar Creek and South Fork Eel River provide significant habitat for anadromous fish runs in the Eel River system, including chinook salmon, coho salmon, and steelhead.

The MA provides approximately 4,353 acres of suitable owl habitat (nesting/roosting/foraging). This includes approximately 788 acres within the Red Mountain ACEC and 913 acres within the Elder Creek RNA/ACEC. Current data (1988-1992) indicates the area is supporting eight pairs and three territorial single owls. Two additional pairs and one territorial single occur on adjacent private lands with portions of their territories on public lands. Approximately 70% of the MA has been inventoried for owls.

All current regional planning efforts for recovery of the northern spotted owl identify lands in the MA as core habitat. USFWS identified three CHUs (CA-52, CA-54, CA-55) in the MA. The final draft recovery plan identifies seven DCAs (CD-10, CD-11, CD-12, CD-15, CD-16, CD-17, CD-18) within the same area as the designated critical habitat. Final draft recovery plan DCAs are identified in same configuration and total acreage as LSRs in the NWFP.

The final draft recovery plan projects all federal lands in the Red Mountain MA as supporting 21 pairs of owls in the long-term. The recovery plan identifies the shortage of

federal lands in the coastal province of California as a constraint to owl recovery. Only Redwood National Park (unsurveyed for owls) and the Red Mountain management area are projected to provide sufficient habitat to support twenty pairs of owls in coastal DCAs.

All public lands within the Red Mountain MA lie between 7 and 17 miles from the coastline, well within the inland activity zone of marbled murrelets. However, no inland detections of the species have been recorded south of Humboldt Redwood State Park to San Mateo County (Paton and Ralph 1988). This distribution includes the entire MA. Generally, suitable habitat for murrelet nesting activity is not available. Both tree age (sufficient to provide large lateral moss-covered limbs) and stand size (generally greater than 100 acres) are deficient characteristics in forested areas. Partial surveys were conducted in the Angelo Coast Range Reserve in 1988 and 1989 and in the Elkhorn Ridge area in 1992 and 1993.

Peregrine falcon nests are known at four locations adjacent to public lands. BLM in the Ukiah District has coordinated monitoring of the species throughout northern California as a participant in the approved recovery plan for the species.

Bald eagles have been observed mostly along the South Fork Eel River in winter. A few summer observations indicate a potential for nesting activities though no nests are currently known.

Anadromous fish utilize many streams in the area, however, with the exception of Cedar Creek and South Fork Eel River, BLM jurisdiction is limited to only short segments of these streams (Table 3-1). Cedar Creek and the South Fork Eel River are highly significant for the persistence of anadromous fish runs in the Eel River system.

Although silver and chinook salmon spawning is documented, steelhead are the only fish species that regularly utilize Cedar Creek, particularly the public lands segment. In 1982, juvenile steelhead were found at levels considered close to carrying capacity with an estimated population in excess of 11,000 individuals. Cedar Creek's value as a steelhead nursery stream is attributable to an abundant cool summer flow of 10-15 cubic feet per second (cfs); summer is a critical survival period for juvenile steelhead.

The South Fork Eel River and its tributaries upstream from Leggett (excluding Cedar Creek) provide spawning and rearing habitat for chinook salmon, coho salmon, and steelhead. The last remaining wild (non-hatchery) long-run coho salmon population in California, approximately 1,000 fish, carry out their freshwater life cycle in the South Fork Eel and its tributaries (Moyle and Morford 1991).

Anadromous fish populations of the South Fork Eel River are in decline. Many factors, both natural and human-induced, have affected the populations. A significant

human-caused problem stems from past poor land use practices throughout the watershed and tributaries.

COVEW VICINITY

The Covelo Vicinity MA encompasses public lands in southern Trinity and northeastern Mendocino Counties along the southern boundary of the Six Rivers National Forest and western boundary of the Mendocino National Forest. The MA includes 66,500 acres of public land and 30,000 acres of split estate.

The entire MA lies within the Eel River watershed including the main stem Eel River, North Fork Eel River, and Middle Fork Eel River; all are designated components of the NWSRS.

Large blocks of public land acreage in the Covelo Vicinity MA lie in the areas of Willis Ridge; Indian and Fish Creeks (Brushy Mountain); and Thatcher Creek, Elk Creek, Deep Hole Creek, and Eden Creek. Public lands in the northern and western parts of the MA are in small blocks and scattered parcels in the Woodman Creek, Shell Rock Creek, North Fork Eel River, Casoose Creek, and Antone Creek watersheds.

The MA includes the Eden Valley, Thatcher Ridge, and Big Butte WSAs and BLM lands in the Yolla Bolly/Middle Eel Wilderness. For a more detailed discussion of the affected environment in these WSAs, refer to the EISs addressing the areas' wilderness suitability; these references are listed in Table 2-1.

The Little Darby area is managed as an environmental education area and used by local schools.

Watershed

The entire Covelo MA lies within the Eel River watershed including the main stem Eel River, North Fork Eel River, and Middle Fork Eel River. With the exception of blocked up public lands in the Middle Fork Eel River watershed (Middle Fork Eel River, Eden Creek, Deep Hole Creek, Elk Creek, and Thatcher Creek), public lands are typically scattered in small blocks throughout the Eel River watershed system with BLM jurisdiction over only short segments of tributary streams within the larger system. Table 3-2 lists BLM-controlled stream mileage within the Covelo Vicinity watershed.

Table 3-2. Rivers and Streams within the Covelo Vicinity Management Area

Stream	Total Stream Miles in MA ^a	Total Stream Miles on Public Lands ^a	Percentage of Stream Miles on Public Lands
Eel River	52.00	3.50	6.73
Shell Rock Creek	5.00	1.50	30.00
Woodman Creek	6.50	0.30	4.62
Indian Creek	3.50	1.75	50.00
Fish Creek	3.75	2.25	60.00
Tomki Creek	20.00	2.50	12.50
Middle Fork Eel River	29.00	10.25	35.34
Elk Creek	8.50	2.50	29.41
Deep Hole Creek	6.00	2.75	45.83
Eden Creek	10.75	2.50	23.26
Thatcher Creek	2.25	1.25	55.56
North Fork Eel River	18.00	6.25	34.72
Hulls Creek	13.50	3.75	27.78
Casoose Creek	8.00	3.50	43.75
Antone Creek	3.00	1.25	41.67
TOTAL	189.75	45.80	24.14

a Includes mainstem mileage only, no tributaries

The NWFP identifies the Thatcher Creek watershed as a Tier 1 Key Watershed. Most of this watershed is on USFS lands in the Mendocino National Forest. Approximately 3,152 acres of public land are included in this Tier 1 Watershed. Tier 1 Watersheds contribute directly to conservation of at-risk anadromous salmonids and have high potential for being restored as part of a watershed restoration program.

Vegetation and Forest Ecosystems

The MA encompasses a variety of vegetation types. Chaparral communities are predominant on ridges in the large blocks of public lands in the Thatcher Ridge WSA (Thatcher Creek and Elk Creek block) and Eden Valley WSA (Deep Hole Creek block); hardwoods, brushlands consisting of chamise and manzanita, and grasslands are a major component. Within the Thatcher Ridge WSA, pockets of mixed conifers near Thatcher Butte and Timbered Ridge and the Middle Fork Eel River Wild and Scenic Corridor are within LSRs; the remainder of the WSA is in the matrix. One of the most extensive known stands of Sargent cypress occurs in the Eden Creek/Eden Valley area. The Eden Creek block and Eden Valley WSA is in the matrix.

Late-successional/old-growth forest habitats are found in remnant patches on the public land blocks in the Casoose Creek/Hulls Creek, White Rock Creek, Woodman Creek, Dingman Ridge, Willis Ridge, Brushy Mountain, Little Darby, and Lake Mountain areas. Forested lands exhibit a silvicultural regime typical of drier sites. Stands include pine, cedar, sugar pine, and fir species with little tan oak encroachment. These public land blocks are LSRs. LSRs comprise 24,000 acres or 36% of the MA.

As a result of past wildfire and harvest, approximately 1,355 acres of LSR forested lands have been identified for some type of forest improvement activities. Potential objectives could include reforestation of previously entered stands, release of overstocked sites to accelerate growth into late successional forest structure, and limited re-establishment of a conifer component on sites dominated by hardwood as determined appropriate through watershed analysis. Silvicultural practices could include brush and hardwood manipulation with spot planting on previously planted sites to re-establish stands; light thinning on previously planted sites to maintain plantings, diversify stand structure, and promote growth; precommercial thinning to diversify stand structure in even-aged stands, and planting of approximately 500 acres of reforestation backlog acres. Established mature hardwood sites would not receive treatment in most cases except to meet specific ecosystem management objectives. All silvicultural treatments, with the exception of planting, would be prescribed consistent with restoring processes identified through watershed analysis.

The BLM sensitive plant species, *Pogogyne douglasii* var. *parviflora*, is found in the Eden Creek area.

Wildlife, Fisheries, and Special Status Species

Even though late seral forest habitats are isolated and small in size due to ownership patterns, fire regimes, and land use practices, there is great overall habitat diversity within the Covelo MA including habitats for black bear, wild turkey, black-tailed deer, mountain and California quail, as well as late-successional forest dependent species.

The MA provides approximately 7,454 acres of suitable owl habitat (nesting/roosting/foraging). Current data (1984-1993) indicates the area is supporting three pairs and five territorial single owls. Northern spotted owl inventories to current protocol include only approximately 7% of potential suitable habitat in the MA. Cursory inventories have been completed over most of the MA.

All current regional planning efforts for recovery of the northern spotted owl identify portions of the MA as providing core habitat. The USFWS identified six CRUs (CA-39, CA-41, CA-56, CA-57, CA-58, CA-59) in the Covelo Vicinity MA. The final draft recovery plan identifies a configuration of eight DCAs (CD-13, CD-14, CD-19, CD-20, CD-21, CD-22, CD-23, and CD-24) similar to the configuration of CRUs. The final draft recovery plan projects federal lands in the MA as supporting 17 pairs of owls in the long term.

Recovery plan DCAs are all within the 24,000 acres allocated to LSRs in the Covelo Vicinity MA with the exception of the 200-acre Mina tract; Mina is within a DCA but is allocated as matrix in the NWFP.

Peregrine falcon nests are known at five locations on or adjacent to public lands in the MA. BLM in the Ukiah District has coordinated monitoring of the species throughout northern California as a participant in the approved peregrine falcon recovery plan.

Bald eagles have been observed along the Middle Fork Eel River in winter. A few summer observations indicate a potential for nesting activities although no nests are currently known.

Anadromous fish utilize many streams in the Covelo Vicinity MA. Although population data for public lands is generally lacking, populations are known to be in decline. Many factors, both natural and human induced, have affected the populations. A significant human-caused problem stems from historic poor land use practices producing high sediment loads throughout the Eel River system. The SEIS for the NWFP identifies fall chinook, coho, and summer steelhead Eel stocks as stocks of special concern. The Middle Fork Eel summer steelhead stock is identified as a stock at moderate risk of extinction. (USDA and USDI 1994.)

SCATTERED TRACTS

The Scattered Tracts MA includes small blocks and isolated parcels of public lands in Humboldt, Trinity, Mendocino, and Sonoma counties. The MA includes 16,105 acres of public lands and 82,800 acres of split estate. Scattered Tracts parcels have historically received minimal management by BLM due to lack of access, small parcel size, and influence from adjacent land uses.

Watershed

Public lands in the Scattered Tracts MA consist of small blocks and isolated parcels intermingled with other federal, state, and private lands in the major watersheds of Humboldt, Trinity, Mendocino, and Sonoma counties. Resource management objectives and land use practices vary widely across these land ownerships. The land ownership patterns in this MA are not conducive to cooperative watershed management.

The NWFP identifies the Mattole River watershed as a Tier 1 Key Watershed. Approximately 1,240 acres of the Gilham Butte block are included in this Tier 1 Key Watershed. The majority of lands in the watershed are private lands, and BLM lands within the King Range National Conservation Area and King Range Vicinity MA (the King Range National Conservation Area and King Range Vicinity MA are not addressed in this plan amendment). Public lands in the King Range National Conservation Area, King Range Vicinity MA, and Gilham Butte block comprise approximately 12% of the Mattole watershed.

Vegetation and Forest Ecosystems

Old-growth and late-successional forest habitats on public lands in the Scattered Tracts MA are found in remnant patches; the largest old-growth stand is in the Gilham Butte block. The NWFP identifies the Gilham Butte, Iaquia Butte, Greenough Ridge/Montgomery Woods, Eagle Peak/Impassable Rock, Pine Ridge, Cameron Creek, and Coleman Creek blocks of public land as LSRs. Gilham Butte (2,550 acres) and Iaquia Buttes (1,080 acres) are designated RNAs/ACECs to protect old-growth values.

Opportunities to utilize silvicultural practices to enhance development of late-successional and old-growth forest characteristics in these LSRs is limited by small forest stand size, small public land parcel size, and lack of access. Reforestation opportunities on Scattered Tracts parcels consist of minor planting projects and, possibly, minor hardwood

conversion sites designed to re-establish late-successional forest structure and habitat for special status species. Established mature hardwood sites would not be candidates for treatment in most cases.

Parcels along the boundary of the Hoopa Valley Indian Reservation, the Big Bend parcel, and The Cedars are in the matrix.

Two BLM sensitive plant species (two subspecies of *Streptanthus morrisonii*) are found in The Cedars public land block.

Wildlife, Fisheries, and Special Status Species

Public lands in the Scattered Tracts MA provide a variety of habitats; species include peregrine falcon, black-tailed deer, black bear, wild turkey, and blue grouse, as well as northern spotted owl and other late-successional forest dependent species. Anadromous fish species, salmon and steelhead, utilize streams in the MA.

The MA provides approximately 2,510 acres of suitable owl habitat (nesting/roosting/foraging). Approximately 1,200 acres are within existing RNA/ACECs. Through the 1992 nesting season, the area supported five owl territories. Two nest territories and three territorial single male owls occur on public land.

All current regional planning efforts for recovery of the northern spotted owl include parcels within the MA as providing core habitat. The NWFP identifies the Gilham Butte, Jaqua Butte, Greenough Ridge/Montgomery Woods, Eagle Peak/Impassable Rock, Pine Ridge, Cameron Creek, and Coleman Creek blocks of public land as LSRs.

USFWS identified the Gilham Butte (CA-51), Jaqua Butte (CA-48), Pine Ridge (CA-60), and Greenough Ridge/Montgomery Woods (CA-60) public land blocks as CHUs. These same blocks of public land are DCAs in the final draft recovery plan (CD-4, CD-9, CD-25, CD-26, and CD-27, respectively). The recovery plan also includes the Cameron Creek (CD-6) and Coleman Creek (CD-7) parcels as DCAs.

The recovery plan projects that Jaqua Butte and Gilham Butte will support one and three owl pairs, respectively, and projects one pair each for Coleman Creek, Cameron Creek, Greenough Ridge, and Pine Ridge.

Chapter 4. Environmental Consequences

INTRODUCTION

This chapter analyzes the environmental impacts of the two management alternatives described in Chapter 2. The evaluation of impacts is based on the description of the Continuing Management Guidance and Actions, as well as the resource condition objectives, land use allocations, and management actions described for each MA alternative.

Public lands in the plan amendment area would be managed in accordance with the NWFP land allocations and standards and guidelines under both the Current Management and Watershed Management/Old-Growth Retention Alternative. In most cases, such as specific forest stand improvement projects to enhance late-successional forest values, subsequent environmental analysis will be required prior to implementation. Management assessments for LSRs, watershed analyses, and site-specific environmental reviews to comply with NEPA will be completed as required.

Because the plan amendment alternatives describe overall management emphasis for public lands in the MAs and do not propose specific, on-the-ground projects or actions, the environmental consequences of the alternatives are identified in general, comparative terms.

Impacts are discussed by alternative for each MA in the following sections. Tables S-1 and S-2 in the Summary for this document provide a comparative analysis of the alternatives for the entire plan amendment area.

RELATIONSHIP TO THE NORTHWEST FOREST PLAN SUPPLEMENTAL EIS

The SEIS prepared for the NWFP analyzed the impacts of 10 alternatives for ecosystem management of habitat for late-successional and old-growth forest related species within the range of the northern spotted owl in Washington, Oregon, and northern California (USDA and USDI 1994). The analysis presented in the programmatic SEIS is an evaluation of the cumulative impacts of implementing the NWFP. This plan amendment/EA is tiered to the SEIS and incorporates the cumulative impacts analysis by reference. The cumulative impacts analysis is summarized at the end of this chapter.

IMPACT ANALYSIS BY MANAGEMENT AREA

Lacks Creek

Alternative 1. Current Management (No Action)

Watershed Resources. Acquisition of 2,480 acres of commercial forest land would increase the amount of federal land in the Lacks Creek MA (and Redwood National Park Protection Zone) and enhance the ability of the BLM to cooperate with the NPS in protecting downstream resources in the Redwood National Park. A watershed activity plan would be prepared for public lands in the Lacks Creek MA. Watershed rehabilitation projects developed and implemented as a part of the activity plan would benefit water quality, soils, and vegetation in the Redwood Creek watershed.

Vehicle use would continue to be limited to transportation facilities designed for highway vehicles having four or more wheels and to Pine Ridge Roads 5111 and 5111.10. The limitations on vehicle use would continue to provide protection against soil erosion and compaction that could result from cross-country vehicle use.

Late-Successional/Old-Growth Ecosystems. Management of the entire Lacks Creek MA as an LSR would maintain and enhance existing late-successional and old-growth forest conditions. Focusing proposed forest improvement activities on 550 acres within previously entered forest stands would accelerate development of old-growth characteristics in those areas. Acquisition of 2,480 acres of high-site, well-stocked commercial forest land would increase the size of the LSR by 60%. The acquisition would enhance the viability of the Lacks Creek LSR by providing greater potential ecological diversity, increased opportunity for maintenance of natural ecological processes and functions, and greater connectivity with other LSRs in the NWFP network.

The existing Lacks Creek RNA/ACEC would provide an extra measure of management and protection to 378 acres of old-growth/late seral stage forest.

Riparian Resources. Riparian habitats in the MA would benefit through implementation of Riparian Reserve standards and guidelines and the Lacks Creek watershed activity plan.

Wildlife and Special-Status Species. Management of the Lacks Creek MA as an LSR would maintain and enhance habitat for late-successional and old-growth related species, including special-status species. The NWFP ROD concluded that management of the Lacks Creek MA as an LSR would comply with the USFWS recovery guidelines for the northern spotted owl and should allow critical habitat to perform the biological function for

which it was designated. Acquisition of 2,480 acres would enhance the long term ability of the Lacks Creek DCA to support the USFWS' draft final recovery plan goal of two nesting pairs of northern spotted owls.

Nesting habitat for the federally threatened marbled murrelet would be protected through compliance with the ESA consultation requirements, future recovery plan, and NWFP land allocations and standards and guidelines.

