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Forest Service

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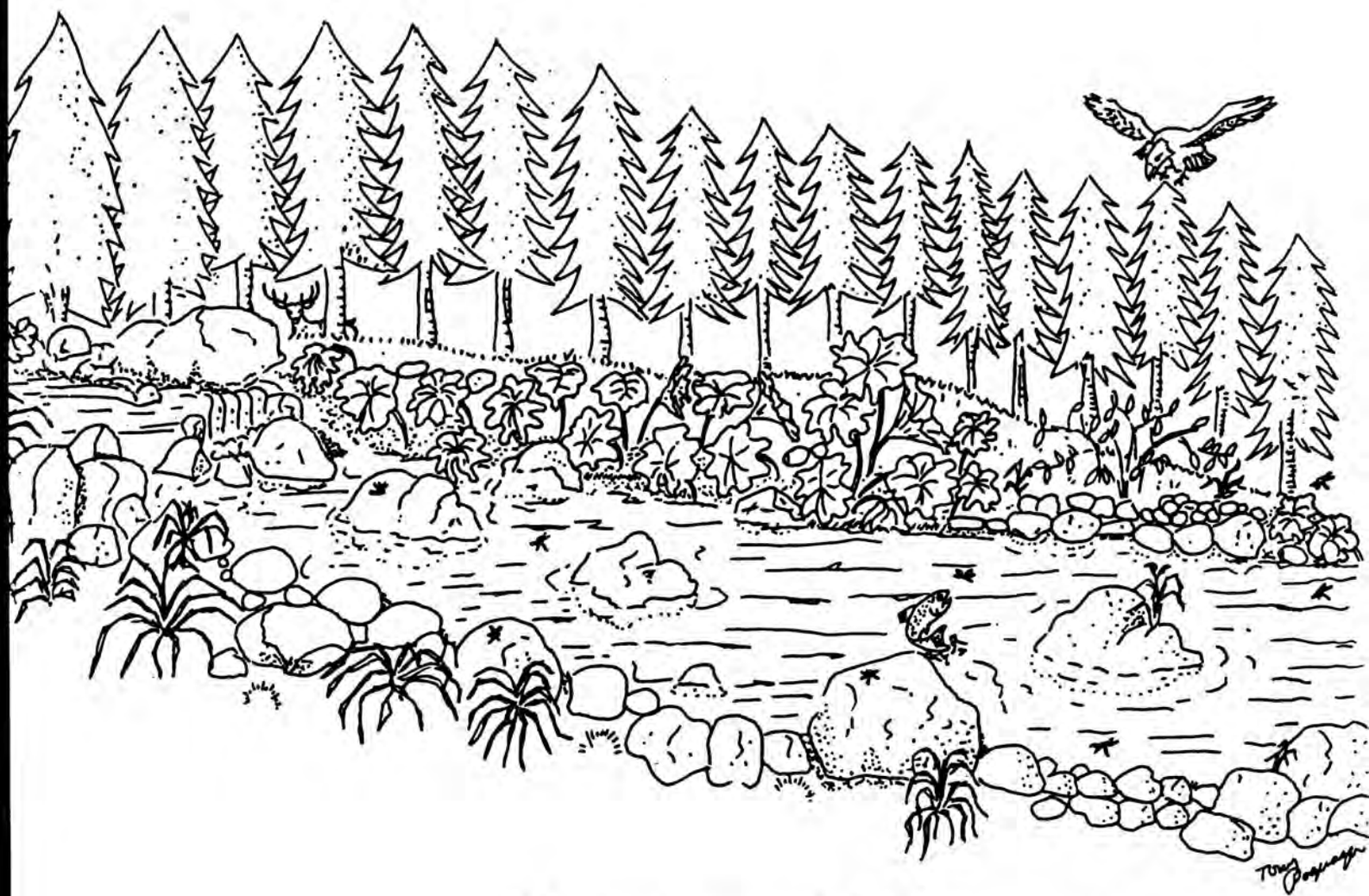
South Fork of the Trinity

Wild and Scenic River



Management Plan

SOUTH FORK OF THE TRINITY

WILD AND SCENIC RIVER

MANAGEMENT PLAN

Trinity and Humboldt Counties, California

United States Department of Agriculture

Forest Service

Shasta-Trinity National Forest, Hayfork Ranger District

Six Rivers National Forest, Lower Trinity Ranger District

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CHAPTER 1

INTRODUCTION

A. Purpose

The purpose of this document is to provide management direction for National Forest System lands within the boundary of the South Fork of the Trinity Wild and Scenic River which lies within the Shasta-Trinity and Six Rivers National Forests. This management direction is specific to the designated section of the river which extends 53 miles from Forest Glen to its confluence with the Trinity River near Salyer. The Standards and Guidelines prescribed in this document focus on protection and enhancement of the outstandingly remarkable value (OR Value) - the anadromous fisheries.

B. History

The California Wild and Scenic Rivers System was created in 1972 to protect "certain rivers which possess extraordinary scenic, recreational, fishery, or wildlife values" and "preserve them in their free-flowing state, together with their immediate environments, for the benefit and enjoyment of the people of the state". The South Fork of the Trinity was selected as one of these rivers and was designated as a component of the California Wild and Scenic Rivers System by legislative act in 1972. In 1980, California Governor Edmund G. Brown Jr. petitioned the Secretary of Interior, Cecil Andrus, to designate the South Fork of the Trinity, along with other rivers in the state system, as National Wild and Scenic Rivers pursuant to section 2(a)(ii) of the National Wild and Scenic Rivers Act. Following public involvement, inter-agency consultation, and NEPA documentation, Secretary Andrus approved the river for inclusion in the National system effective January 19, 1981.

The eligibility evaluation that preceded the designation of the South Fork by the Secretary of the Interior was conducted by the Heritage Conservation and Recreation Service, U.S. Department of Interior. In order for a river to be eligible for designation as a National Wild and Scenic River, it must be free-flowing and possess one or more of the following values to an "outstandingly remarkable degree": Scenic, recreational, geological, fish and wildlife, historic, cultural or other similar values. Once designated, the river and its immediate environment shall be protected for the benefit and enjoyment of present and future generations. The eligibility evaluation report found that the South Fork was at one time, one of the most significant streams in California for spring-run chinook salmon as well as for providing spawning habitat for coho salmon, and steelhead trout. With good watershed management and natural sediment flushing, the potential for the river to restore itself to a very productive fishery was very high. Thus, the South Fork was found to possess potentially high or very high quality anadromous fish habitat and, therefore, to possess outstandingly remarkable fishery values which made the river eligible for designation. The evaluation also noted the rivers significant wildlife values which provide habitat for the bald eagle, a federally designated endangered species.

C. Classifications

The study also classified the individual segments of the river as "Wild", "Scenic", or "Recreational". Classifications were based on the following criteria:

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 the vestiges of primitive America."

2. "Scenic river areas -- Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads."

3. "Recreational 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." (16 USC sec. 1273 (b))

The following are location descriptions and the classifications of the designated segments:

See Figure 1, Location Map

Segment	*Location Description*	*Classification*
1	South Fork from Forest Glen to Hidden Valley Ranch	Wild
2	From Hidden Valley Ranch to Plummer Creek confluence in Section 8, T1N, R7E	Scenic
3	From Plummer Creek confluence to Johnson Creek confluence near the boundary of Sections 13 and 14, T2N, R6E	Wild
4	From Johnson Creek confluence to the boundary of Sections 25 and 36, T3N, R6E	Scenic
5	From the boundary of Sections 25 and 36, T3N, R6E, to the footbridge near the mouth of Underwood Creek	Recreational
6	From the footbridge near the mouth of Underwood Creek to Todd Ranch in Section 18, T5N, R6E	Wild
7.	From Todd Ranch to the confluence with the Trinity River	Scenic

These classifications were adopted by the Secretary of the Interior when he included the river into the National Wild and Scenic Rivers system. The California State Legislature also adopted the segment classifications by amending the California Wild and Scenic Rivers Act in 1982.