Fisheries. Watershed rehabilitation projects developed and implemented as a part of the watershed activity plan for the Lacks Creek MA would improve habitat for salmon and steelhead in Lacks Creek. Fisheries habitat would benefit through implementation of Riparian Reserve standards and guidelines.

Minor Forest Products. Minor forest products, such as posts, poles, fuelwood, and hardwood, could be made commercially available in conjunction with the forest improvement activities. Such activities would be designed to improve or accelerate attainment of late-successional/old-growth forest conditions and would have no adverse effects on LSR management objectives. Given the small acreage of proposed improvements, the benefit of the potential availability of minor forest products is minor.

ACECs. The 800-acre Lacks Creek RNA/ACEC would continue to provide an extra measure of management attention and protection to the 378 acres of old-growth forest within the designated area.

Wild and Scenic Rivers. Management of eligible components of the NWSRS in accordance with Wild and Scenic Rivers guidelines and NWFP land allocations and standards and guidelines would protect these waterways' "outstandingly remarkable values".

Land Tenure Adjustments and Access. Acquisition of nonexclusive, permanent access to public lands in the MA and acquisition of 2,480 acres of private commercial forest land would consolidate public lands and improve public and administrative access, management efficiency, and effectiveness in the long term.

Alternative 2. Watershed Management/Old-Growth Retention (Preferred Alternative)

Watershed Resources. Acquisition of 12,389 acres of private land within the MA would bring all lands within the Lacks Creek watershed (2,978 acres of public land plus an additional 11,065 acres of acquired private land) into federal ownership. Land acquisition and designation and management of the Lacks Creek Watershed ACEC would significantly enhance the ability of the BLM to cooperate with the NPS in protecting downstream resources in Redwood National Park. Over the long term, management of the ACEC (land acquisition, watershed analysis, implementation of watershed restoration projects, and

restriction of off-road vehicle use) would reduce sedimentation throughout the watershed and aid recovery of water quality and riparian habitat.

Late-Successional/Old-Growth Ecosystems. Management of the entire Lacks Creek MA as a LSR would maintain and enhance existing late-successional and old-growth forest conditions. Focusing proposed forest improvement activities on 550 acres within previously entered forest stands would accelerate development of old-growth characteristics in those areas. Acquisition of 12,389 acres would increase the size of the LSR by 300%. The acquisition would significantly enhance the viability of the Lacks Creek LSR by providing greater potential ecological diversity, increased opportunity for maintenance of natural ecological processes and functions, and greater connectivity with other LSRs in the NWFP network.

Expansion of the Lacks Creek RNA/ACEC by 720 acres would provide an extra measure of management and protection to 893 acres of old-growth forest.

Riparian Resources. Riparian habitats in the MA would benefit through implementation of Riparian Reserve standards and guidelines and management of the Lacks Creek Watershed ACEC.

Wildlife and Special-Status Species. Management of the Lacks Creek MA as an LSR would maintain and enhance habitat for late-successional and old-growth related species, including special-status species.

The NWFP ROD concluded that management of the existing Lacks Creek MA as an LSR would comply with the USFWS recovery guidelines for the northern spotted owl and should allow critical habitat to perform the biological function for which it was designated. Acquisition of 12,389 acres under this alternative would enhance the long term ability of the Lacks Creek DCA to support the USFWS' draft final recovery plan goal of two nesting pairs of northern spotted owls.

Nesting habitat for the federally threatened marbled murrelet would be protected through compliance with the ESA consultation requirements, future recovery plan, and NWFP land allocations and standards and guidelines.

Fisheries. Over the long term, management of the ACEC (land acquisition, watershed analysis, implementation of watershed restoration projects, restriction of off-road vehicle use, and implementation of Riparian Reserve standards and guidelines) would reduce sedimentation throughout the watershed and aid recovery of water quality and riparian habitat, thereby improving habitat for salmon and steelhead in the Lacks Creek drainage and downstream in Redwood Creek.

Minor Forest Products. Minor forest products, such as posts, poles, fuelwood, and hardwood, could be made commercially available in conjunction with the forest improvement activities. Such activities would be designed to improve or accelerate attainment of late-successional/old-growth forest conditions and would have no adverse effects on LSR management objectives. Given the small acreage of proposed improvements, the benefit of the potential availability of minor forest products would be minor.

ACECs. The expanded 1,520-acre Lacks Creek RNA/ACEC would provide an extra measure of management attention and protection to 893 acres of old-growth forest within the designated area.

Designation and management of the Lacks Creek Watershed ACEC (2,978 acres of public land plus an additional 11,065 acres of acquired private land within the watershed [if available]) would enhance, preserve, and protect watershed resources in the Lacks Creek watershed and downstream resources in Redwood National Park. The watershed ACEC would protect and preserve 1,041 acres of old-growth forest.

Wild and Scenic Rivers. Management of eligible components of the NWSRS in accordance with Wild and Scenic Rivers guidelines and NWFP land allocations and standards and guidelines would protect these waterways' "outstandingly remarkable values".

Land Tenure Adjustments and Access. Acquisition of 12,389 acres of private land would consolidate federal ownership within the entire Lacks Creek MA and significantly improve public and administrative access, management efficiency, and effectiveness. Acquisition of legal public access on existing roads on the northeast corner of the MA and/or Beaver Ridge would also improve management efficiency and effectiveness.

Red Mountain

Alternative 1. Current Management (No Action)

Watershed Resources. Acquisition of 900 acres of land between Elkhorn Ridge and Brush Mountain would increase the amount of federal land in the South Fork Eel River watershed and enhance the ability of the BLM to manage the watershed as a Tier 1 Key Watershed. Over the long term, management of 22,000 acres in the Cedar Creek and South Fork Eel River watersheds as Tier 1 Key Watersheds (land acquisition, watershed analysis, implementation of watershed restoration projects, restriction of off-road vehicle use) would reduce sedimentation throughout the watersheds and aid recovery of water quality and riparian habitat.

Continuation of the closed to vehicle use designation on 18,882 acres [in the Red Mountain ACEC (6,895 acres), Elder Creek RNA/ACEC (3,775 acres), and South Fork Eel River Wild and Scenic River corridor (8,212 acres)] and limiting vehicle use to transportation facilities designed for highway vehicles having four or more wheels on 16,782 acres in the rest of the MA would continue to provide protection against soil erosion and compaction that could result from cross-country vehicle use.

Late-Successional/Old-Growth Ecosystems. Management of 34,344 acres in the Red Mountain MA as LSRs would maintain and enhance existing late-successional and old-growth forest conditions. Focusing proposed forest improvement activities on 2,900 acres within previously entered forest stands would accelerate development of old-growth characteristics in the South Fork Eel River, McCoy Creek, and Tom Long Creek watersheds.

Acquisition of 7,000 acres (including 3,500 acres of forest land in the MA, 2,600 acres in the Charlton Creek and Bell Springs watersheds, and 900 acres along South Fork Eel River) would increase the LSR acreage in the Red Mountain MA by 20%. The acquisition would enhance the viability of the LSRs by providing greater potential ecological diversity, increased opportunity for maintenance of natural ecological processes and functions, and greater connectivity with other LSRs in the NWFP network.

The existing Red Mountain and Elder Creek RNA/ACECs would provide an extra measure of management and protection for approximately 1,700 acres of old-growth forest.

Late-successional/old-growth fragments in the matrix would be managed in accordance with matrix standards and guidelines.

Vegetation and Special-Status Species. Habitat for the MacDonald's rockcress (*Arabis macdona/diana*), a federally endangered plant, would be protected through compliance with the USFWS recovery plan, management provisions of the Red Mountain ACEC, and acquisition of an additional 520 acres of habitat. Habitat for three federal candidate plant species would also be protected in the Red Mountain ACEC.

Riparian Resources. Riparian habitats throughout the MA would benefit through implementation of Riparian Reserve standards and guidelines and management of the South Fork Eel River and Cedar Creek watersheds as Tier 1 Key Watersheds.

Wildlife and Special-Status Species. Management of the Red Mountain MA as an LSR would maintain and enhance habitat for late-successional and old-growth related species, including special-status species.

The NWFP ROD concluded that management of the Red Mountain MA as an LSR would comply with the USFWS recovery guidelines for the northern spotted owl and should allow critical habitat to perform the biological function for which it was designated. The

acquisition of 7,000 acres would enhance the long-term ability of the Red Mountain MA to support the USFWS draft final recovery plan goal of 21 owl pairs.

Habitat for the federally endangered peregrine falcon would be protected through compliance with the ESA and USFWS recovery plan. Acquisition of up to 2,600 acres in the Charlton Creek and Bell Springs watersheds would provide additional protection for peregrine falcon nesting and foraging sites.

Habitat for the federally endangered northern bald eagle would be protected through compliance with the ESA and the Pacific bald eagle recovery plan. Improvements in riparian habitat and water quality (through implementation of Riparian Reserve standards and guidelines and management of Tier 1 Key Watersheds) would benefit bald eagle recovery by providing an increasing number of potential nest sites and an improved prey base.

Fisheries. Watershed rehabilitation projects developed and implemented as a part of Tier 1 Key Watershed management for the Cedar Creek and South Fork Eel River watersheds would improve habitat for steelhead, chinook salmon, and coho in these watersheds. Fisheries habitats would also benefit through implementation of Riparian Reserve standards and guidelines.

Minor Forest Products. Minor forest products, such as posts, poles, fuelwood, and hardwood, could be made commercially available in conjunction with the forest improvement activities. Such activities would be designed to improve or accelerate attainment of late-successional/old-growth forest conditions and would have no adverse effects on LSR management objectives. Given the small acreage of proposed improvements, the benefit of the potential availability of minor forest products is minor.

ACECs. The 6,895-acre Red Mountain RNA/ACEC would continue to provide an extra measure of management attention and protection for unique botanical and soils values, old-growth forest, raptor habitat, and anadromous fisheries. Acquisition of 520 acres of private land would protect additional habitat for sensitive plant species.

The 3,775-acre Elder Creek RNA/ACEC would continue to provide an extra measure of management attention and protection for the Elder Creek and Fox Creek watersheds and old-growth forest values.

Wild and Scenic Rivers. Management of designated and eligible components of the NWSRS in accordance with approved management plans and/or Wild and Scenic Rivers guidelines and NWFP land allocations and standards and guidelines would protect these waterways' "outstandingly remarkable values".

Land Tenure Adjustments and Access. Acquisition of nonexclusive, permanent access to public lands in the MA and acquisition of 7,000 acres of private land would consolidate public lands and improve public and administrative access, management efficiency, and effectiveness.

Disposal of 1,040 acres in the matrix would relieve BLM of administrative responsibility for six difficult to manage isolated public land parcels. Public land parcels (totaling 2,280 acres) in LSRs in the northern part of the Red Mountain MA would be made available for disposal through exchange if the exchanges provided benefits equal to or better than current conditions.

Alternative 2. Watershed Management/Old-Growth Retention (Preferred Alternative)

Watershed Resources. Over the long term, management of 22,000 acres in the Cedar Creek and South Fork Eel River watersheds as Tier 1 Key Watersheds (land acquisition, watershed analysis, implementation of watershed restoration projects, restriction of off-road vehicle use) would reduce sedimentation throughout the watersheds and aid recovery of water quality and riparian habitat.

Designation of the 10,784-acre South Fork Eel River Watershed ACEC would add an extra measure of protection and management attention for the area's watershed resources. Acquisition of 2,408 acres of land in the South Fork Eel River Watershed ACEC would increase the amount of federal land in the watershed and enhance the ability of the BLM to manage the watershed as a Tier 1 Key Watershed/ACEC.

Closing a total of 18,882 acres to vehicle use [in the Red Mountain ACEC (6,895 acres), Elder Creek RNA/ACEC (3,775 acres), and South Fork Eel River Wild and Scenic River corridor (8,212 acres)] and limiting vehicle use to transportation facilities designed for highway vehicles having four or more wheels on 16,782 acres in the rest of the MA would provide protection against soil erosion and compaction that could result from cross-country vehicle use.

Late-Successional/Old-Growth Ecosystems. Management of 34,344 acres in the Red Mountain MA as LSRs would maintain and enhance existing late-successional and old-growth forest conditions. Focusing proposed forest improvement activities on 2,900 acres within previously entered forest stands would accelerate development of old-growth characteristics in the South Fork Eel River public land block, McCoy Creek, and Tom Long Creek watersheds.

Acquisition of 5,480 acres (including up to 1,240 acres of in the Charlton Creek and Bell Springs watersheds, 480 acres in the Tenmile Creek watershed, and 3,960 acres in the

South Fork Eel River watershed) and BLM participation in cooperative management partnerships with landowners in the McCoy Creek, East Branch South Fork Eel River, Tom Long Creek, Charlton Creek, Tenmile Creek, and South Fork Eel River watersheds would increase the effective LSR acreage in the Red Mountain MA by 16-41%. The acquisitions and cooperative management partnerships would enhance the viability of LSRs by providing greater potential ecological diversity, increased opportunity for maintenance of natural ecological processes and functions, and greater connectivity with other LSRs in the NWFP network.

The existing Red Mountain RNA/ACEC would provide an extra measure of management and protection for 788 acres of old-growth forest. Designation of the South Fork Eel River Watershed ACEC would provide an extra measure of management and protection for 3,192 acres of low-elevation old-growth Douglas-fir forest.

Late-successional/old-growth fragments in the matrix would be managed in accordance with matrix standards and guidelines.

Vegetation and Special-Status Species. Habitat for the MacDonald's rockcress (*Arabis macdonaldiana*), a federally endangered plant, would be protected through compliance with the USFWS recovery plan, management provisions of the Red Mountain ACEC, and acquisition of an additional 520 acres of habitat. Habitat for three federal candidate plant species would also be protected in the Red Mountain ACEC.

Riparian Resources. Riparian habitats throughout the MA would benefit through implementation of Riparian Reserve standards and guidelines, management of the South Fork Eel River and Cedar Creek watersheds as Tier 1 Key Watersheds, and management of the South Fork Eel River Watershed ACEC.

Wildlife and Special-Status Species. Management of the Red Mountain MA as an LSR would maintain and enhance habitat for late-successional and old-growth related species, including special-status species.

The NWFP ROD concluded that management of the Red Mountain MA as an LSR would comply with the USFWS recovery guidelines for the northern spotted owl and should allow critical habitat to perform the biological function for which it was designated. The acquisition of 5,480 acres and cooperative partnerships on an additional 8,500 acres would enhance the long-term ability of the Red Mountain MA to support the USFWS draft final recovery plan goal of 21 owl pairs.

Habitat for the federally endangered peregrine falcon would be protected through compliance with the ESA and USFWS recovery plan. Acquisition of up to 1,720 acres in the Charlton Creek, Bell Springs, and Tenmile Creek watersheds would provide additional protection for peregrine falcon nesting and foraging sites.

Habitat for the federally endangered northern bald eagle would be protected through compliance with the ESA and the Pacific bald eagle recovery plan. Improvements in riparian habitat and water quality (through implementation of Riparian Reserve standards and guidelines and management of Tier 1 Key Watersheds) would benefit bald eagle recovery by providing an increasing number of potential nest sites and an improved prey base.

Fisheries. Watershed rehabilitation projects developed and implemented as a part of Tier 1 Key Watershed management for Cedar Creek and Tier 1 Key Watershed/ACEC management for South Fork Eel River watersheds would enhance and aid recovery of habitat for steelhead, chinook salmon, and coho in these watersheds. Fisheries habitats would also benefit through implementation of Riparian Reserve standards and guidelines.

Minor Forest Products. Minor forest products, such as posts, poles, fuelwood, and hardwood, could be made commercially available in conjunction with the forest improvement activities. Such activities would be designed to improve or accelerate attainment of late-successional/old-growth forest conditions and would have no adverse effects on LSR management objectives. Given the small acreage of proposed improvements, the benefit of the potential availability of minor forest products is minor.

ACECs. The 6,895-acre Red Mountain RNA/ACEC would continue to provide an extra measure of management attention and protection for unique botanical and soils values, old-growth forest, raptor habitat, and anadromous fisheries. Acquisition of 520 acres of private land and development of cooperative partnerships on an additional 2,500 acres would protect additional habitat for sensitive plant species.

Management of the 10,784-acre South Fork Eel River Watershed ACEC (which includes the 3,775-acre Elder Creek RNA/ACEC) and an additional 2,408 acres of acquired private land would provide enhance, preserve, and protect watershed resources and old-growth forest values in the South Fork Eel River management area.

Wild and Scenic Rivers. Management of designated and eligible components of the NWSRS in accordance with approved management plans and/or Wild and Scenic Rivers guidelines and applicable NWFP land allocations and standards and guidelines would protect these waterways' "outstandingly remarkable values".

Land Tenure Adjustments and Access. Acquisition of 5,480 acres of private land would consolidate public lands and improve public and administrative access, management efficiency, and effectiveness.

Disposal of 1,180 acres in the matrix would relieve BLM of administrative responsibility for nine difficult to manage isolated public land parcels. Acquisition of public and/or administrative access on existing roads would improve public and administrative

access, management efficiency, and effectiveness for the following blocks of public land: North Jewett, South Jewett, Island Mountain, Red Mountain (trail access), and South Fork Eel River.

Covelo Vicinity

Alternative 1. Current Management (No Action)

Watershed Resources. Over the long term, management of 3,152 acres in the Thatcher Creek watershed as a Tier 1 Key Watershed (watershed analysis, implementation of watershed restoration projects, restriction of off-road vehicle use) would reduce sedimentation throughout the watershed and aid recovery of water quality and riparian habitat.

Continuation of a closed to vehicle use designation on approximately 7,009 acres in the BLM portion of the Yolla-Bolly/Middle Eel Wilderness and limiting vehicle use to transportation facilities designed for highway vehicles having four or more wheels on 59,491 acres in the rest of the MA would continue to provide protection against soil erosion and compaction that could result from cross-country vehicle use.

Late-Successional/Old-Growth Ecosystems. Management of 24,000 acres in the Covelo Vicinity MA as LSRs would maintain and enhance existing late-successional and old-growth forest conditions on public land blocks in the Casoose Creek/Hulls Creek, White Rock Creek, Woodman Creek, Dingman Ridge, Willis Ridge, Brushy Mountain, Little Darby, and Lake Mountain areas. Focusing proposed forest improvement activities on 1,355 acres within previously entered forest stands would accelerate development of old-growth characteristics in the above areas.

Approximately 42,500 acres would be managed as matrix, including the Eden Valley WSA, most of the Thatcher Ridge WSA, Eden Creek block, Big Chemise Knob block, Shell Rock block, and Mina tract. WSAs would be managed under the interim management policy until released by Congress or designated as wilderness. Most of the Big Chemise Knob block and part of the Eden Creek block are within the Middle Fork Eel River Wild and Scenic River corridor and Riparian Reserves. Timber harvest would not be allowed in WSAs under IMP, designated "Wild" river corridors, and Riparian Reserves. Late-successional/old-growth fragments in the matrix would be managed in accordance with matrix standards and guidelines.

Riparian Resources. Riparian habitats throughout the MA would benefit through implementation of Riparian Reserve standards and guidelines and management of the Thatcher Creek watershed as a Tier 1 Key Watershed.