D. ***Background***

This management plan is the result of an environmental impact analysis which included public involvement and interagency consultation. The five alternatives that were analyzed were based on varying levels of recreation development and resource improvements as well as varying boundary locations. The alternative selected by the responsible official serves as the foundation for this management plan. This plan will "dovetail" the Forest Land and Resource Management Plans (LRMP's) for both forests. In other words, these documents will be integrated into the LRMP's, and establish the standards and guidelines for the management of National Forest System lands within and adjacent to the river corridor boundary to ensure protection of the OR Value. Environmental analysis of site-specific projects will be tiered to this program document, thus avoiding repetition of information common to each individual project.

The analysis resulted in the selection of the RES alternative as the preferred alternative. The boundary for this alternative was established based on resource criteria provided by the Interdisciplinary Team (IDT). (See Figure 1, Location Map) Critical watershed, fisheries, and wildlife resources were used to determine boundary

location. Recreational opportunities will provide for solitude with an emphasis on a dispersed primitive experience in Wild segments; some opportunities for solitude and isolation as well as opportunities for gregarious activities in Scenic segments; and opportunities for highly gregarious activities in Recreational segments. Recreation development will include maintenance of existing trails and facilities as well as providing for minimal developments in Wild segments. In Scenic and Recreational segments, moderate developments will be allowed. In Wild segments, only use of native materials will be allowed in project areas for resource improvements. These improvements will be natural appearing. In Scenic and Recreational segments, use of native and non-native materials will be allowed. Both natural and manmade appearing improvements will be allowed. Bioenhancement and fisheries habitat enhancement will be allowed in all segments of the river.

The Limits of Acceptable Change (LAC) process was used to set standards for acceptable levels of recreation use as well as resource conditions in order to maintain Wild and Scenic River status based on the classification of the river segments. A description of this process can be found in Appendix B).

The basis of this plan is in response to the issues and concerns generated during the public scoping phase. The issues were:

River Boundaries

Where should the Wild & Scenic boundaries be located, so as to define a river management corridor that will protect the anadromous fisheries habitat?

River Administration

What activities (i.e. timber management, off road vehicles, special uses, grazing, etc.) will be allowed within the river corridor, that are compatible with the wild, scenic and recreational designations?

What effect will the management plan have on private rights, such as land use, water rights, encroachment and land adjustment?

Fisheries

How will the anadromous fisheries habitat be managed?

Watershed

How will water quality be managed, and what effects will activities authorized by the management plan have on water quality?

Wildlife/Botany

How will the management plan affect Threatened, Endangered, Sensitive and Management Indicator plant and animal species, and provide their habitat needs including biodiversity and connectivity?

Visual Resources

How will visual resources be managed as seen from the river?

Facilities

How will existing facilities (i.e. roads, trails, recreation sites, etc.) be managed within the river corridor; and will additional facilities be allowed?

Recreation

What effect will the management plan have on existing recreational uses, and what new recreational opportunities could be provided?

Roadless Areas

How will the plan effect existing roadless areas?

Cultural Resources

What actions will be necessary to protect cultural resources, and statutorily protected Native American practices?

Fire/Fuels

How will fire and fuels be managed within the river corridor?

Minerals

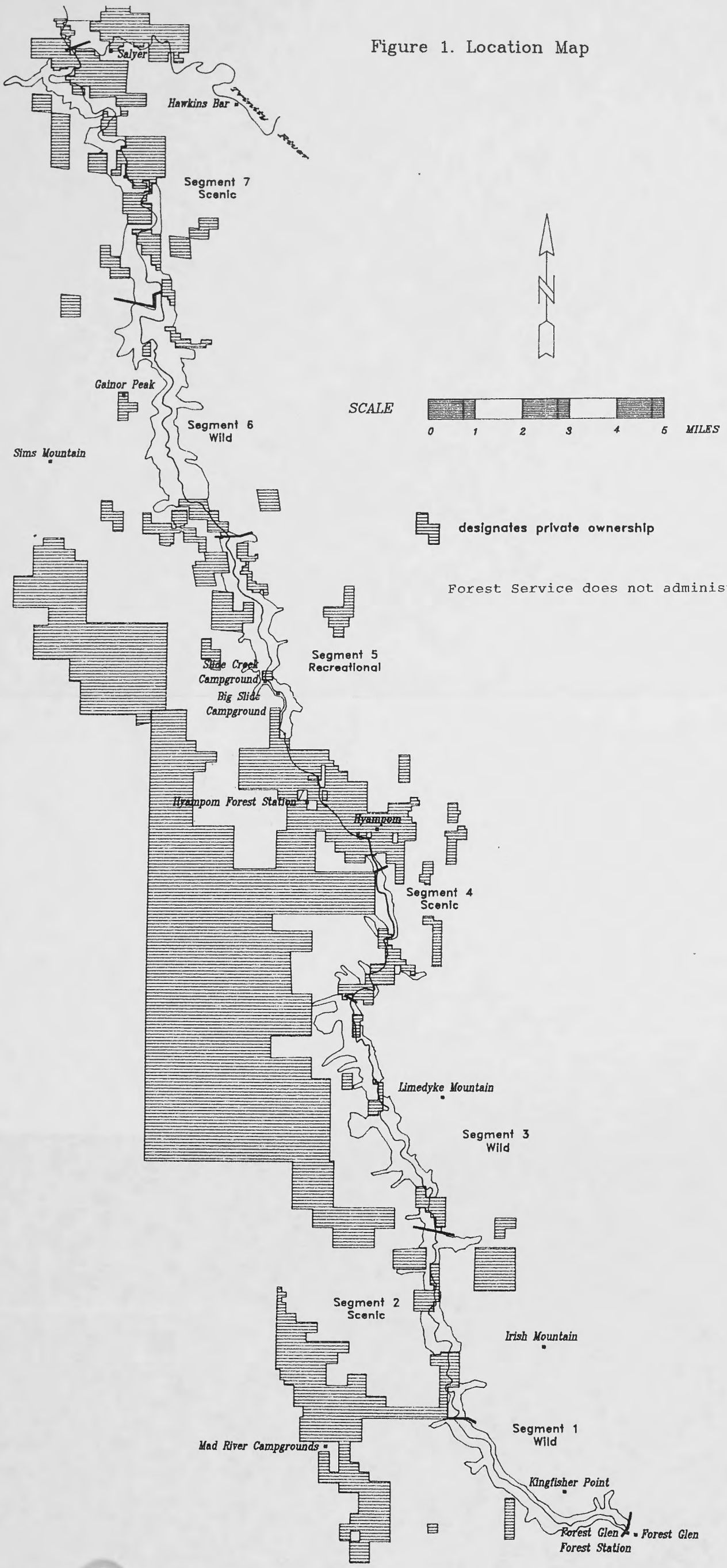
What effect will the management plan have on existing and new mineral development?

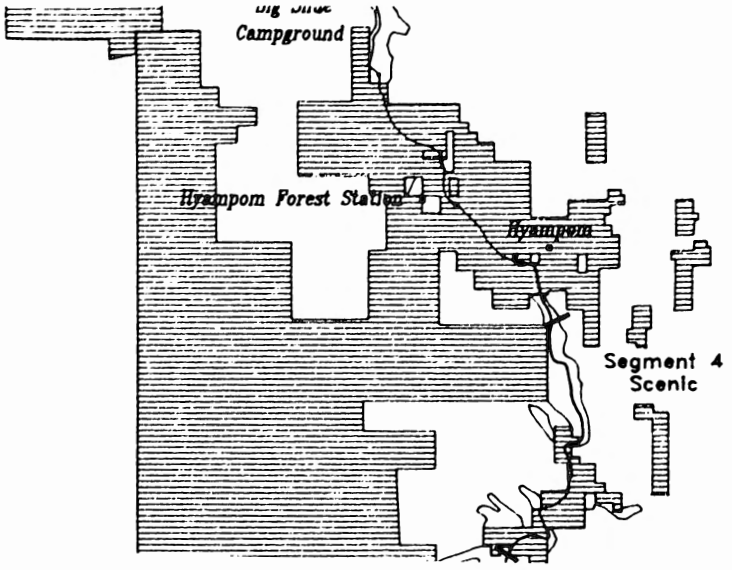
E. Management Plan Objectives

The objective of this Management Plan is:

a) To provide management direction of National Forest System lands within and adjacent to the designated section of the South Fork of the Trinity River to maintain and enhance the anadromous fisheries habitat.
b) To maintain and enhance other values of the river such as scenic, geologic, wildlife, cultural and other similar values for the enjoyment of the public.
c) To define the river corridor boundary;
d) To establish Standards and Guidelines for the three classifications - Wild, Scenic, and Recreational;
e) To supply user demand for recreation with a variety of recreational opportunities;
f) To monitor and evaluate impacts to the river to determine if the Standards and Guidelines in this document adequately protect the OR Value.