Wildlife and Special-Status Species. Management of LSRs in the Covelo Vicinity MA would maintain and enhance habitat for late-successional and old-growth related species, including special-status species.

The NWFP ROD concluded that management of LSRs in the Covelo Vicinity MA would comply with the USFWS recovery guidelines for the northern spotted owl and should allow critical habitat to perform the biological function for which it was designated. Known northern spotted owl activity centers within the matrix would be protected through management as "unmapped" LSRs.

Habitat for the federally endangered peregrine falcon would be protected through compliance with the ESA and USFWS recovery plan.

Habitat for the federally endangered northern bald eagle would be protected through compliance with the ESA and the Pacific bald eagle recovery plan. Improvements in riparian habitat and water quality (through implementation of Riparian Reserve standards and guidelines and management of the Thatcher Creek Tier 1 Key Watershed) would benefit bald eagle recovery by providing an increasing number of potential nest sites and an improved prey base.

Fisheries. Watershed rehabilitation projects developed and implemented as a part of Tier 1 Key Watershed management for the Thatcher Creek watershed would improve habitat for summer steelhead, fall chinook salmon, and coho in this watershed. Fisheries habitat throughout the MA would also benefit through implementation of Riparian Reserve standards and guidelines.

Minor Forest Products. Minor forest products, such as posts, poles, fuelwood, and hardwood, could be made commercially available in conjunction with forest improvement activities. Such activities would be designed to improve or accelerate attainment of late-successional/old-growth forest conditions and would have no adverse effects on LSR management objectives.

Wild and Scenic Rivers. Management of designated and eligible components of the NWSRS in accordance with approved management plans and/or Wild and Scenic Rivers guidelines and applicable NWFP land allocations and standards and guidelines would protect these waterways' "outstandingly remarkable values".

Land Tenure Adjustments and Access. Transfer of public lands in the Yolla-Bolly/Middle Eel Wilderness and Big Butte WSA (9,400 acres) to the Mendocino National Forest would improve management efficiency and effectiveness of the wilderness.

Alternative 2. Watershed Management/Old-Growth Retention (Preferred Alternative)

Watershed Resources. Over the long term, management of 3,152 acres in the Thatcher Creek watershed as a Tier 1 Key Watershed (watershed analysis, implementation of watershed restoration projects, restriction of off-road vehicle use) and development of cooperative partnerships with other landowners in the Eel River watershed would reduce sedimentation throughout the Eel River watershed and aid recovery of water quality and riparian habitat.

Vehicle use closures on a total of 13,069 acres (7,009 acres in the BLM portion of the Yolla-Bolly/Middle Eel Wilderness and 6,060 acres in the Middle Fork Eel River corridor) and limiting vehicle use to transportation facilities designed for highway vehicles having four or more wheels on 53,431 acres in the rest of the Covelo Vicinity MA would provide protection against soil erosion and compaction that could result from cross-country vehicle use.

Late-Successional/Old-Growth Ecosystems. Management of 24,000 acres in the Covelo Vicinity MA as LSRs would maintain and enhance existing late-successional and old-growth forest conditions on public land blocks in the Casoose Creek/Hulls Creek, White Rock Creek, Woodman Creek, Dingman Ridge, Willis Ridge, Brushy Mountain, Little Darby, and Lake Mountain areas. Focusing proposed forest improvement activities on 1,355 acres within previously entered forest stands would accelerate development of old-growth characteristics in the above areas.

Approximately 42,500 acres would be managed as matrix, including the Eden Valley WSA, most of the Thatcher Ridge WSA, Eden Creek block, Big Chemise Knob block, Shell Rock block, and Mina tract. WSAs would be managed under the IMP until released by Congress or designated as wilderness. Most of the Big Chemise Knob block and part of the Eden Creek block are within the Middle Fork Eel River Wild and Scenic River corridor and Riparian Reserves. Timber harvest would not be allowed in WSAs under IMP, designated "Wild" river corridors, and Riparian Reserves. Late-successional/old-growth fragments in the matrix would be managed in accordance with matrix standards and guidelines. Approximately 430 acres in isolated parcels in the matrix could be made available for disposal.

Riparian Resources. Riparian habitats throughout the MA would benefit through implementation of Riparian Reserve standards and guidelines and management of the Thatcher Creek watershed as a Tier 1 Key Watershed.

Wildlife and Special-Status Species. Management of LSRs in the Covelo Vicinity MA would maintain and enhance habitat for late-successional and old-growth related species, including special-status species.

The NWFP ROD concluded that management of LSRs in the Covelo Vicinity MA would comply with the USFWS recovery guidelines for the northern spotted owl and should allow critical habitat to perform the biological function for which it was designated. Known northern spotted owl activity centers within the matrix would be protected through management as "unmapped" LSRs.

Habitat for the federally endangered peregrine falcon would be protected through compliance with the ESA and USFWS recovery plan.

Habitat for the federally endangered northern bald eagle would be protected through compliance with the ESA and the Pacific bald eagle recovery plan. Improvements in riparian habitat and water quality (through implementation of Riparian Reserve standards and guidelines and management of the Thatcher Creek Tier 1 Key Watershed) would benefit bald eagle recovery by providing an increasing number of potential nest sites and an improved prey base.

Fisheries. Watershed rehabilitation projects developed and implemented as a part of Tier 1 Key Watershed management for the Thatcher Creek watershed would improve habitat for summer steelhead, fall chinook salmon, and coho in this watershed. Fisheries habitat throughout the MA would also benefit through implementation of Riparian Reserve standards and guidelines.

In the long term, development of cooperative partnerships with other landowners in the Eel River watershed could aid in recovery of anadromous fisheries in the main stem Eel River, Middle Fork Eel River, and North Fork Eel River.

Minor Forest Products. Minor forest products, such as posts, poles, fuelwood, and hardwood, could be made commercially available in conjunction with forest improvement activities. Such activities would be designed to improve or accelerate attainment of late-successional/old-growth forest conditions and would have no adverse effects on LSR management objectives.

Wild and Scenic Rivers. Management of designated and eligible components of the NWSRS in accordance with approved management plans and/or Wild and Scenic Rivers guidelines and applicable NWFP land allocations and standards and guidelines would protect these waterways' "outstandingly remarkable values".

Land Tenure Adjustments and Access. Transfer of public lands in the Yolla-Bolly/Middle Eel Wilderness and Big Butte WSA (9,400 acres) to the Mendocino National Forest would improve management efficiency and effectiveness of the wilderness.

Scattered Tracts

Alternative 1. Current Management (No Action)

Watershed Resources. Over the long-term, management of 1,240 acres in the Gilham Butte public land block as part of the Mattole River Tier 1 Key Watershed (watershed analysis and implementation of watershed restoration) would reduce sedimentation throughout the watershed and aid recovery of water quality and riparian habitat.

Continuation of the closed to vehicle use designation on isolated parcels (approximately 320 acres) in the Van Duzen, main stem Eel, and Klamath Rivers designated Wild and Scenic River corridors would continue to provide protection against soil erosion and compaction that could result from cross-country vehicle use.

Late-Successional/Old-Growth Ecosystems. Management of 10,320 acres in the Scattered Tracts MA as LSRs would maintain and enhance existing late-successional and old-growth forest conditions on public land blocks in the Gilham Butte, Jaqua Butte, Coleman Creek, Cameron Creek, Greenough Ridge/Montgomery Woods, Impassable Rocks/Eagle Peak, and Pine Ridge public land blocks. Focusing proposed forest improvement activities on previously entered forest stands in LSRs would accelerate development of old-growth characteristics in those areas.

The existing Gilham Butte and Jaqua Butte RNA/ACECs would provide an extra measure of management and protection for 1,152 acres of old-growth forest.

Approximately 5,785 acres would be managed as matrix, including parcels along the boundary of the Hoopa Valley Indian Reservation (605 acres), parcels on the Klamath River, the Big Bend parcels on the Mad River (280 acres), the Van Duzen River/Goat Rock (40 acres) parcel, main stem Eel River (120 acres) parcel south of Coleman Creek, and The Cedars. River parcels would all be managed under Riparian Reserve standards and guidelines, as well as Wild and Scenic River management guidelines; timber harvest would not be allowed. Late-successional/old-growth fragments in the matrix would be managed in accordance with matrix standards and guidelines.

Riparian Resources. Riparian habitats throughout the MA would benefit through implementation of Riparian Reserve standards and guidelines and management of the Mattole River watershed as a Tier 1 Key Watershed.

Wildlife and Special-Status Species. Management of LSRs in the Scattered Tracts MA would maintain and enhance habitat for late-successional and old-growth related species, including special-status species. The NWFP ROD concluded that management of LSRs in the Scattered Tracts MA would comply with the USFWS recovery

guidelines for the northern spotted owl and should allow critical habitat to perform the biological function for which it was designated.

Habitat for the federally endangered peregrine falcon would be protected through compliance with the ESA and recovery plan.

Fisheries. Watershed rehabilitation projects developed and implemented as a part of Tier 1 Key Watershed management for the Mattole River watershed would improve habitat for fall chinook salmon and coho in this watershed. Fisheries habitat would also benefit through implementation of Riparian Reserve standards and guidelines.

Minor Forest Products. Minor forest products, such as posts, poles, fuelwood, and hardwood, could be made commercially available in conjunction with forest improvement activities. Such activities would be designed to improve or accelerate attainment of late-successional/old-growth forest conditions and would have no adverse effects on LSR management objectives.

ACECs. The 2,550-acre Gilham Butte RNA/ACEC and 1,080-acre Squaw Butte RNA/ACEC would continue to preserve and protect old-growth forest values. Acquisition of 800 acres would enhance the Gilham Butte RNA/ACEC designation.

Wild and Scenic Rivers. Management of eligible components of the NWSRS in accordance with Wild and Scenic Rivers guidelines and NWFP land allocations and standards and guidelines would protect these waterways' "outstandingly remarkable values".

Land Tenure Adjustments and Access. Acquisition of public access to Gilham Butte, Eagle Peak, and The Cedars would improve public and administrative access, management efficiency, and effectiveness. Acquisition of 800 acres adjacent to Gilham Butte and construction of a trail would improve recreation opportunities in the area between Humboldt Redwoods State Park and Gilham Butte.

Disposal of isolated parcels could occur if consistent with NWFP and spotted owl critical habitat and recovery plan objectives. Disposal of isolated parcels would relieve BLM of administrative responsibility for difficult to manage public lands.

Alternative 2. Watershed Management/Old-Growth Retention (Preferred Alternative)

Watershed Resources. Over the long term, management of 1,240 acres in the Gilham Butte public land block as part of the Mattole River Tier 1 Key Watershed (watershed analysis and implementation of watershed restoration) would reduce sedimentation throughout the watershed and aid recovery of water quality and riparian habitat.

Closing isolated parcels (approximately 320 acres) in the Van Duzen, main stem Eel, and Klamath Rivers designated Wild and Scenic River corridors and limiting vehicle use to transportation facilities designed for highway vehicles having four or more wheels on 15,785 acres in the rest of the Scattered Tracts MA would provide protection against soil erosion and compaction that could result from cross-country vehicle use.

Late-Successional/Old-Growth Ecosystems. Management of 10,320 acres in the Scattered Tracts MA as LSRs would maintain and enhance existing late-successional and old-growth forest conditions on public land blocks in the Gilham Butte, !aqua Butte, Coleman Creek, Cameron Creek, Greenough Ridge/Montgomery Woods, Impassable Rocks/Eagle Peak, and Pine Ridge public land blocks. Focusing proposed forest improvement activities on previously entered forest stands in LSRs would accelerate development of old-growth characteristics in those areas.

The existing Gilham Butte and !aqua Butte RNA/ACECs would provide an extra measure of management and protection for 1,152 acres of old-growth forest.

Approximately 5,785 acres would be managed as Matrix, including parcels along the boundary of the Hoopa Valley Indian Reservation (605 acres), parcels on the Klamath River, the Big Bend parcels on the Mad River (280 acres), the Van Duzen River/Goat Rock (40-acres) parcel, main stem Eel River (120 acres) parcel south of Coleman Creek, and The Cedars. River parcels would all be managed under Riparian Reserve standards and guidelines, as well as Wild and Scenic River management guidelines; timber harvest would not be allowed. Late-successional/old-growth fragments in the matrix would be managed in accordance with matrix standards and guidelines.

Riparian Resources. Riparian habitats throughout the MA would benefit through implementation of Riparian Reserve standards and guidelines and management of the Mattole River watershed as a Tier 1 Key Watershed.

Wildlife and Special-Status Species. Management of LSRs in the Scattered Tracts MA would maintain and enhance habitat for late-successional and old-growth related species, including special-status species.

The NWFP ROD concluded that management of LSRs in the Scattered Tracts MA would comply with the USFWS recovery guidelines for the northern spotted owl and should allow critical habitat to perform the biological function for which it was designated.

Habitat for the federally endangered peregrine falcon would be protected through compliance with the ESA and recovery plan.

Fisheries. Watershed rehabilitation projects developed and implemented as a part of Tier 1 Key Watershed management for the Mattole River watershed would improve

habitat for fall chinook salmon and coho in this watershed. Fisheries habitat would also benefit through implementation of Riparian Reserve standards and guidelines.

Minor Forest Products. Minor forest products, such as posts, poles, fuelwood, and hardwood, could be made commercially available in conjunction with forest improvement activities. Such activities would be designed to improve or accelerate attainment of late-successional/old-growth forest conditions and would have no adverse effects on LSR management objectives.

ACECs. The 2,550-acre Gilham Butte RNA/ACEC and 1,080-acre Laqua Butte RNA/ACEC would continue to preserve and protect old-growth forest values. Acquisition of 800 acres would enhance the Gilham Butte RNA/ACEC designation.

Wild and Scenic Rivers. Management of eligible components of the NWSRS in accordance with Wild and Scenic Rivers guidelines and NWFP land allocations and standards and guidelines would protect these waterways' "outstandingly remarkable values".

Land Tenure Adjustments and Access. Acquisition of public access to Gilham Butte, Laqua Butte, Coleman Creek, Cameron Creek, Greenough Ridge/Montgomery Woods, Impassable Rocks/Eagle Peak, and Pine Ridge would improve public and administrative access, management efficiency, and effectiveness. Acquisition of 800 acres adjacent to Gilham Butte and construction of a trail would improve recreation opportunities in the area between Humboldt Redwoods State Park and Gilham Butte.

Disposal of 2,050 acres in isolated parcels could occur if consistent with NWFP and spotted owl critical habitat and recovery plan objectives. Disposal of isolated parcels would relieve BLM of administrative responsibility for difficult to manage public lands.

CUMULATIVE IMPACTS

Summary of Cumulative Impacts Identified in the Northwest Forest Plan

The SEIS evaluated effects on terrestrial ecosystems, aquatic ecosystems, water quality, threatened and endangered species, timber harvest levels, and regional economies and communities; these evaluations address the cumulative effects of implementing the NWFP on all USFS and BLM lands within the range of the northern spotted owl in western Washington, western Oregon, and northwestern California. This proposed Arcata RMP amendment/EA is tiered to the SEIS and incorporates the cumulative impacts analysis by

reference. The conclusions and findings in the NWFP SEIS and ROD are summarized below.

- The NWFP network of LSRs, in combination with the other allocations and standards and guidelines, will maintain a functional, interactive, late-successional and old-growth forest ecosystem and serve as habitat for late-successional and old-growth related species including the northern spotted owl.
- Implementation of the NWFP will result in a decline from historic levels of timber harvested from forest lands administered by the USFS and BLM.
- The preservation of late-successional and old-growth forests will have beneficial consequences to the fish, wildlife and plants associated with them, to water quality, and to ecological diversity.
- Riparian reserves will help maintain and restore riparian structures and functions, benefit fish and riparian-dependent non-fish species, enhance habitat conservation for organisms dependent on the transition zone between upslope and riparian areas, improve travel and dispersal corridors for terrestrial animals and plants, and provide for greater connectivity of late-successional forest habitat.
- Particulate emissions (PM10 - particulate matter smaller than 10 micrometers) from prescribed burning are projected to decline from historic levels as a result of implementation of the NWFP.
- Implementation of the NWFP would maintain or improve water quality and benefit or improve water supply systems within and downstream from lands administered by the USFS and BLM.
- The development of mineral resources may be limited by the NWFP land allocations and standards and guidelines. Measures required to protect habitat could increase operating costs and result in less mining in designated areas.
- Grazing practices that retard or prevent attainment of reserve objectives will be adjusted or eliminated. The overall effects on the livestock industry would be small, but could have greater consequences for individual permittees.
- Standards and guidelines could result in restrictions on use of some special forest products to ensure protection of other resource values, special status species, and resource sustainability. Silvicultural prescriptions could enhance the production of other special forest products such as floral greens.

- Implementation of the NWFP would probably not influence the immediate future of commercial or subsistence fisheries operations, but improved watershed and fisheries management policies could aid in the production of high value salmon in the long term.
- Implementation of the NWFP could result in additional primitive nonmotorized recreational opportunities and creation of more "natural" appearing landscapes.
- The NWFP will result in displacement of natural resources-based jobs in the three-state area. Estimates for the timber industry predict displacement of 9,500 jobs in the next decade, relative to 1992. The majority of the jobs affected are in Oregon. These declines could be offset in part through investments in reforestation, timber stand improvement, monitoring, inventory, and restoration activities. Some employment gains may be made in recreation, tourism, and special forest products. Rural communities will bear the brunt of the adverse economic effects while more developed areas are projected to continue to grow.
- Declines in federal timber harvest will reduce federal receipts to counties. Southwestern Oregon is the most substantially affected subregion.
- Rural communities that lack economic diversity and have low leadership capacity may find it difficult to mobilize and respond to changing conditions associated with reduced timber harvests. These communities are likely to experience increased unemployment, poverty, and social disruption in the absence of assistance.
- The NWFP will provide a predictable and sustainable supply of timber, recreational opportunities, and other resources at the highest level possible while still meeting the need and legal requirements to maintain and restore the late-successional and old-growth forest ecosystem.
- The NWFP meets the requirements of the ESA for the conservation of listed species and the requirements of FLPMA directing BLM to manage lands for sustainable multiple uses. The plan also meets the requirements of acts that protect elements of the environment, and requirements for coordinated planning and consultation including the Coastal Zone Management Act, Executive Order 11990 - Protection of Wetlands, Clean Air Act, and Clean Water Act.

Summary of Impacts for the Plan Amendment Area

Tables S-1 and S-2 provide a comparative analysis and summary of the impacts of the Current Management (No Action) Alternative and Watershed Management/Old-Growth Retention Alternative for the entire plan amendment area.

Unavoidable Adverse Impacts of the Preferred Alternative

The NWFP SEIS identified the following unavoidable adverse cumulative impacts in the three state planning area for the NWFP: loss of jobs and income and threats to the economic vitality of many timber-dependent communities as a result of short and long term reduction in timber harvest from federal forests in the three state area, and reduction in habitat for late-successional and old-growth related species in lands allocated to the matrix.

There would be no additional unavoidable adverse impacts of the preferred alternative for the Arcata plan amendment.

Irreversible and Irretrievable Commitment of Resources

The NWFP SEIS identified the following cumulative commitments of resources associated with implementation of the NWFP.

- For those old-growth forest stands that would be harvested under the NWFP, there would be a loss of utility of habitat for late-successional and old-growth related species for the period of time needed for the habitat to grow again. This represents a commitment of over a century.
- Forest lands allocated to LSRs would not provide timber growth at the rate they would were stands harvested and regenerated; this loss of growth is not retrievable.

Under the preferred alternative for the Arcata plan amendment, land disposals in the matrix would result in the only irreversible and irretrievable commitment of resources. Land disposals would cause the permanent loss of those lands for public use. Development or timber harvests on disposal parcels could directly impact wildlife, vegetation, soils, or other resource values on those parcels. The maximum acreage affected would be 3,660 acres (3% of the total surface acreage in the plan amendment area). Site specific environmental analyses would be completed to address impacts to wildlife, cultural, and other resource values on disposal parcels.

Short Term Uses Versus Long Term Productivity of the Environment

The NWFP SEIS concluded that short term uses of resources in accordance with the standards and guidelines would result in minimum long term loss in productivity of forest soils and other components necessary for a healthy forest environment.

For the Arcata plan amendment preferred alternative, proposed land disposals in the matrix would increase resource management efficiency in both the short and long term. Disposal of matrix lands will result in loss of productivity and values associated with old growth forest on some of the disposal acres that contain marginal, fragmented stands of late seral stage forest. Land disposal in the matrix will facilitate the acquisition of land within LSRs and key watersheds improving the long-term effectiveness of the conservation strategy identified in the NWFP. Site specific environmental reviews will identify impacts of disposal on listed species and their habitats. Overall, proposed land disposals in the matrix would increase resource management efficiency in both the short and long term.

Chapter 5. Consultation and Coordination

SCOPING AND PUBLIC PARTICIPATION

The ARA invited public participation in the development of this proposed plan amendment/EA. The following list is summarized from the scoping report on file in the ARA office (USDI BLM 1993a).

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|------------------|---|
| August 13, 1992 | Notice of Intent to prepare the Arcata RMP Amendment published in Federal Register. |
| December 2, 1992 | Mailout and news release advising public of intent to prepare a plan amendment and to invite them into the process. |
| December 8, 1992 | Scoping meeting held in Redway, California. |
| December 9, 1992 | Scoping meeting held in Arcata, California |

LIST OF AGENCIES, ORGANIZATIONS, AND PERSONS TO WHOM COPIES OF THIS DOCUMENT HAVE BEEN SENT

A list of agencies, organizations, and persons to whom copies of this document have been sent is included in Appendix C.

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Finding of No Significant Impact for Arcata RMP Amendment/EA

The Bureau of Land Management Ukiah District, Arcata Resource Area (ARA), has analyzed a proposed action and alternatives for amending the resource management plan (RMP) for the Lacks Creek, Red Mountain, Covelo Vicinity, and Scattered Tracts management areas (MAs) in the ARA.

The proposed amendment was developed in response to the release of President Clinton's Northwest Forest Plan (NWFP) for managing habitat for late-successional and old-growth forest related species within the range of the northern spotted owl. The NWFP plan was adopted on April 14, 1994; it amends the planning documents of all national forests and BLM districts within the range of the northern spotted owl, including the Arcata RMP, and provides more specific federal management direction than was available when the Arcata RMP ROD was published in 1992.

The proposed action outlines strategies for watershed and ecosystem management in each of these MAs within the context of the NWFP. The proposed action:

- identifies and incorporates NWFP land allocations and management direction for the four MAs in the plan amendment area,
- establishes more specific resource condition objectives and land allocations and identifies suitable management activities for the four MAs in the plan amendment within the context of the NWFP,
- identifies areas where BLM should manage and acquire lands in support of regional ecosystem and watershed management strategies, and
- identifies parcels of land that may be disposed of through exchange to consolidate public lands into larger and more effective management blocks.

In addition, the proposed action contains the following specific changes to the present land use plan:

- designation of a 2,978-acre Lacks Creek Watershed Area of Critical Environmental Concern (ACEC),
- designation of a 10,784-acre South Fork Eel River Watershed ACEC,
- expansion of the Lacks Creek Research Natural Area (RNA)/ACEC to include an additional 720 acres,
- changes in land tenure allocation acreages for areas to be retained, acquired, and made available for disposal (Table 2-2), and
- changes in off-highway vehicle designations (designation of an additional 5,700 acres as closed to vehicle use and designation of an additional 9,738 acres as limited [vehicle use is allowed only on transportation facilities designed for highway vehicles having four or more wheels]).

These actions are described and analyzed in the plan amendment and EA. The EA will be made available to the public in March 1995. This EA is hereby incorporated by reference and is available at the Ukiah District Office and the ARA Office.

The supplemental environmental impact statement (SEIS) prepared for the NWFP (USDA and USDI 1994) is a programmatic document analyzing the impacts of alternative plans for managing federal forest lands within the range of the northern spotted owl in Washington, Oregon, and northern California. The proposed Arcata plan amendment is tiered to the SEIS and incorporates the impact analyses in the SEIS by reference. The SEIS was reviewed against the following criteria and has been determined to fully analyze the cumulative impacts of the proposed action described above; additional NEPA analysis is not required.

- The watershed management/ecosystem management strategies outlined in the proposed action are essentially the same as those outlined and analyzed in the NWFP.
- A reasonable range of alternatives were analyzed in the NWFP SEIS.
- There has been no significant change in circumstances or significant new information germane to the proposed action.
- The methodology and analytical approach used in the SEIS is appropriate for the proposed action.

- The proposed action would not change the cumulative impacts identified in the SEIS.

The NWFP and SEIS, plan amendment, EA, and this Finding of No Significant Impact (FONSI) constitute an amendment to the Arcata Resource Management Plan/EIS (1989) and Record of Decision (ROD) (1992).

Under the proposed action and no action alternative, significant impacts on the quality of the human environment would not occur, based upon the following considerations of context and intensity:

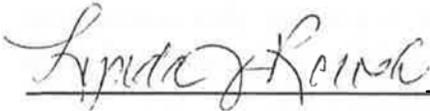
- The analysis did not identify any significant impacts other than those cumulative impacts already identified in the NWFP SEIS.
- Public health or safety would not be significantly affected.
- There are no prime or unique farmland resources within the plan amendment area. Floodplains, wild and scenic rivers, wetlands, and threatened and endangered plants and animals will benefit. Paleontological and cultural resources will not be affected.
- All alternatives are consistent with the Coastal Zone Management Act and goals.
- The alternatives do not violate federal, state, or local law requirements for environmental protection.
- There are no adverse environmental impacts other than those adverse cumulative economic and social impacts already identified in the NWFP SEIS.

Consistency

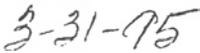
The proposed action and no action alternatives analyzed by BLM are consistent with federal laws and with state and county planning goals, and the state coastal zone management plan.

Determination

On the basis of the information contained in the plan amendment and EA, and all other information available to me as is summarized above, it is my determination that the proposed action analyzed does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, an environmental impact statement is not necessary and will not be prepared.



Arcata Resource Manager



Date

List of Acronyms

AMP	allotment management plan
ACEC	area of critical environmental concern
AIRFA	American Indian Religious Freedom Act
ARA	Arcata Resource Area
ARPA	Archaeological Resources Protection Act
ASQ	allowable sale quantity
BLM	Bureau of Land Management
BMP	best management practice
Board	California Board of Forestry
CDF	California Department of Forestry and Fire Protection
CEQ	Council on Environmental Quality
CFL	commercial forest land
cfs	cubic feet per second
CHU	Critical Habitat Unit Designated
DCA	Conservation Area
DFG	California Department of Fish and Game
EA	environmental assessment
IS	environmental impact statement
ESA	Endangered Species Act
FLPMA	Federal Land Policy and Management Act
HCP	habitat conservation plan
HMP	habitat management plan
LSR	Late-Successional Reserve
MA MFP	Management Area
MOU	management framework plan
NAAQS	memorandum of understanding
NAGPRA	National Ambient Air Quality Standards
NEPA	Native American Graves Protection and Repatriation Act
NHPA	National Environmental Policy Act
NPS	National Historic Preservation Act
NOI	National Park Service
NWFP	Notice of Intent
NWSRS	Northwest Forest Plan
OHV	National Wild and Scenic Rivers System off-highway vehicle

ORV	off-road vehicle
PRIA	Public Rangelands Improvement Act
PSD	Prevention of Significant Deterioration
RMP	resource management plan
RNA	research natural area
ROD	Record of Decision
SEIS	supplemental EIS
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SMARA	California Surface Mining and Reclamation Act
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
VRM	visual resource management
WSA	wilderness study area

Glossary

ACTIVITY PLAN. A site-specific plan that describes management objectives, actions, and projects to implement decisions of the resource management plan or other planning documents. Usually prepared for the management of one or more resources in a specific area.

ADMINISTRATIVELY WITHDRAWN AREAS. Areas removed from the suitable timber base through agency direction and land management plans.

ALLOWABLE CUT EFFECT (ACE). The expected change in the allowable sale quantity resulting from future management decisions.

ALLOWABLE SALE QUANTITY (ASQ). The gross amount of timber volume, including salvage, that may be sold annually from a specified area over a stated period in accordance with management plans of the Forest Service or Bureau of Land Management. Formerly referred to as "allowable cut."

ALTERNATIVE. One of several policies, plans, or projects proposed for making decisions.

ANADROMOUS FISH. Fish that are born and reared in freshwater, move to the ocean to grow and mature, and return to freshwater to reproduce. Salmon, steelhead, and shad are examples.

ANALYSIS OF THE MANAGEMENT SITUATION (AMS). A document that summarizes important information about existing resource conditions, uses, and demands, as well as existing management activities. It provides the baselines for subsequent steps in the planning process, such as the design of alternatives and affected environment.

AQUATIC ECOSYSTEM. Any body of water, such as a stream, lake or estuary, and all organisms and nonliving components within it, functioning as a natural system.

AQUATIC HABITAT. Habitat that occurs in free water.

ARCHAEOLOGICAL RESOURCES. Sites, areas, structures, objects, or other evidence of prehistoric or historic human activities.

ARCHAEOLOGICAL SITE. Geographic locale containing structures, artifacts, material remains, and/or other evidence(s) of prehistoric and/or historic human activity.

AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC). An area within the public

lands where special management attention is required to protect and prevent irreparable damage to important historic, cultural, or scenic values; fish and wildlife resources; or other natural systems or processes, or to protect life and safety from natural hazards.

ASSOCIATED SPECIES. A species found to be numerically more abundant in a particular forest successional stage or type compared to other areas.

AT-RISK FISH STOCKS. Stocks of anadromous salmon and trout that have been identified by professional societies and fish management agencies and in the scientific literature as being in need of special management consideration because of low or declining populations and are therefore at risk for extinction.

AVAILABLE COMMERCIAL FOREST LAND (CFL). Land declared suitable for producing timber crops and not withdrawn from timber production for other reasons.

AVAILABLE FOREST LAND. That portion of the forested acres for which timber production is planned and included within the acres contributing to the allowable sale quantity. This includes both lands allocated primarily to timber production and lands on which timber production is a secondary objective.

BEST MANAGEMENT PRACTICE (BMP). A practice or combination of practices determined by the state and/or areawide planning agencies, after problem assessment, examination of alternative practices, and appropriate public participation, to be the most effective, practicable means of preventing or reducing pollution generated by nonpoint sources to a level compatible with water quality standards. BMPs are generally applied as a system of practices rather than a single practice.

BIOLOGICAL ASSESSMENT. A procedural step in the interagency consultation process under Section 7 of the Endangered Species Act in which the BLM submits a written summary of potential project impacts on threatened or endangered species to the U.S. Fish and Wildlife Service for evaluation.

BIOLOGICAL CORRIDOR. A habitat band linking areas of similar management and/or habitat type.

BIOLOGICAL DIVERSITY. The variety of life forms and processes, including a complexity of species, communities, gene pools, and ecological functions.

BIOLOGICAL OPINION. The document resulting from formal consultation that states the opinion of the U.S. Fish and Wildlife Service or National Marine Fisheries Service as to whether or not a federal action is likely to jeopardize the continued existence of listed species or results in destruction or adverse modification of critical habitat.

BWCK (OF FOREST, HABITAT). Geographic area of trees or vegetation that is distinct from surrounding conditions. Block size may vary greatly.

CANDIDATE SPECIES. Those plants and animals included in Federal Register "Notices of Review" that are being considered by the U.S. Fish and Wildlife Service for listing as threatened or endangered. Two categories that are of primary concern:

Category 1. Taxa for which there is substantial information to support proposing the species for listing as threatened or endangered. Listing proposals are either being prepared or have been delayed by higher priority listing work.

Category 2. Taxa information indicates that listing is possibly appropriate. Additional information is being collected.

CLOSELY ASSOCIATED SPECIES. A species is designated as "closely associated" with a forest successional stage if the species is found to be significantly more abundant in that forest successional stage compared to the other successional stages, if it is known to occur almost exclusively in the successional stage, or if it uses habitat components that are usually produced at that stage.

CODE OF FEDERAL REGULATIONS (CFR). A codification of the general and permanent rules published in the Federal Register by the Executive departments and agencies of the federal government.

COMMERCIAL FOREST LAND (CFL). Forest land that is capable of yielding at least twenty cubic feet of wood per acre per year of commercial coniferous tree species.

COMMUNITY. Pertaining to plant or animal species living in close association and interacting as a unit.

CONGRESSIONALLY WITHDRAWN AREAS. Areas that require congressional enactment for their establishment, such as National Parks, Wild and Scenic Rivers, National Recreation Areas, National Monuments, and Wilderness.

CONNECTIVITY. A measure of the extent to which conditions among late-successional/old-growth (LS/OG) forest areas provide habitat for breeding, feeding, dispersal, and movement of LS/OG-associated wildlife and fish species (*see Late-Successional/Old-Growth Forest*).

CONSERVATION. The process or means of achieving recovery of viable populations.

CONSERVATION AREA. Designated land where conservation strategies are applied for the purpose of attaining a viable plant or animal population.

CONSISTENCY. Under the Federal Land Policy and Management Act, the adherence of Bureau of Land Management resource management plans to the terms, conditions, and decisions of officially approved and adopted resource related plans or, in their absence, to the policies and programs of other federal agencies, state and local governments and Indian tribes, as long as the plans are also consistent with the purposes, policies, and programs of federal laws and

regulations applicable to Bureau of Land Management lands. Under the Coastal Zone Management Act, the adherence to approved state management programs to the maximum extent practicable of federal agency activities affecting the defined coastal zone.

CONSULTATION. A formal interaction between the U.S. Fish and Wildlife Service and another federal agency when it is determined that the agency's action may affect a species that has been listed as threatened or endangered or its critical habitat.

CONTIGUOUS HABITAT. Habitat suitable to support the life needs of species that is distributed continuously or nearly continuously across the landscape.

CORE AREA. The area of habitat essential in the breeding, nesting and rearing of young, up to the point of dispersal of the young.

CORRIDOR. A defined tract of land, usually linear, through which a species must travel to reach habitat suitable for reproduction and other life-sustaining needs.

CRITICAL HABITAT. Under the Endangered Species Act, critical habitat is defined as (1) the specific areas within the geographic area occupied by a federally listed species on which are found physical and biological features essential to the conservation of the species, and that may require special management considerations or protection; and (2) specific areas outside the geographic area occupied by a listed species, when it is determined that such areas are essential for the conservation of the species. Critical habitat must be officially designated as such by the U.S. Fish and Wildlife Service or the National Marine Fisheries Service.

CUMULATIVE EFFECTS. The aggregate effects on the environment that result from the incremental effect of the action when added to the past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions occurring over a period of time.

DESIGNATED CONSERVATION AREA (DCA). A contiguous area of habitat to be managed and conserved for spotted owls under the Final Draft Recovery Plan for the Northern Spotted Owl. This general description can be applied to two DCA categories:

DCA 1 - Category intended to support at least 20 pairs of spotted owls.

DCA 2 - Category intended to support from one to 19 pairs of spotted owls.

ECOSYSTEM. A unit comprising interacting organisms considered together with their environment (e.g., marsh, watershed, and lake ecosystems).

ECOSYSTEM MANAGEMENT. A strategy or plan to management ecosystems to provide for all associated organisms, as opposed to a strategy or plan for managing individual species.

ELIGIBLE RIVER. A river or river segment found, through interdisciplinary team and, in some cases, interagency review, to meet Wild and Scenic River Act criteria of being free-flowing and possessing one or more outstandingly remarkable values.

ENDANGERED SPECIES. Any species of plant or animal defined through the Endangered Species Act as being in danger of extinction throughout all or a significant portion of its range and published in the Federal Register.

ENVIRONMENTAL ANALYSIS. An analysis of alternative actions and their predictable short-term and long-term environmental effects, incorporating physical, biological, economic, and social considerations.

ENVIRONMENTAL ASSESSMENT (EA). A systematic analysis of site-specific activities used to determine whether such activities have a significant effect on the quality of the human environment and whether a formal environmental impact statement is required and to aid an agency's compliance with the National Environmental Policy Act when no environmental impact statement is necessary.

ENVIRONMENTAL IMPACT. The positive or negative effect of any action on a given area or resource.

EPHEMERAL STREAMS. Streams that contain running water only sporadically, such as during and following storm events.

FINAL DRAFT RECOVERY PLAN FOR THE NORTHERN SPOTTED OWL. A management plan developed under the authority of the Endangered Species Act that sets forth management standards and population or other biological objectives for listed species. Implementation of such plans has a high likelihood that the species population and/or distribution will improve to the point that listing is no longer appropriate.

GREEN TREE RETENTION. A standard management practice in which live trees, as well as snags and large downed wood, are left as biological legacies within harvest units to provide habitat components over the next management cycle. There are two levels:

High Level. A regeneration harvest designed to retain the highest level of trees possible while still providing enough disturbance to allow regeneration and growth of the naturally occurring mixture of tree species. Such harvest should allow for the regeneration of intolerant and tolerant species. Harvest design would also retain cover and structural features necessary to provide foraging and dispersal habitat for mature and old-growth dependant species.

Low Level. A regeneration harvest designed to retain only enough green trees and other structural components (e.g., snags, coarse woody debris) to result in the development of stands that meet old-growth definitions within 100 to 120 years after harvest entry, considering overstory mortality.

HABITAT. A specific set of physical conditions that surround a single species, a group of species, or a large community. The place where a species, a group of species, or community naturally or normally lives and grows. In wildlife management, the major components of habitat are considered to be food, water, cover, and living space.

HISTORIC. Refers to period wherein non-native cultural activities occurred, based primarily on European roots, having no origin in traditional Native American culture(s).

IMPACT. A spatial or temporal change in the environment caused by human activity.

INHOLDING. A parcel of nonpublic land surrounded by public land.