Figure 1. Location Map





CHAPTER 2

STANDARDS AND GUIDELINES

This chapter is divided into 4 sections: 1) Standards and Guidelines Common to All Classifications; 2) Standards and Guidelines Specific to Wild segments; 3) Standards and Guidelines Specific to Scenic segments; and 4) Standards and Guidelines Specific to Recreational segments. Opportunities are listed at the end of each section. These opportunities will be implemented as funding becomes available. This plan is not limitied to the opportunities listed in this document. As additional opportunities arise, they will be incorporated and implemented according to Standards and Guidelines prescribed in this plan.

Standards and Guidelines Common to All Classifications

The Standards and Guidelines prescribed below are for the National Forest System lands within the Wild and Scenic River corridor. The Standards and Guidelines provided by this Plan for lands outside the corridor are interim direction. The LRMP Standard and Guidelines will serve to protect the OR Value of the river upon it's implementation. At that time, the interim direction will be superseded by the LRMP.

Criteria that may trigger the need to modify the Standards and Guidelines in this document include:

(1) adverse impacts on the fisheries, recreational uses, visual quality, and cultural resources;
(2) degradation of air or water quality;
(3) adverse impacts on habitat for threatened, endangered, and sensitive species;
(4) loss of soil or vegetation resulting in reduced land productivity;
(5) adverse impacts to others using the National Forests;
(6) new technological changes; and
(7) changes in objectives for managing the National Forests.

Administration

Each Forest will administer and manage the SFTR WSR in their respective Forests.

This management plan will be reviewed for revision at the time of Forest LRMP revision. If revision is necessary prior to LRMP revision, this management plan will be amended.

The Forest Service will assist, advise, and cooperate with other Federal agencies, State agencies, local government agencies, landowners, tribal groups, private organizations, and individuals in projects involving the protection and management of the river resources. Where appropriate and consistent with the overall plan, the Forest Service will seek cooperative funding, partnerships, cost-share agreements, and volunteers to augment appropriated dollars.

Air Quality

The Forests will coordinate with the appropriate air quality regulatory agencies. Prescribed burning operations will comply with the procedures identified in the Open Burning Regulations for California North Coast Air Basin.

Cultural Resources

A cultural resources inventory will be completed for any proposed activities that could affect cultural resources. Results of these inventories will be documented in a project specific Cultural Resources Inventory Report (CRIR). A certified archaeological surveyor, archaeologist, or historian will conduct the cultural resource inventory.

The significance of and effects on inventoried sites will be evaluated by an archeologist or historian. Consultation with the California State Historic Preservation Officer and the Advisory Council on Historic Preservation will take place when needed.

Management strategy for identified cultural resources will be to identify, evaluate, and protect or mitigate adverse effects to cultural resources according to the National Historic Preservation Act, following the regulations and guidelines of the Department of Interior and the Advisory Council on Historic Preservation. Sites requiring protection will be identified by signing and/or flagging prior to implementation of any management activities adjacent to the site.

Proposed projects with potential to affect local Native American cultural values or contemporary uses, or in locations known as traditional Native American spiritual use areas, will be discussed with a cross section of the local Indian population and Tribal Governments. These discussions will take place in the early stages of planning and environmental analysis to identify possible mitigation opportunities or alternatives.

The Forests will allow for access to and use of sacred areas.

Programs and activities will honor Indian treaty rights and fulfill legally-mandated trust responsibilities to the extent they are determined applicable to National Forest System lands.

Programs and activities will be administered with regard for and sensitivity to traditional Indian religious beliefs and cultural practices.

Management strategy for properties on or eligible for the National Register of Historic Places (NRHP) will be to identify, evaluate, and protect or mitigate adverse effects to eligible properties according to the National Historic Preservation Act, following the regulations and guidelines of the Department of Interior and the Advisory Council on Historic Preservation. Historic properties that have not had their eligibility determined will be managed as if they were eligible.

Identify cultural resources in areas of recreation use (i.e. signed) only if visitor use is impairing the site's values or if the site is to be interpreted.

Historic sites could be enhanced or interpreted. They will be managed so that the site is not adversely affected and no hazard is caused to the public. Modifications to historic structures must be compatible with standards and guidelines issued by the Dept. of the Interior and the Advisory Council on Historic Preservation (ACHP).

Fire/Fuels

Restrictions for campfire use will be based on the National Fire Danger Rating system.

Objective will be to control all wildfires in the corridor.

Activity generated fuels within the corridor that remain after meeting resource needs will be considered surplus. The amount and method of disposal will be determined in site-specific project environmental analyses.

Fire prevention signing and patrolling where necessary.

Fisheries

Maintain, improve, and create fish habitat in the SFTR and its tributaries by evaluating and implementing opportunities for stream habitat improvement, watershed restoration and bioenhancement. These projects

will be done in conjunction with programs such as the Model Steelhead Stream Demonstration Project and the Trinity River Restoration Program, and other State and Federal agencies.

Finish assessing the extent of fish habitat in the river and continue to monitor habitat and fish population changes.

Cooperate with the California Department of Fish and Game in the implementation of harvest regulations to protect the fish populations until they are fully recovered.

Consider regulating public fishing access to the river.

Blasting may be used to remove fish barriers caused by landslides or other events that restrict the river channel.

Limit blasting that could adversely affect fish spawning beds to times when eggs and fry are not vulnerable.

Educate the public to the problems of poaching.

Maintain adequate streamside management zones (SMZ's) to provide for future recruitment of Large Woody Debris (LWD).

Perform instream rehabilitation work where necessary.

Enhance or create fish habitat to provide a 40:60 to 50:50 pool:riffle ratio in anadromous fish bearing streams.

All summer steelhead populations will be managed according to the standards prescribed in the 1986 Region 5 Forest Service edition of the "Summer Steelhead Management Guidelines". These guidelines are currently undergoing an update by CDFG.

Any trail or river access construction will be done so as to not open access to sensitive hold areas for adult fish to fishing and poaching.

The Forest Service will work toward restoring and enhancing anadromous habitat under its jurisdiction. The Forest Service recognizes it is the managerial responsibility of the CDGF to restore the fishery population levels and will cooperate with CDFG to work toward this goal.

Land Ownership and Use

No impoundments or diversions allowed on the mainstem.

The Forest Service as managing agency will cooperate fully with private land owners to minimize incompatible uses and potential management problems.

Highest priority for acquisition will be those parcels of land that will most benefit the fisheries resource.

Small Tracts Act

Lands that, if excluded from the South Fork of the Trinity WSR corridor, would qualify for conveyance into private ownership under the Small Tracts Act (STA) will be evaluated for exclusion from the corridor. Private lands offered in exchange or interchange, under the STA, for federal lands within the corridor will be evaluated for inclusion in the corridor. The appropriate Management Plan or Forest LRMP will be amended if it is determined that parcels are appropriate to exclude or include in the

corridor to resolve encroachment cases under the STA while maintaining the integrity of the corridor's purpose to protect the immediate environment.

The following standards would be used to evaluate applications for relief under STA:

1) Applications to purchase lands under STA will be evaluated for exclusion from the SFTR WSR corridor at the same time they are evaluated for conveyance under STA.

2) Applications to exchange or interchange lands under STA will be evaluated for exclusion of the federal lands in the SFTR WSR corridor at the same time they are evaluated for exchange or interchange of said lands under the STA.

3) Evaluations will include an analysis of the affect of the poposed exchange or purchase on the fisheries with preference given to actions which will benefit this OR Value.