INTENSIVE FOREST MANAGEMENT PRACTICES. The growth-enhancing practices of release, precommercial thinning, commercial thinning, and fertilization designed to obtain a high level of timber volume or quality.

INTERMITTENT STREAM. Any nonpermanent flowing drainage feature having a definable channel and evidence of scour or deposition. This includes what are sometimes referred to as ephemeral streams if they meet these two criteria.

IRREVERSIBLE OR IRRETRIEVABLE COMMITMENT OF RESOURCES. Effect of an action or inaction that cannot be reversed within a reasonable time.

ISSUE. A matter of controversy or dispute over resource management activities that is well defined or topically discrete. Addressed in the design of planning alternatives.

JEOPARDY. A finding made through consultation under the Endangered Species Act that the action of a federal agency is likely to jeopardize the continued existence of a threatened or endangered species.

KEY WATERSHED. As defined in the Northwest Forest Plan, a designated watershed within a system of large refugia throughout the Pacific Northwest region that is considered crucial to at-risk fish species and stocks and provides high water quality.

LAND ALLOCATION. The specification in land use and resource management plans of where activities, including timber harvest, can occur on a National Forest or Bureau of Land Management District.

LATE-SUCCESSIONAL RESERVE (LSR). A forest in its mature and/or old-growth stages that has been reserved under the Northwest Forest Plan (*see Late-Successional/Old-Growth Forest*).

LATE-SUCCESSIONAL/OLD-GROWTH FOREST (OR STANDS). Forests and stands consisting of trees and structural attributes and supporting biological communities and processes associated with old-growth and/or mature forests.

MANAGEMENT ACTIVITY. An activity undertaken for the purpose of harvesting, traversing, transporting, protecting, changing, replenishing, or otherwise using resources.

MANAGEMENT AREA. A discrete portion of the total planning area that has common features, problems, and/or management needs, which lends itself to specific management decisions.

MANAGEMENT CONCERN. A topic of management or public interest that is not well enough defined to become a planning issue or does not involve controversy or dispute over resource management activities or land use allocations or lend itself to designating land use alternatives. A concern may be addressed in a noncontroversial plan decision or in analysis, background documents, or procedures.

MATRIX. Federal lands outside of reserves, withdrawn areas, and Managed Late-Successional areas.

MONITORING. Specific studies which evaluate the effectiveness of actions taken toward achieving management objectives.

MULTIPLE USE. The management of the public land and its various resource values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources (including, but not limited to, recreation, range, timber, minerals, watershed, and wildlife and fish and natural scenic, scientific, and historical values); and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA). An act passed in 1969 to declare a national policy that encourages productive and enjoyable harmony between humankind and the environment, promotes efforts that will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of humanity, enriches the understanding of the ecological systems and natural resources important to the nation, and establishes a Council on Environmental Quality.

NATIONAL REGISTER OF HISTORIC PLACES. A formal list established by the National Historic Preservation Act of 1966 of cultural resources (e.g., districts, sites, buildings, structures, and objects) worthy of preservation. The Register is maintained by the National Park Service and lists archaeological, historic, and architectural properties.

OFF-ROAD VEHICLE (ORV). Any motorized track or wheeled vehicle designed for cross-country travel over natural terrain (e.g., motorcycles, all-terrain vehicles, four-wheeled drive vehicles, and snowmobiles).

OFF-ROAD VEHICLE DESIGNATION. Executive Order 11644 requires that all public land be designated for appropriate levels of ORV use in one of the following three possible categories.

Open. Designated areas and trails where off-road vehicles may be operated subject to operating regulations and vehicle standards set forth in manuals.

Limited. Designated areas and trails where off-road vehicles are subject to restrictions limiting the number or types of vehicles and date and time of use or are limited to existing or designated roads and trails.

Closed. Areas and trails where the use of off-road vehicles is permanently or temporarily prohibited. Emergency use is allowed.

OLD-GROWTH. This stage constitutes the potential plant community capable of existing on a site given the frequency of natural disturbance events. For forest communities, this stage exists from approximately age 200 until stand replacement occurs and secondary succession begins again. Depending on fire frequency and intensity, old-growth forests may have different structures, species composition, and age distributions. In forests with longer periods between natural disturbance, the forest structure will be more even-aged at late mature or early old-growth stages.

OLD-GROWTH ASSOCIATED SPECIES. Plant and animal species that exhibit a strong association with old-growth forests.

PERENNIAL STREAM. A stream that typically has running water on a year-round basis.

PHYSIOGRAPHIC PROVINCE. A geographic area having a similar set of biophysical characteristics and processes due to effects of climate and geology that result in patterns of soils and broad-scale plant communities. Habitat patterns, wildlife distributions, and historical land use patterns may differ significantly from those of adjacent provinces.

PLAN AMENDMENT. A change in the terms, conditions, or decisions of a resource management plan.

PREHISTORIC. Refers to a period wherein Native American cultural activities occurred that were not yet influenced by contact with historic non-native culture(s).

PRESCRIBED BURNING. Controlled fire deliberately set to meet various resource objectives.

PRESCRIBED FIRE. A fire burning under specified conditions that will accomplish certain

planned objectives. The fire may result from planned or unplanned ignitions.

PROPOSED THREATENED OR ENDANGERED SPECIES. Plant or animal species proposed by the U.S. Fish and Wildlife Service to be biologically appropriate for listing as threatened or endangered and published in the Federal Register. It is not a final designation.

PUBLIC LAND. Land administered by the Bureau of Land Management.

REARING HABITAT. Areas in rivers or streams where juvenile salmon and trout find food and shelter to live and grow.

RECORD OF DECISION. A document separate from but associated with an environmental impact statement that states the management decision; identifies all alternatives, including both the environmentally preferable and preferred alternatives; and states whether all practicable means to avoid environmental harm from the preferred alternative have been adopted, and if not, why not.

RECREATIONAL RIVER. *See Wild and Scenic River System.*

REFUGIA. Locations and habitats that support populations of organisms that are limited to small fragments of their previous geographic range (i.e., endemic populations).

RESEARCH NATURAL AREA (RNA). An area that is established and maintained for the primary purpose of research and education because the land has one or more of the following characteristics: a typical representation of common plant or animal association; an unusual plant or animal association; a threatened or endangered plant or animal species; a typical representation of common geologic, soil, or water features; or outstanding or unusual geologic, soil, or water features (43 CFR 8223.0-5).

RESOURCE MANAGEMENT PLAN (RMP). A land use plan prepared by the Bureau of Land Management under current regulations in accordance with the Federal Land Policy and Management Act.

RIPARIAN. Situated on or pertaining to the bank of a river, stream, or other body of water. Normally used to refer to the plants of all types that grow rooted in the water table of streams, ponds, and springs.

RIPARIAN AREA. A geographic area containing an aquatic ecosystem and adjacent upland areas that directly affect it. This includes floodplain, woodlands, and all areas within a horizontal distance of approximately 100 feet from the normal line of high water of stream channel or from the shoreline of a standing body of water.

RIPARIAN RESERVES. As defined in the Northwest Forest Plan, a land allocation along all streams, wetlands, ponds, lakes, and unstable and potentially unstable areas where riparian-dependent resources receive primary emphasis.

RIPARIAN ZONE. Those terrestrial areas where the vegetation complex and microclimate conditions are products of the combined presence and influence of perennial and/or intermittent water, associated high water tables, and soils that exhibit some wetness characteristics. Normally used to refer to the zone within which plants growth rooted in the water table of these rivers, streams, lakes, ponds, reservoirs, springs, marshes, bogs, and wet meadows.

SCENIC RIVER. *See Wild and Scenic River System.*

SECTION 7. The section of the Endangered Species Act that specifies the roles of interagency coordination in accomplishing the objective of species recovery.

SENSITIVE FISH SPECIES AND STOCKS. Fish species and stocks (genetically distinct populations) of anadromous salmonids identified by the American Fisheries Society's Endangered Species Committee as needing special management considerations to avoid further declines in population.

SENSITIVE SPECIES. Those species that (1) have appeared in the Federal Register as proposed for classification and are under consideration for official listing as endangered or threatened species, or (2) are on an official state list, or (3) are recognized by the Bureau of Land Management or other management agency as needing special management to prevent their being placed on federal or state lists. Sensitive species may include plants and animals whose populations are consistently and widely dispersed or whose ranges are restricted to a few localities, so that any major habitat change could lead to extinction. A species that is particularly sensitive to some external disturbance factors.

SIGNIFICANCE. A high degree of importance as indicated by either quantitative measurements or qualitative judgments. Significance may be determined by evaluating characteristics pertaining to location, extent, consequences, and duration.

SILVICULTURAL PRACTICES (OR TREATMENTS OR SYSTEM). The set of field techniques and general methods used to modify and manage a forest stand over time to meet desired conditions and objectives.

SILVICULTURAL PRESCRIPTION. A professional plan for controlling the establishment, composition, constitution, and growth of forests.

SILVICULTURE. The science and practice of controlling the establishment, composition, and growth of the vegetation of forest stands. It includes the control or production of stand structures, such as snags and downed logs, in addition to live vegetation.

SNAG. Any standing dead, partially dead, or defective (cull) tree at least 10 inches in diameter at breast height and at least 6 feet tall. A hard snag is composed primarily of sound wood, generally merchantable. A soft snag is composed primarily of wood in advanced stages of decay and deterioration, generally not merchantable.

SOCIOECONOMIC. Pertaining to, or signifying the combination or interaction of, social and economic factors.

SPECIAL AREAS. Areas that may need special management, which may include management as an area of critical environmental concern, research natural area, environmental education area, or other special category.

SPECIAL-STATUS SPECIES. Plant or animal species fitting into any of the following categories:

- Threatened or endangered species
- Proposed threatened or endangered species
- Candidate species
- State-listed species
- Bureau sensitive species

SPECIES. (1) A group of individuals that have their major characteristics in common and are potentially interfertile. (2) The Endangered Species Act defines species as including any species or subspecies of plant or animal. Distinct populations of vertebrates also are considered to be species under the act.

SPLIT ESTATE. An area of land where the surface is nonfederally owned and the subsurface mineral resources are federally owned or vice versa.

STATE HISTORIC PRESERVATION OFFICER (SHPO). The state official authorized to act as a liaison to the Secretary of the Interior for purposes of implementing the National Historic Preservation Act of 1966.

SUSTAINED YIELD. The achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public land consistent with multiple use. This term is most commonly associated with forest management and the provisions of an undiminished or "even flow" average annual production of wood fiber over decades. It is also applicable to the management of all renewable resources, including forage, wildlife, water, recreation, or any value that can be managed for renewal and sustained productivity. It is dependent on the application of multiple use management in a way that assumes the maintenance of the land's productivity.

THREATENED SPECIES. Those plant or animal species likely to become endangered species throughout all or a significant portion of their range within the foreseeable future. A plant or animal identified and defined in accordance with the 1973 Endangered Species Act and published in the Federal Register.

TIMBER PRODUCTION CAPABILITY CLASSIFICATION. The process of partitioning forest land into major classes indicating relative suitability to produce timber on a sustained yield basis.

VEGETATION TYPE. A grouping of similar vegetation based on structure, a product of the complex of climatic factors effective in a region.

VISUAL RESOURCE MANAGEMENT CLASSES. Categories assigned to public lands based on scenic quality, sensitivity level, and distance zones. Each class has an objective that prescribes the amount of modification allowed in the landscape.

VISUAL RESOURCE MANAGEMENT (VRM). The planning, design, and implementation of management objectives to provide acceptable levels of visual impacts for all Bureau of Land Management resource management activities. VRM classes I through V each describe a different degree of modification allowed in the basic elements of the landscape and still retain its character.

WATERSHED. The area drained by a river, stream system, or lake. The drainage basin contributes water, organic matter, dissolved nutrients, and sediments to the river, stream system, or lake.

WATERSHED ANALYSIS. As defined by the Northwest Forest Plan, an analytical process for collecting and compiling information within a watershed that is essential for making sound management decisions. Watershed analysis is a stratum of ecosystem management planning applied to watersheds covering approximately 20 to 200 square miles.

WATERSHED RESTORATION. Improving current conditions of watersheds to restore degraded fish habitat and provide long-term protection to aquatic and riparian resources.

WETLANDS. Areas that are inundated by surface water or groundwater with a frequency sufficient to support, and under normal circumstances do or would support, a prevalence of vegetative or aquatic life that require saturated or seasonally saturated soil conditions for growth and reproduction (Executive Order 11990). Wetlands generally include, but are not limited to, swamps, marshes, bogs and similar areas.

WILD AND SCENIC RIVER SYSTEM. Those rivers or sections of rivers designated as such by congressional action under the Wild and Scenic River Act (Public Law 90-542, 1968), as supplemented and amended, or those sections of rivers designated as wild, scenic, or recreational by an act *Of* the legislature of the state or states through which they flow. Each designated river may be classified and administered under one or more of the following categories:

1. *Wild River Areas.* Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.
2. *Scenic River Areas.* Those rivers or sections of rivers that are free of impoundments with watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

3. *Recreation River Areas.* Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

WILDERNESS. Areas designated by congressional action under the 1964 Wilderness Act. Wilderness is defined as undeveloped federal land retaining its primeval character and influence without permanent improvements or human habitation. Wilderness areas are protected and managed to preserve their natural conditions, which generally appear to have been affected primarily by the forces of nature, with the imprint of human activity substantially unnoticeable; have outstanding opportunities for solitude or for a primitive and unconfined type of recreation; include at least 5,000 acres or are of sufficient size to make practical their preservation, enjoyment, and use in an unimpaired condition; and may contain features of scientific, education, scenic, or historical value, as well as ecologic and geologic interest.

WILDERNESS STUDY AREA (WSA). A roadless area inventoried and found to be wilderness in character, having few human developments, and providing outstanding opportunities for solitude and primitive recreation, as described in Section 603 of the Federal Land Policy and Management Act and in Section 2(c) of the Wilderness Act of 1964.

WITHDRAWAL. A formalized action restricting specified land from operation or disposal under specified laws, either mineral laws or land disposal laws, or both. Can also be used to transfer jurisdiction of land to another Federal agency.

References

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Appendix A. Wild and Scenic River Eligibility and Classification Report and Wild and Scenic River Guidelines

APPENDIX A

WILD AND SCENIC RIVER ELIGIBILITY AND CLASSIFICATION REPORT

Introduction

The Wild and Scenic Rivers Act of 1968 was passed by Congress to preserve riverine systems that contain certain exceptionally outstanding features. The BLM is now mandated to evaluate potential additions to the National Wild and Scenic Rivers System (NWSRS) by Section S(d) of the Act during the Resource Management Plan (RMP) process. The NWSRS study guidelines are found in BLM Manual 8351, U.S. Departments of Agriculture and Interior guidelines published in Federal Register Vol. 7, No. 173, September 7, 1982 and in various BLM memoranda and policy statements.

The NWSRS study process has three distinct steps:

1. Determine what rivers or river segments are eligible for NWSRS designation.
2. Determine the potential classification of eligible river segments as wild, scenic, recreational or any combination thereof.
3. Conduct a suitability study/legislative EIS to determine if the river segments are suitable for designation to the NWSRS.

Any river found to be eligible for inclusion in the NWSRS will result in the associated BLM administered lands, within 1/4 mile of the river, being managed as if the river were an actual component of the NWSRS, until the suitability issue is resolved.

The following discussion provides information on how BLM considered waterways for potential inclusion in the NWSRS.

Identification

A variety of sources were used to identify waterways which could have potential for wild and scenic river designation. Among them include the Nationwide Rivers Inventory List, the 1970 USDA/USDI List, the Outstanding Rivers List compiled by American Rivers, Inc., river segments identified in the State Comprehensive Outdoor Recreation Plan, river segments identified by State or local government, river segments identified by the public during formulation of the Arcata Resource Management Plan and river segments in or adjacent to Congressional and for administratively designated areas.

In response to public concerns that BLM undertake a more comprehensive approach and assess entire watersheds where substantial BLM ownership is involved, all waterways located within 1/4 mile or passing through public land within the Arcata Resource

Area and several tracts within the Clear Lake Resource Area covered under the Arcata Resource Management Plan were identified for potential eligibility. This amounted to approximately 300 miles.

Eligibility

Each identified river segment was evaluated to determine whether or not it is eligible for inclusion in the NWSRS. To be eligible, a river segment must be "free-flowing" and must possess at least one "outstanding remarkable value." No other factors were considered in determining the eligibility of a river segment. All other relevant factors are considered in determining suitability. A river need not be boatable or floatable in order to be eligible. For purposes of eligibility determination, the volume of flow is sufficient if it is enough to maintain the outstandingly remarkable values identified within the segment.

Table 1 lists all river segments found to be noneligible. Table 2 lists all river segments found to be eligible. It provides information on their length, percent of river corridor under BLM jurisdiction, and identifies what kind of outstandingly remarkable value(s) made them eligible. All eligible river segments must be tentatively classified as either wild, scenic or recreational to ensure appropriate protection of the values supporting the determination. These potential classifications are also shown in Table 2. Listed in Table 3 are more exact descriptions of each river segment's location and a brief narrative of its outstanding remarkable value(s).

TABLE 1 - NONELIGIBLE RIVER SEGMENTS

ELIGIBILITY ASSESSMENT FOR RIVER SEGMENTS IDENTIFIED FOR
POSSIBLE INCLUSION AS COMPONENTS OF THE NATIONAL WILD
AND SCENIC RIVERS SYSTEM

MANAGEMENT AREA	RIVER SEGMENT	REASON FOR CONSIDERATION ¹	LENGTH ON BLM LAND (MILES)	FREE FLOWING	OUTSTANDINGLY REMARKABLE VALUES ²	ELIGIBILITY DETERMINATION
LACKS CREEK	Hopkins Creek	C	0.20	Yes	A	Noneligible
	Klamath River Tributary	C	0.00	Yes	A	Noneligible
	Pine Creek w/Tribs	C	0.10	Yes	A	Noneligible
	Little Pine Creek w/Trib	C	0.30	Yes	A	Noneligible
	Lacks Creek Tribs	C	1.75	Yes	A	Noneligible
BUTTE CREEK	Little Larabee Creek w/Tribs	C	1.00	Yes	A	Noneligible
	Burr Creek	C	0.50	Yes	A	Noneligible
KING RANGE VICINITY	Squaw Creek	C	0.75	Yes	A	Noneligible
	Sholes Creek	C	0.75	Yes	A	Noneligible

1 A - Nationwide Rivers Inventory
B- 1988 Outstanding Rivers List- American Rivers, Inc.
C - Potential Rivers Inventory - Arcata RA
D- Other

2 A - Non-existent
B- Scenic
C - Recreational
D - Geological
E - Fish and Wildlife
F - Historical
G- Cultural
H - Other (Including Ecological)

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Area Manger, Arcata Resource Area

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AND SCENIC RIVERS SYSTEM

MANAGEMENT AREA	RIVER SEGMENT	REASON FOR CONSIDERATION ¹	LENGTH ON BLM LAND (MILES)	FREE FLOWING	OUTSTANDINGLY REMARKABLE VALUES ²	ELIGIBILITY DETERMINATION
RED MOUNTAIN	Michaels Creek	C	0.25	Yes	A	Noneligible
	Butler Creek w/Trib	C	0.50	Yes	A	Noneligible
	Hogshed Creek	C,D	1.20	Yes	A	Noneligible
	Fox Creek	C,D	0.50	Yes	A	Noneligible
	Rock Creek	C,D	0.50	Yes	A	Noneligible
	Kenny Creek	C,D	0.40	Yes	A	Noneligible
	Mud Springs Creek w/Tribs	C,D	1.40	Yes	A	Noneligible
	Bear Creek	C,D	0.20	Yes	A	Noneligible
	South Fork Eel River Tribs	C,D	2.10	Yes	A	Noneligible

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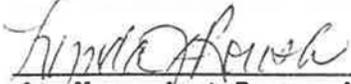

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MANAGEMENT AREA	RIVER SEGMENT	REASON FOR CONSIDERATION ¹	LENGTH ON BLM LAND (MILES)	FREE FLOWING	OUTSTANDINGLY REMARKABLE VALUES ²	ELIGIBILITY DETERMINATION
RED MOUNTAIN (Continued)	Big Rock Creek	C	0.25	Yes	A	Noneligible
	Streeter Creek Trlbs	C	0.75	Yes	A	Noneligible
	Mill Creek	C	0.50	Yes	A	Noneligible
	Elk Creek w{Trlbs	C	0.65	Yes	A	Noneligible
	Grub Creek	C	0.30	Yes	A	Noneligible
	Jewett Creek w{Trlb	C	1.25	Yes	A	Noneligible
	Chamlse Creek	C	1.50	Yes	A	Noneligible
	Tom Long Creek w{Trib	D	0.50	Yes	A	Noneligible
McCoy Creek w{Trib	C	2.00	Yes	A	Noneligible	

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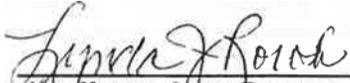

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MANAGEMENT AREA	RIVER SEGMENT	REASON FOR CONSIDERATION ¹	LENGTH ON BLM LAND (MILES)	FREE FLOWING	OUTSTANDINGLY REMARKABLE VALUES ²	ELIGIBILITY DETERMINATION
RED MOUNTAIN (Continued)	Red Mountain Creek w/Tribs	C	1.50	Yes	A	Noneligible
	Rock Creek	C	0.25	Yes	A	Noneligible
	Big Dan Creek w/Trib	C	1.25	Yes	A	Noneligible
	Rattlesnake Creek Trib	C	0.25	Yes	A	Noneligible
	Blue Rock Cr. Trib	C	0.25	Yes	A	Noneligible
	Main Stem Eel River Tributaries	D	1.75	Yes	A	Noneligible
	Low Gap Creek	C	0.25	Yes	A	Noneligible
	Bond Creek	C	0.50	Yes	A	Noneligible

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Area Manager, Arcata Resource Area

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WILD AND SCENIC RIVERS SYSTEM

MANAGEMENT AREA	RIVER SEGMENT	REASON FOR CONSIDERATION ¹	LENGTH ON BLM LAND (MILES)	FREE FLOWING	OUTSTANDINGLY REMARKABLE VALUES ²	ELIGIBILITY DETERMINATION
COVELO VICINITY	Wilson Creek	C	0.30	Yes	A	Noneligible
	Peterptor Creek	C	2.50	Yes	A	Noneligible
	Lynch Creek	C	2.20	Yes	A	Noneligible
	Antone Creek wfTrib	C,D	3.30	Yes	A	Noneligible
	Casoose Creek Tribs	C,D	2.25	Yes	A	Noneligible
	Lousy Creek	C	1.00	Yes	A	Noneligible
	North Fork Eel River Tribs	C	1.50	Yes	A	Noneligible
	Brin Canyon Creek	C	0.75	Yes	A	Noneligible
	Hulls Creek Tribs	C,D	1.10	Yes	A	Noneligible

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Lynne A. Ford
Area Manager, Arcata Resource Area

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MANAGEMENT AREA	RIVER SEGMENT	REASON FOR CONSIDERATION ¹	LENGTH ON BLM LAND (MILES)	FREE FLOWING	OUTSTANDINGLY REMARKABLE VALUES ²	ELIGIBILITY DETERMINATION
COVELO VICINITY (Continued)	Bloody Run Creek	C	1.75	Yes	A	Noneligible
	Bud Creek	C	0.25	Yes	A	Noneligible
	Twin Bridges Creek	C	0.50	Yes	A	Noneligible
	George Lambert Canyon Creek	C	1.00	Yes	A	Noneligible
	Doe Canyon Creek	C	2.00	Yes	A	Noneligible
	Hayshed Creek w/Tributaries	C	3.50	Yes	A	Noneligible
	Thatcher Creek w/Tribs	C	3.50	Yes	A	Noneligible
	Little Thatcher Creek	C	1.75	Yes	A	Noneligible

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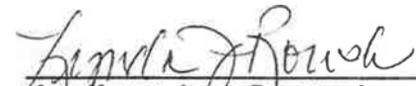

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MANAGEMENT AREA	RIVER SEGMENT	REASON FOR CONSIDERATION ¹	LENGTH ON BLM LAND (MILES)	FREE FLOWING	OUTSTANDINGLY REMARKABLE VALUES ²	ELIGIBILITY DETERMINATION
COVELO VICINITY (Continued)	Ellis Creek	C	1.50	Yes	A	Noneligible
	Shake Creek	C	1.25	Yes	A	Noneligible
	Elk Creek Tribs	C	7.00	Yes	A	Noneligible
	Bear Creek	C	0.50	Yes	A	Noneligible
	Middle Fork Eel River Tribs	C	3.75	Yes	A	Noneligible
SCATTERED TRACTS	Haman Creek	C	0.25	Yes	A	Noneligible
	Anderson Creek	C	0.25	Yes	A	Noneligible
	Mattole Canyon Creek w/Trib	C	0.50	Yes	A	Noneligible
	Blue Slide Creek	C	0.25	Yes	A	Noneligible

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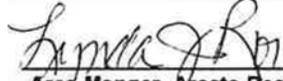
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Area Manager, Arcata Resource Area

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MANAGEMENT AREA	RIVER SEGMENT	REASON FOR CONSIDERATION ¹	LENGTH ON BLM LAND (MILES)	FREE FLOWING	OUTSTANDINGLY REMARKABLE VALUES ²	ELIGIBILITY DETERMINATION
SCATTERED TRACTS (Continued)	Grindstone Creek	C	0.50	Yes	A	Noneligible
	Yew Wood Creek	C	0.25	Yes	A	Noneligible
	Basin Creek	C	0.25	Yes	A	Noneligible
	Upper North Fork Mattole River Trib	C	0.25	Yes	A	Noneligible
	Dry Creek w/Trlb	C	0.75	Yes	A	Noneligible
	Gilham Creek w/Trlb	C	1.00	Yes	A	Noneligible
	Boulder Creek Trlb	C	0.25	Yes	A	Noneligible
	Lawrence Creek Trlbs	C	1.00	Yes	A	Noneligible
Mad River Trib.	C	0.25	Yes	A	Noneligible	

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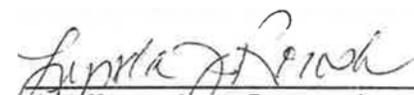

Area Manger, Arcata Resource Area

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SCATTERED TRACTS (Continued)	Berry Creek	C	0.50	Yes	A	Noneligible
	White Creek	C	0.25	Yes	A	Noneligible
	North Fork Indian Creek w/Tribs	C	4.00	Yes	A	Noneligible
	Gut Creek w/Trib	C	1.50	Yes	A	Noneligible
	Soda Fork Creek	C	0.50	Yes	A	Noneligible
	Austin Creek w/Trib	C	0.75	Yes	A	Noneligible
	East Fork Austin Creek	C	1.00	Yes	A	Noneligible

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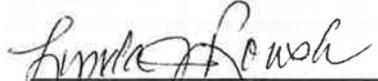

Area Manager, Arcata Resource Area

TABLE 2- ELIGIBLE RIVER SEGMENTS

ELIGIBILITY ASSESSMENT FOR RIVER SEGMENTS IDENTIFIED FOR
POSSIBLE INCLUSION AS COMPONENTS OF THE NATIONAL WILD
AND SCENIC RIVERS SYSTEM

Management Area	River Segment	Reason For Consideration ¹	length (MILES)		Free Flowing	Outstandingly Remarkable Values ²	Potential Classification	BLM Jurisdiction	
			BLM	Other				Acres'	%OF Corridor
LACKS CREEK	lacks Creek	C,D	0.5	3.5	Yes	E,H	Wild	160	13
BUTTE CREEK	Butte Creek w(Tribs)	C	3.0	4.0	Yes	E,H	Wild	960	43
KING RANGE VICINITY	Mattole River	B,C,D	0.0	0.75	Yes	E,G	Recreational	0	0
	Bridge Creek	C	0.2	1.5	Yes	E	Recreational	64	12
	Jewett Creek	C	0.6	1.8	Yes	E	Recreational	192	25
RED MOUNTAIN	Pipe Creek	C	0.5	4.5	Yes	E	Wild	160	10
	Charleton Creek w/Tribs	C	2.0	1.0	Yes	E,H	Wild	640	66
	Bell Springs Creek w(Tribs)	C	4.0	3.0	Yes	E	Wild	1280	57
	Rattlesnake Creek	C	0.3	0.8	Yes	E	Recreational	96	27

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B- 1988 Outstanding Rivers Ust- American Rivers, Inc.
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D- Other

- 3 Shoreline and adjacent lands within 1/4 mile of the river segment not to exceed 320 acres per mile measured from the ordinary high water mark on both sides of the river.

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Area Manger, Arcata Resource Area

TABLE 2- ELIGIBLE RIVER SEGMENTS

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AND SCENIC RIVERS SYSTEM

Management Area	River Segment	Reason For Consideration ¹	Length (MILES)		Free Flowing	Outstandingly Remarkable Values ²	Potential Classification	BLM Jurisdiction	
			BLM	Other				Acres ³	%OF Corridor
RED MOUNTAIN (Continued)	Cedar Creek w/ Tribs	C,D	8.0	3.5	Yes	D,E,H	Wild	2560	70
	East Branch South Fork Eel River w/ Trlbs	C,D	4.0	4.0	Yes	E	Recreational	1280	50
	Elder Creek w/ Tribs	A,B,C,D	4.0	3.0	Yes	E,H	Wild	1280	57
	Tenmile Creek w/ Trlbs	C,D	0.3	3.3	Yes	E	Wild	96	8
	White Rock Creek w/Trlbs	C	5.0	1.0	Yes	H	Recreational	1600	83
	Shell Rock Creek w/Trlbs	C	2.0	3.5	Yes	D	Wild	640	36
	Woodman Creek w/Trib	C	1.0	4.0	Yes	E	Wild	320	25

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Area Manger, Arcata Resource Area

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ELIGIBILITY ASSESSMENT FOR RIVER SEGMENTS IDENTIFIED
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Management Area	River Segment	Reason For Consideration ¹	Length (MILES)		Free Flowing	Outstandingly Remarkable Values ²	Potential Classification	BLM Jurisdiction	
			BLM	Other				Acres ³	%OF Corridor
COVELO VICINITY	Indian Creek w/Tribbs	C,D	3.2	2.5	Yes	E	Wild	1024	56
	Fish Creek w/Tribbs	C,D	3.5	2.0	Yes	E	Wild	1120	64
	Tomki Creek	C,D	2.3	8.0	Yes	E	Recreational	736	22
	Eden Creek w/Tribbs	C,D	3.5	2.5	Yes	E,G	Wild	1120	58
	Elk Creek	C,D	2.5	5.5	Yes	E,G	Recreational	800	31
	Deep Hole Creek	C,D	3.5	3.0	Yes	E	Wild	1120	54
	Hulls Creek	C,D	6.0	10.0	Yes	E	Recreational	1920	38
	Casoose Creek	C,D	1.5	2.5	Yes	E	Wild	480	38

A - Nationwide Rivers Inventory
B- 1988 Outstanding Rivers List- American Rivers, Inc.
C - Potential Rivers Inventory - Arcata RA
D- Other

2 A - Non-existent
B- Scenic
C - Recreational
D - Geological
E - Fish and Wildlife
F - Historical
G- Cultural
H - Other (Including Ecological)

3 Shoreline and adjacent lands within 1/4 mile of the river segment not to exceed 320 acres per mile measured from the ordinary high water mark on both sides of the river.

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Area Manger, Arcata Resource Area

TABLE 2- ELIGIBLE RIVER SEGMENTS

ELIGIBILITY ASSESSMENT FOR RIVER SEGMENTS IDENTIFIED FOR
POSSIBLE INCLUSION AS COMPONENTS OF THE NATIONAL WILD
AND SCENIC RIVERS SYSTEM

Management Area	River Segment	Reason For Consideration ¹	Length (MILES)		Free Flowing	Outstandingly Remarkable Values ²	Potential Classification	BLM Jurisdiction	
			BLM	Other				Acres ³	%OF Corridor
SCATIERED TRACTS	Coleman Creek wTrib	C	1.3	3.0	Yes	E,G	Wild	416	30
	Mad River w{Trib (Segment #1)	A,C,D	1.0	2.0	Yes	E	Recreational	320	33
	Mad River (Segment #2)	A,C,D	0.3	0.5	Yes	E	Recreational	96	38

A - Nationwide Rivers Inventory
 B- 1988 Outstanding Rivers List- American Rivers, Inc.
 C - Potential Rivers Inventory - Arcata RA
 D- Other

2 A - Non-existent
 B- Scenic
 C - Recreational
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 E - Fish and Wildlife
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3 Shoreline and adjacent lands within 1/4 mile of the river segment not to exceed 320 acres per mile measured from the ordinary high water mark on both sides of the river.

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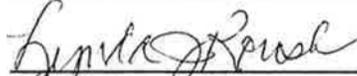

 Area Manger, Arcata Resource Area

TABLE 3- ELIGIBLE RIVER SEGMENTS

EUGIBIUIY ASSESSMENT FOR WATERWAY SEGMENTS IDENTIFIED
FOR POSSIBLE INCLUSION AS COMPONENTS OF THE NAT10NAL
WILD AND SCENIC RIVERS SYSTEM

Management Area	River Segment	Segment Description	Description of Outstanding Values
LACKS CREEK	Lacks Creek	From Its confluence with Redwood Creek to private land In Sec 2, T7N, R3E, H.M. (Map A)	Suitable spawning and/or rearing habitat for Indigenous salmon and steelhead exists. Old growth forests provide habitat for the threatened northern spotted owl that occurs on the site.
BUTTE CREEK	Butte Creek	From its intersection with the common line between Sections 35 and 36, T1N, R4E, H.M. to Its headwaters In Sec 34. Trib. #1 ends in the SW1/4,NW1/4, Sec 35; Trib. #2 ends in the SW1/4,SW1/4, Sec 1 (Map B)	Old growth forests provide high quality habitat for the threatened northern spotted owl that occurs on the site.
KING RANGE VICINITY	Mattole River	From the SW1/4, NE1/4, Sec 6, T5S, R2E H.M. to the crossing under Shelter Cove Road (Map C)	Suitable spawning and/or rearing habitat for Indigenous salmon and steelhead exists. Several significant cultural sites have been recorded In the vicinity of this river segment.
	Bridge Creek	From Its confluence with the Mattole River to the line common with Sections 6 and 7, T5S, R2E, H.M. (Map C).	Suitable spawning and/or rearing habitat for Indigenous salmon and steelhead exists.
	Jewett Creek	From its confluence with Bear Creek to the headwaters near the NW corner of Sec 3, T4S, R1E, H.M.(Map C).	Suitable spawning and/or rearing habitat for Indigenous salmon and steelhead exists.
RED MOUNTAIN	Pipe Creek	From its confluence with the Main Stem Eel River In Sec 13, T4S, R5E, H.M. to the SE1/4, SW1/4, Sec 3, T5S, R5E, H.M. (Map D)	Suitable spawning and/or rearing habitat for Indigenous salmon and steelhead exists.
	Charlton Creek w/Tributaries	From Its confluence with Chamise Creek to the SE corner of Sec 31, T5S, R6E, H.M. (Map D)	Nearly 600 acres of old growth Douglas fir forest provide habitat for the northern spotted owl that occurs in the area.
	Bell Springs Creek w/Tributaries	From its confluence with the Main Stem Eel River to the headwaters east of Bell Springs Mtn. In Sec 6, T24N, R15W, MOM. Two Tributaries are shown on Map D.	Suitable spawning and/or rearing habitat for Indigenous salmon and steelhead exists. An endangered species nesting site Is located nearby.

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Area Manager, Arcata Resource Area

TABLE 3- ELIGIBLE RIVER SEGMENTS

ELIGIBILITY ASSESSMENT FOR WATERWAY SEGMENTS IDENTIFIED
FOR POSSIBLE INCLUSION AS COMPONENTS OF THE NATIONAL
WILD AND SCENIC RIVERS SYSTEM

Management Area	River Segment	Segment Description	Description of Outstanding Values
RED MOUNTAIN (Cont)	Woodman Creek w/Tributaries	From Its confluence with the Main Stem Eel River In Sec 11, T22N, R4W MOM to the headwaters In Sec 32, T22N, R14W, MOM. Included are two tributaries shown on Map F.	Suitable spawning and/or rearing habitat for Indigenous salmon and steelhead exists.
	Cedar Creek w/Tributaries	From Its confluence with the South Fork Eel River just south of Leggett to the headwaters In Sec 27, T24N, R1&W, MOM. Included are four tributaries that drain the south facing slopes of Red Mountain and the north facing slopes of Lmle Red Mountain. (Map E)	High Quality spawning and/or rearing habitat for Indigenous salmon and steelhead exists. Several threatened and endangered plant species occupy the headwaters where the unique red soils are located. An endangered species nesting site is situated nearby, and the northern spotted owl exists in the old growth Douglas fir forest.
	East Branch South Fork Eel River w/Tribs	From the NE1/4, NE1/4, Sec 34, TSS, R4E, HM to Cruso Cabin Creek In Sec 10, T24N, R16W, MOM. Two tributaries are Included and shown on Map D.	Suitable habitat exists for Indigenous salmon and steelhead. Threatened and endangered species nesting sites occur In the vicinity of this river segment.
	Elder Creek w/Tribs	From Its confluence with the South Fork Eel River In Sec 29, T22N, R16W, MOM to the headwaters at Signal Peak and Cahto Peak. Two tributaries are Included and shown on Map E.	The watershed is designated a National Natural Landmark, a Hydrologic Benchmark and a Biosphere Reserve because of its outstanding ecological and scientific values. Suitable habitat exists for Indigenous salmon and steelhead.
	Ten Mile Creek w/Tribs	From Its confluence with the South Fork Eel River In Sec 16, T22N, R1&W, MOM to the SW corner of Sec 18, T22N, R15W, MOM. Included is the tributary flowing north from Black Oak Mtn. (Map E)	An endangered species nesting site occurs nearby. Suitable habitat exists for steelhead and long-run coho salmon.
	White Rock Creek w/Tribs	From its confluence with Woodman Creek In Sec 16, T22N, R14W, MOM. Included are two tributaries shown on Map F.	An old growth Douglas fir forest provides habitat for the northern spotted owl that occurs within this river segment.