Law Enforcement

Increase intensity of law enforcement along the river to prevent poaching, protect wildlife, and monitor recreation user activities.

Mechanized Equipment

Site-specific project analyses will analyze impacts of use of mechanized equipment within the corridor according to NEPA. Mechanized equipment is permitted as long as use will not adversely affect the river. Mechanized equipment will be permitted for all classifications for reasons such as the following:

1) Medical rescue equipment for search or evacuation of dead or severely injured persons or livestock.

2) Aircraft for firefighting and law enforcement.

3) Mineral activities as permitted.

4) Transportation of material, supplies, and personnel for range management activities, if such access has a history of prior use.

5) Control of insects, disease, and other pests interfering with the attainment of recreation development and non-recreation values.

6) Enhancement of cliff faces for peregrine falcon nesting areas.

Mechanized equipment usage allowed in Wild segments are likewise permissible in Scenic and Recreational segments. Usage allowed in Scenic segments are likewise allowed in the Recreational segment.

Private property owners will be allowed continued access to their property by mechanized equipment if deemed necessary by the owners and with approval and consent of the Forest Service.

Mineral Development

Mineral activity will be conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment. Standards, guidelines, and management requirements included in plans of

operations will adequately address the need to protect the fisheries resource. Emphasis will be on minimal disturbance, mitigation requirements, and site restoration.

Plans of Operation should detail potential environmental damage from the operation and propose mitigation as required by the Surface Mining Control and Reclamation Act (1977). Performance bonds will be required.

Save original topsoil to preserve the natural growing medium for plants that will be used to revegetate the spoils.

Reclamation of streams degraded by mining will include rehabilitation and enhancement of fish habitats.

Range

Ensure permittee compliance with allotment management plans.

Consider impacts to the river corridor when developing new allotment management plans. Plans will be developed in accordance with NEPA.

Review vacant allotments for potential impacts to the river corridor before issuing new permits for livestock grazing.

Enhance the forage resource through the use of structural and non-structural improvements as well as stocking rate adjustments.

Mitigate any negative impacts to the resources due to grazing and work with permittees and other livestock users to correct the impacts.

Maintain domestic livestock grazing at levels compatible with other resource needs. Develop proper forage utilization standards during Allotment Management Plan revision using procedures contained in FSH 2209.21.

Develop water sources to meet domestic livestock needs provided they do not conflict with human consumption needs, vested water rights, or fish and wildlife resources.

Permittees are responsible for or share in the funding for projects which enhance range use.

Range allotments will be managed to maintain adequate forage for wildlife species dependent on the resource. Management of the forage resource for big game will be coordinated with livestock use on deer winter range.

Design and construct range fencing within the corridor if compatible with river classification objectives to allow for safe passage of big game (deer, elk, etc.) Consider big game use and movement patterns to minimize impacts on water, food, cover, seasonal ranges, key meadows, and openings.

Manage grazing use so that riparian habitats are maintained or improved. Range use that adversely affects riparian areas will be mitigated.

Develop and revise allotment management plans for active range allotments with the objective of minimizing other resource conflicts and improving forage production. Plans will be developed in accordance with NEPA and mitigation measures carried forward to the grazing permits.

Range land in an unsatisfactory or fair condition will be treated through continued development of improved allotment management, including use of structural and nonstructural range improvements and stocking rate adjustments.

Construct fencing exclosures along sensitive areas of streams with anadromous fisheries habitat, where necessary.

Perform instream rehabilitation work where necessary.

Recreation

An environmental analysis of the effects of proposed recreation facilities installations will be completed prior to installation.

Assess existing facilities for impacts on the OR Value. Relocate if necessary as funding becomes available.

Dispersed campsites and areas of repeated concentrated public use will be identified to determine the need for recreation facilities.

Develop campsite inventory forms to assess and monitor impacts to resources.

Prepare objectives and prescriptions for managing vegetation in and around developed recreation sites.

Inventory the types of recreation use along the river to set base levels of use.

Discourage defacement of natural features along the river and trails.

Other public agencies and educational/scientific institutions should be invited to cooperate in interpreting a full range of natural resource opportunities to the public.

Promote partnerships with user groups and the private sector to assist in the operation, maintenance, and development of recreation sites, facilities, and interpretive services.

Analyze feasibility of barrier free recreation facilities that are accessible to physically challenged individuals then promote their use.

Develop environmental education services through school programs and talks to special interest groups.

Allow commercial outfitting and guiding. Establish a permit system for this use.

Include SFTR WSR in a recreation opportunity guide to be completed for each Ranger District. Highlight the types of recreation opportunities the area provides for the visitor.

Proposed recreation facilities will have site-specific analyses on the OR Value and other resources prior to development according to NEPA.

Developed recreation sites will be maintained to ensure safety for public use and is made enjoyable.

Mitigate the physical impacts of increased dispersed recreation use. Rehabilitation efforts should respond to resource damage. (e.g. soils, water, and vegetation).

Additional Standards and Guidelines that apply to federal lands within the SFTR Basin:

Consider volcanic, seismic, flood, and slope stability hazards in the location and design of administrative and recreation facilities.

Manage, construct, and maintain buildings and administrative sites to meet applicable codes and to provide the necessary facilities for economical resource management.

Inspect bridges at prescribed intervals and provide the maintenance necessary to keep them safe.

Potable water sources and designated swimming areas will be monitored according to the Safe Drinking Water Act and other regulatory health requirements.

Cooperate with CDFG in the implementation of regulatory actions to protect fish populations, such as setting bag limits, setting size limits, setting license quotas, limiting seasons, regulating gear, and limiting access.

Regulate and prohibit certain recreation activities in sensitive areas such as off-road vehicle use, mountain bikes, and campsite locations in sensitive areas.

Educate and involve recreationists in the awareness of how they may influence the fishery, and how they can avoid practices endangering fish habitat.

Manage recreation use to protect key fish habitat during spawning season.

Riparian Areas

Standards and Guidelines that apply to federal lands within the SFTR Basin:

Project plans will identify riparian areas and streamside management zones which will be managed according to Standards and Guidelines in this document as well as Forest Service management direction.

Locate newly constructed roads and trails across streamcourses only in areas where water quality and fisheries values can be protected.

Identify and rehabilitate riparian areas that are in a degraded condition.

Toxic Waste

On notification of a toxic waste spill, each Forest will implement its emergency hazardous material dispatch procedure for toxic waste spills.

Transportation Systems

Roads

Standards and Guidelines that apply to federal lands within the SFTR Basin:

Determine the type and extent of fish habitat before selecting criteria for drainage structure design. Bridges and arch culverts are preferred for streams with migratory fish.

Schedule construction during noncritical times for local fish population. Avoid construction when eggs or alevins are in the gravels downstream, and do not restrict or block streamflow when adult fish are migrating upstream.

Perform road maintenance activities to meet a variety of management objectives. Not all roads will be maintained every year due to unforseeable variations in weather, use, and other factors. Schedule road maintenance activities according to the following priorities: (l) to protect natural resources; (2) to provide for user safety; (3) to meet contractual and legal obligations; and (4) to provide an efficient transportation system.

Assign every road or road segment a specific maintenance level each fiscal year based on traffic management and use objectives. Maintain all Forest roads to at least Maintenance Level 1.

Construct or reconstruct roads so that a stable road prism is established. This includes road cuts and fills and the road surface. Commonly accepted road construction practices that would minimize sedimentation include, but are not limited to: surfacing on the roadway; establishing a vegetative cover on slopes; and installing proper drainage structures.

Use a full range of vegetative management techniques along roads, trails, and transmission corridors with emphasis on nonchemical means.

Closures of roads and/or selected areas, to assist in the management of the Forests' resources, may be made for the following purposes:

--to protect the road surface during the wet season so that maintenance and erosion are reduced;

--to protect wildlife and/or help meet wildlife management objective

--for safety, fire, and general administrative purposes; and

--for special closures per Code of Federal Regulations (CFR).

Make road closures according to pertinent regulations (i.e., 36 CFR 212.7 through 212.12 and 36 CFR 261.53 and 261.54.) In addition, adhere to 36 CFR 261.50 and 36 CFR 261.51, covering closure orders and the posting of those orders.