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Area Manager, Arcata Resource Area

TABLE 3- ELIGIBLE RIVER SEGMENTS

ELIGIBILITY ASSESSMENT FOR WATERWAY SEGMENTS IDENTIFIED
FOR POSSIBLE INCLUSION AS COMPONENTS OF THE NATIONAL
WILD AND SCENIC RIVERS SYSTEM

Management Area	River Segment	Segment Description	Description of Outstanding Values
RED MOUNTAIN (Cont)	Rattlesnake Creek	From its confluence with the South Fork Eel River to the line common with Sec 20 and 21, T23N, R16W, MOM.	Suitable spawning and/or rearing habitat exists for Indigenous salmon and steelhead.
	Shell Rock Creek w/Tributaries	From the SE corner of Sec 13, T23N, R15W, MOM to private land in Sec 23, T23N, R15W, MOM. One tributary is included and shown on Map F.	The geologic formation at Shell Rock is unique to the area. The landscape is rated Scenic Quality A.
COVELO VICINITY	Indian Creek w/Tributary	From its confluence with the Main Stem Eel River in Sec 9, T20N, R13W, MOM to private land in Sec 13 T20N, R13W, MOM. One tributary is included and shown on Map G.	Suitable spawning and/or rearing habitat exists for indigenous salmon and steelhead.
	Fish Creek w/Tribs	From its confluence with the Main Stem Eel River in Sec 34, T20N, R13W, MOM to Buckhorn Spring in Sec 19, T20N, R12W, MOM. Two tributaries are included and shown on Map G.	Suitable spawning and/or rearing habitat exists for Indigenous salmon and steelhead. The threatened northern spotted owl has been detected in the vicinity of this river segment.
	Tomki Creek	From the public land boundary in Sec 25, T19N, R13W MOM to private land at the NE corner of Sec 36, T20N, R14W, MOM. (Map G)	Suitable spawning and/or rearing habitat exists for Indigenous salmon and steelhead that are known to migrate through this river segment.
	Eden Creek w/Tribs	From its confluence with Elk Creek in Sec 19, T21N, R11W, MOM to private land in Sec 27, T21N, R12W, MOM. Two tributaries are included and shown on Map G.	An endangered species nesting site is located nearby. Several significant cultural sites have been recorded.
	Deep Hole Creek	From its confluence with Elk Creek in Sec 5, T20N, R11W MOM to the headwaters in Sec 26, T19N, R12W, MOM.	Suitable spawning and/or rearing habitat exists for Indigenous salmon and steelhead. The threatened northern spotted owl has been detected in the vicinity of this river segment.

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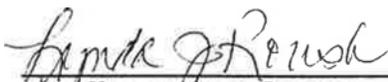
Lynette R. ftcwV
Area Manager, Arcata Resource Area

TABLE 3- ELIGIBLE RIVER SEGMENTS

ELIGIBILITY ASSESSMENT FOR WATERWAY SEGMENTS IDENTIFIED
FOR POSSIBLE INCLUSION AS COMPONENTS OF THE NATIONAL
WILD AND SCENIC RIVERS SYSTEM

Management Area	River Segment	Segment Description	Description of Outstanding Values
COVELO (Cont)	Elk Creek	From its confluence with the Middle fork Eel river to the Mendocino National Forest.(Map G)	Bald eagles are known to concentrate within this river segment. A significant number of cultural sites are concentrated within the area. Suitable spawning and/or rearing habitat exists for migrating steelhead and salmon.
	Hulls Creek	From its confluence with North Fork Eel River to the headwaters near Crazy Bear Pass in Sec 11, T24N, R12W, MOM. (Map H)	The threatened northern spotted owl has been detected in this river segment. Suitable habitat is available for salmon and steelhead.
	Casoose Creek	From its confluence with Hulls Creek to its confluence with Antone Creek. (Map H)	The threatened northern spotted owl has been detected in this river segment. Suitable habitat exists for salmon and steelhead.
SCATTERED TRACTS	Coleman Creek w{Tributary	From its confluence with the Main Stem Eel River at Eel Rock to private land in Sec 11, T2S, R4E, HM. (Map I)	Several ethnographic village sites are located within this river segment. Suitable spawning and/or rearing habitat exists for salmon and steelhead.
	Mad River w{Trib (Segment #1)	From the NW corner of Sec 10, T3N, R3E, HM. to private land in Sec 14, T3N, R3E, HM. One tributary is included and shown on Map J.	Suitable spawning and/or rearing habitat exists for salmon and steelhead.
	Mad River (Segment #2)	From the common line between Sec 7 and 8, T3N, R4E, HM. to the Morgan Creek tributary. (Map J)	Suitable spawning and/or rearing habitat exists for salmon and steelhead.

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Area Manager, Arcata Resource Area

WILD AND SCENIC RIVER GUIDELINES

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Federal Register / Vol. 47, No. 173 / Tuesday, September 7, 1982 / Notices

DEPARTMENT OF THE INTERIOR

Office of the Secretary

National Park Service

DEPARTMENT OF AGRICULTURE

Office of the Secretary

Forest Service

National Wild and Scenic Rivers System; Final Revised Guidelines for Eligibility, Classification and Management of River Areas

AGENCY: National Park Service and Office of the Secretary, Interior; Forest Service and Office of the Secretary, USDA.

ACTION: Publication of final revised guideline.

FOR FURTHER INFORMATION CONTACT: Bob Broclwehl (NPS), 202/272-3566. William R. Snyder (USFS), 202/382-8014.

SUPPLEMENTARY INFORMATION: Guidelines for the study of potential national wild and scenic rivers and management of designated rivers were first issued jointly by the Department of Agriculture and the Department of the Interior in 1970. On January 28, 1981 draft revised guidelines were published in the Federal Register for public comment (Vol. 46, No. 18, pp. 914-9158). The document which follows was prepared after consideration of 50 letters of comment received from other Federal agencies, State governments, private industry, citizens' groups and individuals. Major comments and responses are summarized below. Many of the comments received were not addressed because they related to aspects of the wild and scenic river program beyond the scope of these guidelines. (See Preface of the revised guidelines.)

Comments and Responses

Comment: The definition of the term "outstandingly remarkable value" is too vague and too liberal. Too many rivers will be eligible for designation. Unreasonably constraining economic development of natural resources. *Response:* Balancing of the need for protection versus development of each river area will be considered by the Congress in deciding whether or not to designate the river area. A determination that a particular river is eligible for designation does not necessarily imply that designation is in the national interest.

Comment: The guidelines give inadequate emphasis to public

involvement in the study process.

Response: Public involvement is sufficiently addressed in the context of environmental statements or assessments prepared in the study process.

Comment: The guidelines do not make sufficiently clear which of the management principles apply to private lands. *Response:* The guidelines may be unclear to the general reader in this respect. The management principles are to be implemented throughout each river area to the fullest extent possible under the managing agency's general statutory authorities and other existing Federal, State and local laws, including zoning ordinances where available. Some management principles obviously apply only to Federal lands within the river area. For instance, the Wild and Scenic Rivers Act does not open private lands to public recreation. Management principles may apply to private lands only to the extent required by other laws such as local zoning and air and water pollution regulations.

Comment: Restriction of timber harvest to selective harvest techniques is unnecessarily limiting from both the timber production and the natural resource preservation standpoints. *Response:* The guidelines have been amended in accordance with this comment.

Comment: Specific guidance contained in the 1970 guideline with respect to the granting of rights-of-way for transmission lines is omitted from the revised draft guidelines. *Response:* The subsection on rights-of-way has been amended in accordance with this comment.

Comment: A protected study area extending one half mile from each bank of the river is excessive when the final boundaries of a river area must average no more than one quarter mile from each bank (320 acres per mile). *Response:* The half-mile figure was intended to ensure that all areas likely to be included within the boundaries of a designated river area would be considered in the study process. Setting a study boundary based on the "visual corridor" concept was considered but rejected. The one-quarter-mile figure was finally selected to avoid unnecessary limitations on resource developments. Some developments which may be initiated beyond the one-quarter-mile boundary during the study period might be affected in the future if the river under development is included in the boundaries of the river area designated by Congress.

Comment: Evolution of the study area in its existing condition for classification purposes does not allow

for the fact that a forest area growing in relatively natural condition at the time of the study may be scheduled for clearcutting at some future date. The classification process should allow for authorized and scheduled future uses which could change the condition and, thus, the classification of the river area.

Response: The guidelines have been amended to permit consideration of alternative classifications for the river area where authorized future uses could alter classification.

The following additional changes were made in response to suggestions from the reviewing public or from reviewers within the responsible agencies.

- Unnecessary definitions were deleted.
- Quotations and paraphrases of the Wild and Scenic River Act (including the whole of Section 11-Policy) were eliminated as much as possible. Instead, the guidelines will reference the appropriate sections of the Act where necessary.
- The entire subsection titled "Findings and Recommendations" and portions of the subsection titled "General Management Principles" were deleted and their content was placed in other appropriate sections.

Additional copies of the guidelines, the Wild and Scenic Rivers Act as amended, and further information on the National Wild and Scenic Rivers System may be obtained from: National Park Service, Rivers and Trails Division (780), 440 G Street, N.W., Washington, D.C. 20243.

Dated: July 12, 1982.

G. Ray Amell,

Assistant Secretary for Fish and Wildlife and Parks (Interior).

Deled: August 16, 1982.

Douglas W. MacCieery,

Deputy Assistant Secretary for Natural Resources and Environment (Interior).

Department of Agriculture

Department of the Interior

National Wild and Scenic Rivers System

Guidelines for Eligibility, Classification and Management of River Areas.

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The Wild and Scenic Rivers Act (Pub. L. 95-642 as amended through Pub. L. 96-487)

Preface

The National Wild and Scenic Rivers System

The Wild and Scenic Rivers Act (Pub. L. 95-642 as amended: 18 U.S.C. 1271-1287) established a method for providing Federal protection for certain of our country's remaining free-flowing rivers, preserve them and their immediate environments for the use and enjoyment of present and future generations. Rivers are included in the system so that they may benefit from the protective management and control of development for which the Act provides. The preamble of the Act states:

It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environment, possess outstandingly remarkable scenic, recreational, scientific, historic, cultural, or other similar values, should be preserved in free-flowing condition, and that they and their immediate environment shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy or dam and other construction at appropriate locations of the river or the United States need to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

Addition of Rivers to the System

The Wild and Scenic Rivers Act provides two methods for adding a river to the National Wild and Scenic Rivers System. The first method is by an act of Congress. Congress can designate a river directly or it can authorize a river for study as a potential wild, scenic or recreational river. Upon completion of a study conducted by the Department of the Interior or the Department of Agriculture, a study report is prepared

and transmitted to the President who, in turn, forwards it with his recommendations to Congress for action.

The second method for inclusion of a river in the National System is through the authority granted to the Secretary of the Interior in section 2(a)(ii) of the Act. Upon application by the Governor or Governor of the State or States involved, the Secretary can designate a river as a component of the National System provided that the river has been designated as a wild, scenic or recreational river by or pursuant to an act of the legislature of the State or States through which it flows to be permanently administered as a wild, scenic, or recreational river by an agency or political subdivision of the State or States concerned.

To be eligible for inclusion in the System through either method, rivers must meet certain criteria set forth in section 2(b) of the Act. Procedures for proposing State-administered rivers for designation have been issued by the Department of the Interior.

Tile Guidelines

Subsequent to enactment of the Wild and Scenic Rivers Act in October 1968, the Departments of Agriculture and the Interior initiated studies of twenty-seven rivers which the Act authorized for study as potential additions to the National Wild and Scenic Rivers System. As these studies progressed, it became evident that specific requirements of the Act concerning the evaluation, classification and management of these rivers were subject to differing interpretations within and between the two departments.

It was therefore agreed that a uniform evaluation and management approach should be formulated for use by the two departments, and through a cooperative effort, *Guidelines for Evaluating Wild, Scenic and Recreational River Areas Proposed for Inclusion in the National Wild and Scenic Rivers System Under Section 2, Public Law 95-642* was prepared and promulgated in February 1970.

The guidelines not only provide guidance for the congressionally mandated studies under section 5(a) of the Act, but are also useful for evaluations conducted by water resource development agencies under section 5(d) for States applying for inclusion of State-designated rivers in the national system.

Revision of the Guidelines

While these guidelines were effective throughout a decade, it became clear

that revision was necessary to incorporate changes identified through the need to meet requirements of new laws and regulations. Therefore, on August 1, 1979, the President directed in his Environmental Message that "the Secretary of Agriculture and the Secretary of the Interior should jointly revise their guidelines for evaluating wild, scenic and recreational rivers to ensure consideration of river ecosystems and to shorten the time currently used to study rivers for designation."

This revision of the guidelines has been prepared in response to the President's 1979 directive and includes:

- Clarification of the fact that free-flowing rivers which contain outstandingly remarkable ecological values are eligible for addition to the national system.
- Clarification of the fact that free-flowing rivers in or near urban areas that possess outstandingly remarkable values are eligible for addition to the national system.
- Elimination of the 5-mile minimum length guideline.
- Revision of the definition of sufficient river flow or volume of water in the river. Sufficient flow was not defined in the Act and the definition in the existing guidelines was unnecessarily limiting.
- Revised water quality guidelines to allow inclusion in the system of rivers where restoration to high water quality is planned.
- A revised action plan management of designated river areas.
- A study schedule to accelerate completion of the river studies authorized by Congress.

Section 1-Definitions

The following definitions are provided for the purpose of these guidelines only.

Act: The Wild and Scenic Rivers Act.

Carrying capacity: The quantity of recreational use which an area can sustain without adverse impact on the outstandingly remarkable values and free-flowing character of the river area, the quality of recreation experience, and public health and safety.

Classification criteria: Criteria specified in Section 2(b) of the Act for determining the classification (wild, scenic or recreational) of eligible river segments.

Classification: The process of determining which of the classes outlined in section 2(b) of the Act (wild, scenic, or recreational) best fit the river or its various segments.

outstandingly remarkable value is necessary for eligibility, the study report should carefully document all values of the river area.

In addition to the information required by Section 4(a) and 5(c) of the Act, the section of the report will describe any existing zoning ordinance or other provisions of law governing land use in the study area.

If the study report and the environmental impact statement are combined, the same chapter may describe both the river area and the affected environment. For EIS purposes and for general information, a brief description of the regional setting will also be included.

Determination of Eligibility

Each report will contain a determination as to the eligibility of all portions of the authorized study area.

Section 2(b) of the Act states that "a river area eligible to be included in the system is a free-flowing stream and the related adjacent land area that possesses one or more of the values referred to in section 1, subsection (b) of this Act." The terms "river" and "free-flowing" are defined in section 18 of the act.

In reading and applying the criteria for eligibility, the following points are relevant:

- The fact that a river segment may now be between large impoundments will not necessarily preclude its designation. Such segments may qualify if conditions within the segment meet the criteria.
- Rivers or river segments in or near urban areas that possess outstandingly remarkable values may qualify. Only one outstandingly remarkable value is needed for eligibility.
- In addition to the specific values listed in Section 1(b) of the Act, other similar values, such as ecological, if outstandingly remarkable, can justify inclusion of a river in the national system.
- The determination of whether a river area contains "outstandingly remarkable" values is a professional judgment on the part of the study team. The basis for the judgment will be documented in the study report.
- There are no specific requirements concerning the length or the flow of an eligible river segment. A river segment of sufficient length, if managed as a wild, scenic or recreational river area, the outstandingly remarkable values are protected. Flow is sufficient if they sustain or complement the

outstandingly remarkable value for which the river would be designated.

Classification

Study reports will indicate the potential classification for each eligible river segment viewed in its existing condition. Section 2(b) of the Act states that rivers which are found eligible and included in the National Wild and Scenic Rivers System shall be classified as one of the following:

(1) Wild river areas—Those rivers or sections or rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent the best of primitive America.

These criteria are interpreted as follows:

a. "Free of Impoundments." Wild river areas shall be free of impoundments.

b. "Generally inaccessible except by trail." Wild river areas will not contain roads, railroads, or other provisions for vehicular travel within the river area. The existence of a few inconspicuous roads leading to the boundary of the river area at the time of study will not necessarily bar wild river classification.

c. "Watersheds or shorelines essentially primitive." Wild river areas will show little or no evidence of human activity. Watersheds and watersheds within the river area should be essentially free of structures including such things as buildings, pipelines, powerlines, dams, pumps, generators, diversion works, rip-rap and other modifications of the waterway or adjacent land within the river corridor. The existence of a few inconspicuous structures, particularly those of historic or cultural value, at the time of study need not bar wild classification.

A limited amount of domestic livestock grazing or hay production may be considered "essentially primitive." There should be no row crops or ongoing timber harvest and the river area should show little or no evidence of past logging activities.

d. "Waters unpolluted." The water quality of a wild river will meet or exceed Federal criteria or federally approved State standards for aesthetics, for propagation of fish and wildlife normally adapted to the habitat of the stream, and for primary contact recreation except where exceeded by natural conditions.

(2) Scenic river area—Those rivers or sections or rivers that are free of impoundments, with shorelines or watersheds essentially primitive and shorelines largely undeveloped, but accessible in places by roads.

These criteria are interpreted as follows:

1. "Free of impoundments." Scenic river areas will be free of impoundments.

b. "Shorelines or watersheds still largely primitive." To qualify for scenic classification, the river segment's shoreline and immediate environment should not show substantial evidence of human activity. The portion of the water bed within the boundary of the scenic river may have some discernible existing development. "Largely primitive" means that the shorelines and the immediate river environment still present an overall natural character, but that in places land may be developed for agricultural purposes. Row crops would be considered as meeting the test of "largely primitive," as would timber harvest and other resource use, providing such activity is accomplished without a substantial adverse effect on the natural appearance of the river or its immediate environment.

c. "Shorelines largely undeveloped" means that any structures or concentration of structures must be limited to relatively short reaches of the total area under consideration for designation as a scenic river area.

d. "Accessible in places by road" means that roads may reach the river area and occasionally bridge the river. The presence of short stretches of conspicuous or longer stretches of inconspicuous and well-screened roads or railroads will not necessarily preclude scenic river designation. In addition to the physical and scenic relationship of the free-flowing river area to roads or railroads, consideration should be given to the type of use for which such roads or railroads were constructed and the type of use which would occur within the proposed scenic river area.