A public information/education program will accompany any road closure program. Closure areas will be signed for the seasons and periods of closure. The reason for closure, the regulations providing for closure, and the responsible agencies will also be indicated.

Retain Forest roads which will be needed for future activities (beyond one season) such as: timber harvesting, fire protection, recreation management, mining, wildlife, and range. Analyze uninventoried roads to determine whether they should be added to the transportation system or obliterated as time and funding allows.

Coordinate road improvement and maintenance projects with other Forests, State and local agencies, and cooperators, as needed.

Upgrade the surfacing on the Forests' arterial road system.

Trails

Types of trail use will be managed as prescribed by standards and guidelines for each classification. Trail construction and maintenance will follow specifications specified in FSH 2309.18 - Trails Management Handbook for the type of use designated for a section of trail.

Environmental analyses will be conducted to assess impacts on the OR Value and other resources prior to construction.

Assess existing trails for impacts on the OR Value and other resources. Relocate trails if necessary.

Blasting may be used for trail maintenance and construction.

If trails conditions result in negative impacts to soils and vegetation, rehabilitation efforts will be utilized to respond to resource damage. These conditions will be considered negative if the specifications of the trail no longer meet the type of use the trail was constructed for. The following mitigating actions may be implemented: Re-routing the trail; Revegetate the trail; Information and Education; Limit group sizes; Office-issued permits.

Develop a trail inventory form to monitor impacts on the resources.

Standards and Guidelines that apply to federal lands within the SFTR Basin:

Trails will be maintained as needed for specific management objectives. Erosion control and primary access will receive first priority.

Trails and trail bridges will be located, designed, constructed, and maintained so that they are suitable for the type of travel being served.

Trails which go through areas that will be disturbed by management activities shall be temporarily rerouted and then restored as part of the activity cleanup.

Vegetation Including Timber

Silvicultural systems will be selected and designed to minimize adverse effects on the values of the river. Clearcutting will not be a practice within the corridor.

Trees and other vegetation may be cut for use in the construction and maintenance of authorized improvements located within the corridor when it is not reasonably possible to obtain or bring in necessary materials from outside the area.

Re-establish vegetation including tree cover preferably by native vegetation. Preference will be for natural revegetation but artificial revegetation may be allowed.

Fuelwood gathering for campfires will be limited to dead or down material. Where necessary, prescribe restrictions on gathering of wood for fuel.

Pesticide/herbicide use will not be allowed in the corridor.

Additional Standards and Guidelines that apply to federal lands within the SFTR Basin:

Projects involving manipulation of timber and vegetation will be analyzed for effects on biodiversity and connectivity for wildlife in accordance with NEPA.

Analysis of site-specific vegetation management projects will analyze effects of the projects on the OR Value, and will be consistent with the protection and enhancement of the OR Value.

Use of index streams to monitor effects of harvesting activities.

Restore or maintain riparian vegetation on tributary streams at an average 80% shade canopy along the stream corridor to maintain water temperatures.

Tree Removal

In the event of a catastrophic occurrence (fire, flood, or other natural disasters), tree removal will be dealt with in a separate NEPA document.

Sensitive Plants

Survey any sites prior to proposed ground or vegetation disturbing activities.

Develop a multi-year plan to survey the lands within the corridor for sensitive plants. First priority should be given to areas of ultramafic substrates.

Ensure protection of known sensitive plant populations during the development of recreational sites, resource management activities, and from human disturbance.

Map, record, and protect essential habitat for known and newly discovered threatened, endangered, sensitive and where feasible rare plant species until Regional Species management guides are developed. Follow direction in Forest Service Handbook 2609.25 - Threatened and Endangered Plants Program Handbook.

Coordinate threatened, endangered, sensitive and rare plant inventory and protection efforts with the CDFG, USFWS, the Nature Conservancy, the California Native Plant Society, and other concerned agencies and organizations.

Visual Resources

Manage visual resources in the remaining viewshed outside of the designated river corridor as prescribed by the visual quality objectives established in Forest Service management direction.

Utilize appropriate technology in project planning to identify areas seen from the river.

Manage timber to place a special emphasis on scenic values in the area outside of the river corridor as seen from the river.

Watershed Including Geology, Hydrology, and Soils

The following standards and guidelines are prescribed for the lands within fifth order watersheds for the following: Madden Creek, Grouse Creek, Lower S.F. Trinity, Gulch, Hyampom, Lower Hayfork, Butter, Hidden Valley, Plummer Creek, Rattlesnake, Smoky Creek, and Happy Camp Creek (See Appendix I-1).

Condition Class 3 Watersheds: Grouse Creek, Gulch, Hyampom, Butter, Plummer Creek, Rattlesnake. The following is recommended mitigation. Other types of mitigation, determined at the project level, can be substituted as long as the OR Value is protected or enhanced. The mitigation listed for Condition Class 2 and Condition Class 1 basins also applies.

1. No harvest, scheduled or salvage, within 100 to 250 feet or more if necessary, of any perennial watercourse, spring, or other wet area as measured on the slope distance (if topographic conditions are such that 250 feet extends beyond the area of concern and into a smaller

watercourse then the boundary will extend to the drainage divide. Widths should be considered average. All SMZs will fully protect water quality objectives identified in the Klamath River Basin Water Quality Control Plan.

2. From 250 feet to 500 feet of perennial watercourses timber can only be harvested using non-ground based skidding systems. This will be adjusted based on the judgment of the earth science professional at the project level. SMZ's may need to be wider below the contact of the South Fork Mountain Schist and Galice Formation on South Fork Mountain to protect against the high instability level.

3. Alternative methods of timber harvest may be considered to protect long term soil productivity and the valuable high site conditions found on most of South Fork Mountain from the effects of compaction. The total area to be committed to transportation, landings, skid trails, etc. in any given unit or area should be kept at TOC or lower for the respective basin.

4. Any timber harvest activity within these watersheds will occur during the typically nonrainy season period from May 15 to October 15 unless conditions permit otherwise. Each project will be assessed for rain on snow erosion potential.

5. Periodically assess conditions of Class 3 watersheds to assess for recovery and reclassification to a lower class rating.

Condition Class 2 Watersheds: Madden Creek, Lower S.F. Trinity, Hidden Valley, Smoky Creek, Happy Camp Creek. The mitigation listed for Conditon Class 1 basins also applies.

1. Happy Camp Creek and the southern half of Hidden Valley watershed proposed timber management activities will be designed to limit soil compaction to no more than 12%. The total amount of area to be committed to transportation, landings, skid trails etc. should be kept at TOC or lower for the respective watershed.

2. Assess each project for rain on snow erosion potential.

3. Any timber harvest activity within these watersheds will occur during the typically non-rainy season period from May 15 to October 15, unless conditions permit otherwise.

4. Implement full protection of watercourses through application of SMZs with an average allowable width as defined in the standards and guidelines.

Condition Class 1 Watersheds: Lower Hayfork

1. For class 1 watersheds and all areas outside the analysis area, the recommended direction to protect soil and water resources is found in the following mitigation measures to be used as interim management until LRMP's are approved.

Additional Standards and Guidelines that apply to all federal lands within the South Fork Trinity River Basin:

Analyze each land disturbing project for its effect on the appropriate 2nd or 3rd order watershed (average size about 1,000 acres), in order to mitigate excessive cumulative impacts on stream channel condition and water quality.

(1) Determine the sensitivity of each 2nd or 3rd order watershed using soil, geologic and streamflow characteristics.

(2) The threshold of concern (TOC) for a watershed is expressed as the percentage of disturbed or compacted soil area within a total watershed. The Equivalent Roaded Acres (ERA) threshold equals 18 percent in low sensitivity watersheds, 16 percent in moderate sensitivity watersheds, 14 percent in high sensitivity watersheds, and 12 percent in extremely sensitive watersheds. The extremely sensitive watersheds are Hyampom, Happy Camp Creek, and Hidden Valley.