(3) Recreational river area—Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

These criteria are interpreted as follows:

a. "Readily accessible by road or railroad." River areas classified as recreational may contain existing parallel roads or railroads in close proximity to one or both banks of the river as well as bridge crossings and roads fording or ending at the river.

b. "Some development along their shorelines." Lands may have been developed for the full range of agricultural and forestry uses, may show evidence of past and ongoing timber

harvest, and may include some residential, commercial or similar development.

c. "Some impoundment or diversion in the past." There may be some existing impoundments, diversions and other modifications of the waterway having an impact on the river area. Existing low dams, diversion works, rip-rap and other minor alterations will not affect recreational classification, provided the waterway remains generally natural and riverine in appearance.

The classification criteria are summarized in Table 2, appended to these guidelines.

There are several points which all participants and observers of the study process should bear in mind when reading and applying the classification criteria:

- o It is important to understand each criterion, but it is more important to understand their collective intent. Each river segment and its immediate environment should be considered as a unit. The basis for classification is the degree of naturalness, or stated negatively, the degree of evidence of man's activity in the river area. The most natural river will be classified wild; those somewhat less natural, scenic, and those least natural, recreational.

Generally, only conditions within the river area determine classification; however, occasionally conditions outside the river area such as development which could impact air and water quality, noise levels or scenic view within the river area, may influence classification. For the purpose of classification, a river area may be divided into segments. Each segment, considered as a whole, will conform to one of the classifications. In segmenting the river the study team should take into account the management strategies necessary to administer the entire river area and should avoid excessive fragmentation.

The Wild and Scenic Rivers Act provides no specific guidance on water quality for scenic and recreational rivers. However, the Clean Water Act has made it a national goal that all waters of the United States be made fishable and swimmable, and provides the legal means for upgrading water quality in any river which would otherwise be suitable for inclusion in the system. Therefore, rivers will not necessarily be excluded from the system because of poor water quality at the time study, provided a water quality improvement plan exists or is being

developed in compliance with applicable State and Federal law.

- o Although each classification permits certain existing development, the criteria do not imply that additional inconsistent development is permitted in the future.
- o The classification criteria provide uniform guidance for professional judgment, but they are not absolute. It is not possible to formulate criteria so as to mechanically or automatically classify river areas. Therefore, there may occasionally be exceptions to some of the criteria. For example, if the study team finds that strict application of the statutory classification criteria would not provide the most appropriate classification for a specific river segment, the study report may recommend for congressional consideration an exception to the classification criteria.

Analysis of the Alternatives

To provide for decisionmaking and to satisfy the requirements of the National Environmental Policy Act, study reports will include an analysis of alternatives. The study team will develop an array of alternative plans encompassing a reasonable proposal for use of the river area including uses which may be incompatible with designation or are a component of the national system. Where appropriate, alternative plans for the river area may be based on, but not limited to:

- Alternative managing agencies for the river area;
- o Alternative protective measures other than national designation;
- o Alternative uses of the area incompatible with designation as a component of the national system; and
- o Alternative classifications for the river area. Occasionally there may be authorized but not yet constructed projects, which if constructed would alter the classification of the river area. In such cases, alternatives may be presented to permit consideration of the river area as it would be classified both with and without the authorized project. Authorized projects may include approved land management plans prepared by a Federal land management agency under its authority.

The study report will present at least one alternative plan calling for national designation through either Congressional or Secretarial designation or all eligible segments or the congressionally authorized study area.

If the study team finds a segment ineligible for designation as a

component of the National Wild and Scenic Rivers System, but still worthy of protection, alternatives for State, local or private preservation may be presented, as well as protection under other Federal programs.

If areas adjacent to the study area have been studied and found eligible, the report may present alternatives which incorporate additional river area proposed for designation. Such expansion of the original study area either in length or in width may be desirable to preserve and facilitate management of river ecosystems, historic or archeological areas or other special areas.

Section III-Management

Wild and scenic rivers shall be managed with plans prepared in accordance with the requirements of title Act, other applicable laws, and the following general management principles. Management plans will state: General principles for any land acquisition which may be necessary; the kinds and amount of public use which the river area can sustain without impact to the values for which it was designated; and specific management measures which will be used to implement the management objectives for each of the various river segments and protect aesthetic, scenic, historic, archeologic and scientific features.

If the classification or classifications determined in the management plan differ from those stated in the study report, the management plan will describe the changes in the existing condition of the river area or other considerations which required the change in classification.

General Management Principles

Section 10(a) states,

Each component of the national wild and scenic river system shall be administered in such a manner as to protect and enhance the values which caused it to be included in the system without, insofar as is consistent therewith, limit other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its aesthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish provisions for protection of the system or the area.

This section is interpreted as stipulating nondegradation and enhancement policies for all designated river areas, regardless of classification. Each component shall be managed to protect and enhance the values for which the river was designated, while providing for public

recreation and resource uses which do not adversely impact or degrade those values. Specific management strategies will vary according to classification but will always be designed to protect and enhance the values of the river area. Land uses and developments on private lands within the river area which were in existence when the river was designated may be permitted to continue. New land uses must be evaluated for their compatibility with the purposes of the Act.

The management principles which follow stem from section 10(a). Managing agencies will implement these principles to the fullest extent possible under their general statutory authorities and existing Federal, State and local laws. Because of these limitations, however, implementation of the principles may differ among and within components of the system depending on whether the land areas involved are federally, State, locally or privately owned.

Carrying Capacity. Studies will be made during preparation of the management plan and periodically thereafter to determine the quantity and mixture of recreation and other public use which can be permitted without adverse impact on the resource values of the river area. Management of the river area can then be planned accordingly.

Public Use and Access. Public use will be regulated and distributed where necessary to protect and enhance (by allowing natural recovery where resources have been damaged) the resource values of the river area. Public use may be controlled by limiting access to the river, by issuing permits, or by other means available to the managing agency through its general statutory authorities.

Basic Facilities. The managing agency may provide basic facilities to absorb user impacts on the resource. Wild river areas will contain only the basic minimum facilities in keeping with the "essentially primitive" nature of the area. If facilities such as toilets and refuse containers are necessary, they will generally be located at access points or at a sufficient distance from the river bank to minimize their intrusive impact. In scenic and

recreational river areas, simple comfort and convenience facilities such as toilets, shelters, fireplaces, picnic tables and refuse containers are appropriate. These, when placed within the river area, will be judiciously located to protect the values or popular areas from the impacts of public use.

Major Facilities. Major public use facilities such as developed campgrounds, major visitor centers and administrative headquarters will, where feasible, be located outside the river area. If such facilities are necessary to provide for public use and/or to protect the river resource, and location outside the river area is infeasible, such facilities may be located within the river area provided they do not have an adverse effect on the values for which the river area was designated.

Motorized Travel. Motorized travel on land or water is generally permitted in wild, scenic and recreational river areas, but will be restricted or prohibited where necessary to protect the values for which the river area was designated.

Agricultural and Forestry Practices. Agricultural and forestry practices should be similar in nature and intensity to those present in the area at the time of designation. Generally, uses more intensive than grazing and hay production are incompatible with wild river classification. Row crop production and timber harvest may be practiced in recreational wild scenic river areas. Recreational river areas may contain an even larger range of agricultural and forestry uses. Timber harvest in any river area will be conducted so as to avoid adverse impacts on the river area values.

Other Resource Management Practices. Resource management practices will be limited to those which are necessary for protection, conservation, rehabilitation or enhancement of the river area resources. Such features as rail bridges, fences, water bars and drainage ditches, flow measurement devices and other minor structures or management practices are permitted when compatible with the classification of the river area and provided that the area remains natural in appearance and the practices or structures harmonize with the

surrounding environment.

Water Quality. Consistent with the Clean Water Act, water quality in wild, scenic and recreational river areas will be maintained or, where necessary, improved to levels which meet Federal criteria or federally approved State standards for aesthetics and fish and wildlife propagation. River managers will work with local authorities to abate activities within the river area which are degrading or would degrade existing water quality.

Additional management principles stem from other sections of the Act as follows:

Land Acquisition: Section 6
Water Resource Development: Section 7
Mining: Section 9
Management of Adjacent Federal Lands: Section 12(a)
Hunting and Fishing: Section 13(a)
Water Rights: Section 13(b)(1)
Rights-of-Way: Section 13(8)

The following policies are consistent with and supplement the management principles stated in the Act:

Land Use Controls. Existing patterns of land use and ownership should be maintained, provided they remain consistent with the purposes of the Act. Where land use controls are necessary to protect river area values, the managing agency will utilize a full range of land-use control measures including zoning, easements and fee acquisition.

Rights-of-Way. In the absence of reasonable alternative routes, new public utility rights-of-way on Federal lands affecting a Wild and Scenic River area or Study area will be permitted. Where new rights-of-way are unavoidable, locations and construction techniques will be selected to minimize adverse effects on scenic, recreational, fish and wildlife and other values of the river area.

Other legislation applicable to the various managing agencies may also apply to wild and scenic river areas. Where conflicts exist between the provisions of the Wild and Scenic Rivers Act and other acts applicable to lands within the system, the more restrictive provisions providing for protection of the river values shall apply.

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Appendix B. Land Tenure Adjustments For Each Management Area By Alternative

LACKS CREEK MANAGEMENT AREA

Alternative 1. Current Management (No Action)
Approximate Acreage For Acquisition

Township, Range	Section	Acres
8N, 3E	27	240
	28	160
	29	240
	33	320
	34	400
7N, 3E	1	80
	2	80
	3	480
	4	240
	5	120
	9	40
	10	80
TOTAL		2,480

LACKS CREEK MANAGEMENT AREA

Alternative 2. Watershed Management/Old-Growth Retention (Preferred Alternative)
 Approximate Acreage For Acquisition

Township/Range	Section	Acres	Township/Range	Section	Acres	
8N, 3E	15	348	8N, 3E	34	560	
	16	665		35	640	
	17	656		36	200	
	18	160	7N, 3E	1	400	
	19	160		2	200	
	20	640		3	520	
	21	640		4	600	
	22	240		5	280	
	23	440		8	120	
	25	160		9	120	
	26	360		10	440	
	27	560		11	320	
	28	640		12	280	
	29	640		13	80	
	30	160		14	240	
	33	600		15	320	
Subtotal		7,069.00	Subtotal		5,320.00	
					TOTAL	12,389.00

RED MOUNTAIN MANAGEMENT AREA

Alternative 1. Current Management (No Action) Approximate Acreage For Exchange/Disposal

The Arcata RMP/EIS (1989) and ROD (1992) did not provide a detailed calculation of acres available for exchange or disposal. The ROD directed that 3,320 acres in the following sections would be assessed for disposal on a case-by-case basis.

- T.4S.,R.5E., HM, Sections 14, 15, 22, 27, 33, 34
- T.5S.,R.5E., HM, Sections 2-4, 8, 14, 15, 17-19,20, 22, and 23
- T.5S.,R.4E., HM, Sections 25-27, 32, 33
- T.24N.,R.15W., MDM, Sections 11, 12
- T.23N.,R.15W., MDM, Sections 17, 18,20

Areas available for disposal are identified generally on Map 2-5 in the ROD.

Alternative 1. Current Management (No Action) Approximate Acreage For Acquisition

The Arcata RMP/EIS (1989) and ROD (1992) did not provide a detailed calculation and legal description of acres to be acquired. The ROD directed that the acquisition of approximately 6,900 acres in the following areas be pursued:

- approximately 3,500 acres of commercial forest land within the management area for forest management;
- up to 2,600 acres of land in the Charlton Creek and Bell Springs Creek watersheds to protect peregrine falcon nesting sites and foraging areas; and
- 900 acres of land along the South Fork Eel River between Elkhorn Ridge and Brushy Mountain to protect riparian values.

RED MOUNTAIN MANAGEMENT AREA

Alternative 2. Watershed Management/Old-Growth Retention (Preferred Alternative)
Approximate Acreage For Exchange/Disposal

Township, Range	Section	Acres
5S,4E	25	120
	26	160
	32	120
	33	40
24N, 17W	22	40
	35	20
24N, 15W	12	40
	11	200
23N, 15W	17	160
	18	40
	20	160
21N, 15W	30	80
TOTAL		1,180.00

RED MOUNTAIN MANAGEMENT AREA

Alternative 2. Watershed Management/Old-Growth Retention (Preferred Alternative)
Approximate Acreage For Acquisition

Township/ Range	Section	Acres	Township/ Range	Section	Acres
22N, 15W, MDM	19	440	23N, 16W, MDM	30	40
	20	80		31	120
22N, 16W, MDM	5	160		32	200
	7	200		33	80
	8	280	23N, 17W	24	160
	9	120		25	640
	16	320		26	160
	17	280		35	160
	20	80		36	640
23N, 16W, MDM	19	80	24N, 15W, MDM	3	800
				4	440
Subtotal		2,040.00	Subtotal		3,440.00
TOTAL					5,480.00

COVELO VICINITY MANAGEMENT AREA

Alternative 1. Current Management (No Action)
 Approximate Acreage For Disposal/Transfer to Forest Service

Under this alternative, the 9,400 acres available for transfer to the USFS includes the Big Butte WSA and BLM lands in the Yolla Bolly/Middle Eel Wilderness.

Alternative 2. Watershed Management/Old-Growth Retention (Preferred Alternative)
 Approximate Acreage For Exchange/Disposal/Transfer

Township, Range	Section	Acres
24N,14W	32	35
23N,14W	33	40
21N,13W	6	29
	18	29
	20	40
21N,14W	12	80
	13	40
22N, 12W	1	40
	11	32
	23	40
	31	28
Subtotal		433.00
Big Butte WSA & BLM lands in Yolla Bolly/Middle Eel Wilderness		9,400.00
TOTAL		9,833.00

SCATTEREDTRACTSMANAGEMENTAREA

Alternative 1. Current Management (No Action)
Approximate Acreage For Acquisition

Township, Range	Section	Acreage
2S,2E	32	200
3S,2E	5	360
	6	80
	8	160
TOTAL		800.00

Alternative 2. Watershed Management/Old-Growth Retention (Preferred Alternative)
Approximate Acreage For Acquisition

Township, Range	Section	Acreage
2S,2E	32	200
3S,2E	5	360
	6	80
	8	160
TOTAL		800.00

Alternative 2. Watershed Management/Old-Growth Retention (Preferred Alternative}
 Approximate Acreage For Exchange/Disposal

Township, Range	Section	Acres	Township, Range	Section	Acres
24.N, 19W.	1	11.03	4N.,4E.	17	40
	3	60.5	9N.,3E.	13	144.67
	10	40		14	24.61
24N., 18W.	3	40		23	17.83
2S., 1W.	10	40		26	41.57
	14	40	4N.,3E.	13	40
	21	80		24	40
	22	40	3N.,2E.	26	40
	24	40	4S., 7E.	4	40
3N.,5E.	18	40		20	120
2N.,5E.	5	43.13		21	40
9N.,4E.	7	46.7	4S.,6E.	7	80
9N.,4E.	8	22.94	3S.,6E.	6	79.91
	9	34.40		23	40
	17	141.20	3S.,5E.	30	44
	18	118.62	2S.,4E.	26	40
7.N,4E.	6	3.31	5S.,3E.	10	40
	7	15.93		11	40
	18	40.00	5S.,2E.	25	40
6N. 4E.	19	40	2S., 1E.	15	40
	30	40		33	40
Subtotal		977.76	Subtotal		1,072.59
TOTAL					2,050.351

Appendix C. Distribution List for Proposed Arcata RMP Amendment and EA

RMP PLAN AMENDMENT SENT TO:

Brenda Bowie, Chairperson, Bear River Band of the Rohnerville
Rancheria
Harry Vaughn
John Swanson
North Coast Area Office, California Coastal Commission
Harry Wilson
John Woolley
Randall Stemler
Gordon and Darlene Conkle
Frances E. Ferguson
susie Van Kirk, Sierra Club, Redwood Chapter, North Group
Lucille Vinyard, Sierra Club, Redwood Chapter, North Group
Diane Beck
Humboldt County Library
William Moores
Marie Hagler
Duane Rigge, Manila Community Services District
Aida Parkinson, Redwood National Park
Robert Kim Browning, Forester, Eel River Sawmills, Inc.
Randy Krahn
Steven Day, Ancient Forest Defense Fund
Peter Ryce, Beginnings, Inc.
Library, College of the Redwoods
Dave Irnper
Thomas N. Stephens, Stephens and Associates
Larry Lalaguna
Kirk Gothier, Humboldt County Planning Department
Planning Department, Humboldt County
Herb Pierce, California Department of Fish and Game
Dave and Donna Rocha
Torn Bunting, Mendocino 4X4's
Robert E. Kleiner, President, Western Timber Services, Inc.
Freeman House
Martha Katelle, Forest Supervisor, Six Rivers National Forest
Vernon R. Bonham, Madrone Realty
Tom Camara
Herb Roth, Director, Red Mountain Association
Robert H. Fallis, Secretary, Redwood Gun Club
Ralph Milner
Duane Shoffner
James Holmes, President, Soper-Wheeler Company
Stan Dixon, Humboldt County Supervisor
Kevin and Yvette McNally, Mendocino 4X4's
Arthur M. Stover
Norbert Riedy, The Wilderness Society
Peter Newton
Tim McKay, Northcoast Environmental Center
California Coastal Commission, Headquarters Office
Dan Chisholm, Mendocino National Forest
Office of Planning Analysis, EPI Center
Jim Eaton, California Wilderness Coalition
Director, Mendocino County Planning Department

RMP PLAN AMENDMENT SENT TO (CONTINUED):

John P. "Jack" Sweeley
Jerry Martien
Steve L. Evans, Friends of the River
Bill and Shirley Robison
Humboldt Buggy Association
Ron Hoover, Sierra Pacific Industries
The Library, Documents Department, Humboldt State University
Fred Horton, Off Road Advertiser
Nicolett Bowler
Yvonne Reynolds, Mother Earth
Hoopa Tribal Forestry
Siskiyou Forestry Consultants
Don Klusman, Field Representative, California 4WD Association
Bill Devall, Earth First!
Mr. and Mrs. Kevin Fogle
Bob Whitney
Jack B. Alderson, Humboldt Bay Harbor District
Environmental Protection Information Center
J. Ehrlich
Mr. and Mrs. Lintz
Craig Miller
Douglas Fir, Government Liaison, Tom Long Watershed Association
Don Lollock, California Department of Fish and Game
Dr. John Sawyer, Botany Professor, Humboldt State University
Dave Kahan, Mattole Forest and Rangelands Cooperative - Soilbankers
Albert Bridges
Ed Katlas
Californians for Alternatives to Taxes
Bernie and Carole Severson
Mark Stickney
Robert Cervantes, Planning Unit Chief, State Office of Planning and
Research
John Jelichich, Planning Director, Trinity County Planning
Department
Aryay Kalaki
Mark Stopher, California Department of Fish and Game
Mattole Restoration Council
Russ Robinson, Humboldt Buggy and ATV Association, Inc.
T. W. Schuette, Resource Buyer, Simpson Timber Company
Frank Reichmuth, Senior Water Quality Engineer, California Regional
Water Quality Control Board
Cecelia Lanman
Ralph D. Milner
Ernie Wolf
National Park Service (MIB 1210), Environmental Quality Division -
774
Joe Russ, President, Covelo Indian Community Council
Mendocino County Planning Department