(3) Projects on National Forest system lands should not increase the ERA above the proportional share (depending on land ownership) of the TOC unless, as part of the project, existing ERAs will be reduced or the ERA recovery factor will be improved. Watersheds that are over TOC, regardless of ownership, will not be further impacted unless they can be improved with appropriate mitigation measures.

(4) Coordinate projects with adjoining landowners.

(5) The following table contains recommended average widths for SMZ's on National Forest System lands as measured on the slope distance:

SMZ Widths

SMZ Width For Each Side of Stream (Feet)

Slope/Erosion Hazard	Perennials	Intermittent/ Ephemeral
Less Than 40%/Low-Mod	100	50
Less Than 40%/High	200	75
40% to 65%/Low-Mod	150	75
40% to 65%/High	250	100
Greater than 65%/Low-High (Inner Gorge)	300	100

The above riparian management standards and guidelines are interim management and will be superseded by standardized riparian management guidelines for the Shasta-Trinity, Six Rivers, Mendocino, and Klamath National Forests when these standardized guidelines are adopted.

Management activities within 5th order watersheds, which are in condition class 3, will emphasize watershed improvement and overall reduction in ERA levels.

Implement Best Management Practices (BMPs) for protection or improvement of water quality, as described in "Water Quality Management for National Forest System Lands in California," for applicable management activities. Determine specific practices or techniques during project level planning using information obtained from on-site soil, water, and geology investigations. BMPs will be prescribed on a project by project basis.

Implement Regional Soil Quality Standards and the Forest supplement of the Regional BMPs for areas identified as having highly erodible soils. Specifically, apply the special practices dealing with timber harvest, site preparation, and road construction in highly erodible soils. These will be prescribed on a project by project basis.

Regional Soil Quality Standards, in relation to ground cover, soil organic matter, and soil porosity will be used to protect soil productivity (R5 FSH 2509.22).

Identify and treat areas with a degraded watershed condition in a cost-effective manner and according to beneficial use priorities. High priority items include anadromous fish habitat, domestic use, and Threatened, Endangered and Sensitive species habitat. Improvement activities will be designed to meet Management Area objectives.

Secure water rights for existing and foreseeable future National Forest system consumptive uses.

Give full recognition to the tendency for erosion, mass land movement, and severe watershed damage potential when implementing timber harvest and related land management activities.

Assess the potential impacts of timber harvest, road construction, and related activities on slope stability and watershed condition for areas identified as being moderately or highly unstable.

When watering roads for dust abatement, adhere to the following rules:

(1) Allow drafting from fishery streams only where immediate downstream discharge is maintained at 1.5 cubic feet per second (CFS) or greater.

(2) Allow drafting from ephemeral streams, intermittent streams, wetlands or constructed ponds provided that sufficient water quantity and quality remains to support associated wildlife species and riparian values.

(3) In no case allow drafting to remove more than 50 percent of any stream discharge or 75 percent of constructed pond water.

Wildlife

Provide appropriate wildlife-proof waste facilities at designated campsites to reduce the incidence of negative human-wildlife contact.

Periodically inventory primary habitat components where recreational use is concentrated to assess user impact and take appropriate action if user impact is determined to be adverse.

Review reports of negative campground utilization by wildlife. If the number of incident reports exceeds standards the following mitigating actions may be implemented based on classification.

Wildlife Habitat Management

1. ***Biological Diversity***

To assure distribution across the Forest landscape, manage components of diversity in accordance with the diversity flow chart in Appendix J-6.

Reduce existing deficits of diversity components by 20 percent per decade. If a Management Area or Compartment is below acceptable levels, manage the area so that no further reduction will occur.

Analyze and develop a forest landscape dispersal pattern through the use of the 50-11-40 rule (as described in the ISC Report). Where possible, use the 50-11-40 rule to help meet diversity objectives in areas around natural openings, springs, seeps, lakes, reservoirs, and along streams.

a. *Natural Openings*

Maintain natural openings equal to or greater than one acre in size to benefit wildlife. The need to modify management activities in areas adjacent to these natural openings will be determined at the project level.

Natural openings less than one acre will be evaluated on a site-by-site basis to determine management emphasis.

b. *Cliffs, Caves, Taluses, Rock Outcrops*

Manage these unique habitats on a site-by-site basis to protect their existing microenvironments and the viability of dependent animal and plant species.

c. *Snags*

Maintain snag densities according to standards established for each classification. Manage primarily for groups of snags. However, no more than eight snags per acre can be counted towards the density requirements in order to maintain adequate distribution throughout the compartment. At least 50 percent of these snags should be hard snags. Snags which do not constitute a safety or fire hazard will be left standing if they are needed to meet snag requirements. Snags which exhibit active wildlife use will be favored for retention.

Over time, provide the necessary number of replacement snags to meet density requirements. Live, green culls and trees exhibiting decadence and/or active wildlife use are preferred.

d. *Dead/Down Material*

Maintain unburned dead/down material in the quantity prescribed for each classification. Use the current USDA Technical Report photo series for specific vegetation species to help determine when the standards have been met. During project planning, identify additional areas where small slash piles (about 2 per acre) can be left for wildlife needs.

e. *Seral Stages*

Provide for and maintain at least 5 percent of each vegetative type/seral stage combination shown in Table 1. When determining vegetative type/seral stage conditions for project planning, follow the diversity flow chart in Appendix J. The entire area in each vegetative type should be used for this calculation. Both suitable and unsuitable timber lands should be used to meet these seral stage requirements. Determine specific arrangements (size, distribution, and location) of seral stages for each Management Area in order to meet species viability criteria as shown in Wildlife Habitat Relationship (WHR) models.

Timber Type/Seral Stage Requirements

Minimum Desired Occur %	WHR* Seral Stages	Total % Canopy Closure **	DBH (in)	Seral Stage Description
5	1	≤10	NA	Grass/forb stage consisting of annual and perennial grasses and forbs, with or without scattered shrubs and seedlings.
5	2	≤10	NA	Shrub/Seedling/sapling stage consisting of mixed or pure stands up to 20 feet in height.
5	3a	10-39	5-21	Pole/medium tree stage including larger trees in the size range 20 to 50 feet in height.
5	3b 3c	40-69 ≥70	5-21 5-21	Pole/medium tree stage including larger trees in the size range 20 to 50 feet in height.
5	4a	10-39	21+	Large tree stage corresponding roughly to a mature and overmature classification. Trees generally exceed 50 feet in height, except perhaps some of the oak types at lower elevations. The average age of the stands is generally over 110 years.
5	4b 4c	40-69 ≥70	21+ 21+	Large tree stage corresponding roughly to a mature and overmature classification. Trees generally exceed 50 feet in height, except perhaps some of the oak types at lower elevations. The average age of the stands is generally over 110 years.
5	4c-older	≥70	21+	Multi-layered large tree stage with obvious signs of decadence (older over-mature habitat). At least 2.5 snags per acre and 20 tons of dead/down material should be present. Stands should contain at least 3 trees (alive or dead) per acre over 35 inches dbh. Dominant trees are over 180 years of age

* Wildlife Habitat Relationship (WHR)

** All canopy layers above 10 feet in height (includes conifer and deciduous species) may be used in determining the total canopy closure. The overstory layer should make up at least 40 percent of the total canopy closure in 4b and 4c stands.

f. *Hardwoods*

Apply the following standards in existing hardwood types:

(1) retain at least 90 percent of the existing basal area per acre unless the area is being regenerated for wildlife purposes;
(2) conversion to conifers may take place only in order to meet wildlife objectives.

Where hardwoods occur naturally within existing conifer types on suitable timber lands, manage to provide the number of hardwoods required in management prescription standards.

Timber Type/Seral Stage Requirements

Minimum Desired Occur %	WHR* Seral Stages	Total % Canopy Closure **	DBH (in)	Seral Stage Description
5	1	≤10	NA	Grass/forb stage consisting of annual and perennial grasses and forbs, with or without scattered shrubs and seedlings.
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(1) retain at least 90 percent of the existing basal area per acre unless the area is being regenerated for wildlife purposes;
(2) conversion to conifers may take place only in order to meet wildlife objectives.

Where hardwoods occur naturally within existing conifer types on suitable timber lands, manage to provide the number of hardwoods required in management prescription standards.

Retain groups of hardwoods over single trees.

g. *Corridors*

Provide connecting travel corridors for wildlife species, particularly late seral stage dependent species, by using streamside management zones, the 50-11-40 rule, and management prescriptions with limited or no timber harvest.

1. *Streamside Management Zones (SMZs)*

Streamside Management Zones and riparian corridors will be protected under the standards and guidelines for *Watershed Including Geology, Hydrology and Soils*, and *Riparian Areas*. These standards and guidelines, in addition to protecting soil and water quality, will protect and provide wildlife travel corridors, habitat interspersion, and habitat connectivity within the WSR corridor.

2. ***Chaparral***

Coordinate the planning of chaparral treatment projects with adjacent private landowners and appropriate State and Federal agencies. Optimize multi-resource and multi-agency/owner benefits.

Manage selected chaparral lands to create a mosaic of vegetative conditions and/or age classes.

Assess brushfields for multi-resource management opportunities, and develop project plans for treatment. Selection of specific areas and the treatment methods used will be guided by the following criteria:

(1) The effectiveness of producing multi-resource benefits through modification of the specific vegetation associations;
(2) the cost effectiveness of the project;
(3) the degree of fire protection provided by conversion; and
(4) the risk to watersheds.

Wildlife Species Management

Minimize accidental electrocution of raptors by ensuring that newly constructed overhead power lines meet safe design standards.

Consider transplants, introductions, or reintroductions of wildlife species only after thorough analysis and coordination with other agencies and the public.

Black-Tail and Mule Deer:

(1) Design and construct new roads to minimize potential conflicts.

(2) Where possible, vegetative security/screening cover along heavily used roads or key use areas (meadows, glades, ponds, springs and seeps) should be retained where required by dependent species.

(3) Use seasonal or permanent road closures to reduce disturbance during critical periods such as fawning season.

Black Bear

Use seasonal or permanent road closures to reduce disturbance during critical cub rearing periods in selected black bear areas within designated Wildlife Management Areas.

Other Wildlife Habitat

Manage habitat for neotropical migrant birds to maintain viable population levels.

Micro-habitat conditions (particularly canopy closure) for herpetofauna in occupied sites should be protected/maintained from timber harvest and other ground disturbing activities.

Develop interpretation/view sites for wildlife viewing, photography, and study. Produce pamphlets, slide shows, and other educational material to enhance the program.

Develop additional guzzlers, spring boxes, etc., to improve distribution and availability of drinking water for wildlife.

Threatened, Endangered and Sensitive Species Management

Maintain and/or enhance habitat for T&E species consistent with individual species recovery plan objectives. If an approved plan is not available, all known populations and their occupied habitat will be protected from negative impacts associated with management activities.

Biological evaluations for Endangered, Threatened, Candidate and Sensitive species will be prepared for each project authorized, funded or conducted in the Forests as part of the environmental analysis. This evaluation will determine the effects of the proposed activity on these species and their habitats. A field survey conducted in accordance with the appropriate protocol to determine if a species is present or expected is required as part of the biological evaluation process if prior records for the species or suitable habitat exists in the project area.

Consultation and conferencing requirements with the USFWS will be met in accordance with the Endangered Species Act.

Known nest sites, roost sites, den sites and micro-habitat conditions will be protected. Disturbing activities will be restricted during critical use times (nesting, mating, etc.). Management practices will be designed to ensure that species do not become listed as endangered or threatened because of Forest Service actions.

Protect potential bald eagle and peregrine falcon sites for future occupancy.

Management activities around active goshawk nesting sites outside the goshawk matrix in designated areas should be restricted until the young leave the area. This buffer should include the nest grove or an area about 300 feet around the nest tree.

Maintain and/or enhance northern spotted owl habitat so that it is consistent with Regional Guidelines.

For the Northern Spotted Owl, insure minimum disturbance relative to the spatial distribution of projects and developments by maintaining a 0.5 mile minimum no activity radius around all known nest sites through project planning.

For the Northern Spotted Owl, insure minimum disturbance relative to the temporal occurrence of projects and developments by scheduling those activities outside of the Limited Operating Period,

designed to reduce disturbance during the critical breeding and nesting season and usually occurring February 1 through August 1. This Limited Operating Period *may* be lifted if it is determined that nesting has not occurred by May 15.

If, over a three year period, population trends of known nest territories and activity centers indicate a decline that can be attributed to human activity, whether recreational or managerial, the following mitigating measures may be implemented: Restrict access to territories and activity centers by closing roads via log barriers or gates during critical reproductive periods; Restrict access to territories and activity centers by closing trails during critical reproductive periods; Provide additional key habitat components (broken-topped snags, large diameter down woody material, multi-layered canopy) if the population decline is a result of habitat component loss.

Inventory forested lands within the WSR corridor for northern spotted owls in accordance with Forest Service spotted owl monitoring protocol.

Extirpated Species

Species that are reintroduced into the SFTR basin will be managed in accordance with and protected by CDFG regulation and policy.

Opportunities

Cultural Resources

Inventory areas not previously surveyed within the WSR corridor for Cultural Resources.

Create Cultural Resource interpretive opportunities within the WSR corridor for users. Forest Service actions could include establishing interpretive sites, provide interpretive signing and develop interpretive literature handouts.

Develop partnership opportunities within the WSR corridor for preservation/restoration of recorded Cultural Resources.

Fisheries

Complete fish habitat and salmonid population inventories on anadromous tributaries to the SFTR.

Restore and/or enhance fish habitat in anadromous tributaries to the SFTR.

Restore and/or enhance riparian vegetation in streams tributary to the SFTR and along the SFTR where appropriate.

Recreation

Provide interpretive services by providing information about Wild and Scenic Rivers, recreational opportunities, resource management activities, cultural resources, Threatened and Endangered Species, and other special areas. Provide this service around developed campgrounds and trails.

Sensitive Plants

Survey lands not otherwise inventoried for sensitive and rare plants.

Trails

Determine the feasibility of reconstructing the South Fork Trail from Forest Glen to Hyampom.

Wildlife

Create or improve wildlife interpretive opportunities for users in and around developed campgrounds and trails. Forest Service actions could include providing interpretive signing and trail maps, organizaing and coordinating nature talks and/or guided walks and improving habitat at selected sites for increased wildlife viewing opportunities.

WILD

Management Objective

Segments classified as Wild will be managed for the following desired conditions:

Resource Setting

Wild segments are the most pristine of the three classifications. It is predominantly an unmodified natural environment. The soil, water, fish, wildlife, and vegetation components of the ecosystem within this class are stable and natural processes operate predominantly free of human induced controls, but controls may be used to enhance vegetation, wildlife, and native fish populations. Natural processes are minimally affected by resource management activities. Visitor impacts are rare with minor, temporary disturbances of soils and vegetation in camp areas and along popular hiking routes. Typically, impacts recover on an annual basis. Disturbances are visually subtle and therefore, unnoticeable. Impacts from other resource users are rare and temporary.

Social Setting

This classification provides outstanding opportunities for solitude and isolation from other users. Encounters with other visitors or resource users are rare; whether in camp areas or while traveling. Visitors may travel unregulated and interact with the natural environment. Opportunities to use primitive outdoor skills and experience challenge, self-reliance, and risk are also very high.

Managerial Setting

Management very strongly emphasizes maintaining and, if necessary, enhancing the natural ecosystem and its processes in order to provide a primitive recreation experience. Management strives for use of on-site methods to achieve, maintain, or enhance desired conditions for the area while fulfilling other program responsibilities.

Location Descriptions

Segments 1, 3 and 6 are classified as Wild.

Segment	*Location Description*
1	South Fork from Forest Glen to Hidden Valley Ranch
3	From Plummer Creek confluence to Johnson Creek confluence near the boundary of Sections 13 and 14, T2N, R6E
6	From the footbridge near the mouth of Underwood Creek to Todd Ranch in Section 18, T5N, R6E

Standards and Guidelines Specific to Wild Segments

The following Standards and Guidelines are specific to the Wild segments of the SFTR and are to be used in conjunction with the Standards and Guidelines Common to All Classifications in the management of these segments:

Fire/Fuels

Suppression tactics could utilize natural barriers and favor low impact suppression techniques. Low impact suppression techniques could include favoring handlines as opposed to dozer lines, helicopter water drops as opposed to air tanker retardant drops, and the use of mechanical equipment such as chainsaws and water pumps. Use small camps and staging areas and provide for their return to as near a pre-use condition as possible.

Prevention signing will be posted outside of the corridor.

Land Use and Ownership

Land acquisition will be encouraged in Wild segments. Priority will be for undeveloped land in these segments. Any acquisition will be on a willing seller - willing buyer basis, or by donation.

Special Uses

No new special use permits will be issued and existing special use permits that terminate will be reviewed only if viable alternatives are not available on private land or outside the river corridor.

Hydroelectric Power

Development of hydroelectric power facilities is prohibited.

Utilities

New transmission lines, gas lines, water lines, etc would be discouraged. Where no reasonable alternative exists, additional or new facilities should be restricted to existing rights of way.

Segment 1. If the Pacific Gas and Electric Company transmission line in Segment 1 needs replacement in the future, consideration should be given to relocation outside of this segment.

Flood Control

No flood control dams, levees or other works are allowed. Some minor rip rapping could be allowed if it would not violate the natural-like appearance and essentially primitive character of the river area.

Water Supply

All water supply dams and major diversions are prohibited. Minor natural looking diversion facilities for providing water to livestock or for human use could be permitted if such facilities would not adversely impact wild river values. Unobtrusive flow management and other water management devices could be permitted.

Mineral Development

The Wild segments are closed to mineral entry subject to valid existing rights. Where valid existing rights can be substantiated, standards, guidelines and management requirements included in the plans of operations will adequately address the need to protect the fisheries resource. Emphasis will be on minimal disturbance, mitigation requirements, and site restoration.

Range

Not more than one incident per year of negative campground utilization by livestock should be acceptable. If this standard is exceeded, the Forest Service will work with the permittee to mitigate this impact. The following mitigating actions may be implemented: Relocate livestock, fencing, salting.

Light grazing should be acceptable. If this standard is exceeded, the Forest Service will work with the permittee to mitigate this impact. The following mitigating actions may be implemented: Relocate livestock, disperse livestock.

Recreation

Campsites within the corridor should be primitive in nature. Major public-use areas, such as large campgrounds, interpretive centers or administrative headquarters would be located outside the boundary. Simple comfort and convenience facilities, such as fireplaces, shelters and toilets may be provided as necessary within the river area. These should harmonize with the surroundings.

Recreation development would include maintenance of existing trails and facilities as well as providing for minimal developments which could include some new trail construction, and beach and trail access improvements.

Minimize signing within the corridor.

If the number of dispersed campsites exceeds more than one per mile of river, the following mitigating actions may be implemented: Campsite Obliteration; Contact repeat users and educate them on maintaining desired conditions not only for themselves but also for other users; Changing access conditions.

If defacement to natural features occurs, the following mitigating actions may be implemented: Closing off the site; Obliterating access to the site; Visitor Contact to discourage defacement; Information and Education; or Enforcement

To prevent littering along trails and the river, the following mitigating actions may be implemented: Institute a pack it in - pack it out policy; Information and Education; Visitor contact/enforcement.

At dispersed campsites, if there is an occurrence of more than 100 square feet of barren ground (excluding stock animals), the following mitigating actions may be implemented: Close the site for a period of time; Revegetate the area; Information and Education; Prohibit stock at the campsite; Limit the number of stock per group; Limit group size; Close access to the site.

No other recreation users should be camped at dispersed sites within sight or continuous sound of other recreation users during peak use season. If this standard is exceeded, the following mitigating actions may be implemented: Information and Education; Campsite obliteration; Contact repeat users.

There should be one or fewer trail group encounters per day with other users during the peak use season. If this standard is exceeded, the following mitigating actions may be implemented: Office-Issued permits to regulate use on trails; Limit sizes of groups using the trail; Change trail accesses.

There should be no encounters between recreation users and non-recreation users per day during peak use season. If the standard is exceeded, the following mitigating actions may be implemented: Information and Education; Limit group size of non-recreation users.

Human-caused noise that can't be heard by other recreation users within the corridor should be the acceptable standard for Wild segments. If this standard is exceeded, the following mitigating actions may be implemented: Information and Education; Visitor Contact; Limit Group Sizes.

No more than two incidents per season between different user groups should be acceptable. If this standard is exceeded, the following mitigating actions may be implemented: Information and Education; Limit Group Sizes; Office-Issued Permits.

Interview a sample of visitors regarding their experience. The goal should be that at least 95% of the visitors interviewed should have had a positive river experience. If this standard falls below 95%, the mitigating actions may be implemented based on nature of any negative experience.

Information provided by interpretive services should be made available in areas that access the river such as trail heads, beach accesses.

Recreation Opportunity Spectrum

Management activities will be compatible with Semi-Primitive Non-Motorized Recreation Opportunity Spectrum guidelines.

Resource Improvements

Resource improvements will be limited to the use of native materials in project areas. Improvements will be natural appearing.

Transportation Systems

Roads

Motorized travel only on existing roads. No new roads will be constructed for Forest Service generated activities. May have one or two existing inconspicuous roads leading to the river area for the purpose of providing access to the river. Unobtrusive trail bridges could also be allowed. The access road from the Forest Glen Campground, the Klondike Mine road, and the access road to Mule Bridge will be maintained for river access.

Trails

Trails will be located, designed, constructed and maintained so that they are suitable for foot and horseback travel only according to FSH 2309.18 - Trails Management Handbook. Trail density should provide low frequency of user contact.

Tree Removal

Tree removal will be only in association with a primitive recreation experience or to protect the environment (i.e. public safety hazard reduction, trail construction and maintenance, fire control, insect and disease control).

Vegetation

Retain late seral stage forest stands.

Visual Resources

Manage all Wild segments to meet a visual quality objective of "preservation" in the river corridor. Exceptions meeting a visual quality objective of "retention" will be acceptable for primitive resource improvements or necessary recreation developments.

Wildlife

Segment 1. Prohibit use on the Marble Caves foot trail from March 1 through August 31.

Inventory snag densities in high visitor use and management activity areas. If densities fall below 3 snags per acre due to visitor utilization or management activities the following mitigating actions may be implemented: Girdle and/or blast green trees to create snags; Provide "Animal Inn" literature for recreational users at District Office and at campgrounds on the necessity of snags in forest ecosystems.

Inventory hardwood densities in high visitor use and management activity areas. If densities fall below 30 sq ft Basal Area due to visitor utilization or management activities, the following mitigating actions may be implemented: Plant hardwood root stock or seed with acorns; Provide "Animal Inn" literature for recreational users at District Office and at Campgrounds on the necessity of hardwoods in forest ecosystems.

Inventory down woody material tonnage in high visitor use and management activity areas. If tonnages fall below 30 tons per acre due to visitor utilization or management activities the following mitigating action may be implemented: Replace lost material with cull material generated from harvest activities outside the corridor; Provide "Animal Inn" literature for recreational users at District Office and at Campgrounds on the necessity of woody material in forest ecosystems.

Review reports of negative campground utilization by wildlife. If the number of incident reports exceeds 6 incidents per year, the following mitigating actions may be implemented: Investigate reports and determine exact cause of the negative situation; Provide literature for recreational users at District Office and at campgrounds on methods of "wildproofing" campsites.

Threatened, Endangered, and Sensitive Species

In management areas, maintain 60% to 80% canopy closure.

Opportunities

Segment 1.

Improve river access and clean up garbage at Klondike mine.
Assess Forest Glen road beach access for closure or improvements.
If Pacific Gas and Electric Company transmission line needs replacement in the future, consideration should be given to relocation outside of this segment.

Vegetation

Retain late seral stage forest stands.

Visual Resources

Manage all Wild segments to meet a visual quality objective of "preservation" in the river corridor. Exceptions meeting a visual quality objective of "retention" will be acceptable for primitive resource improvements or necessary recreation developments.

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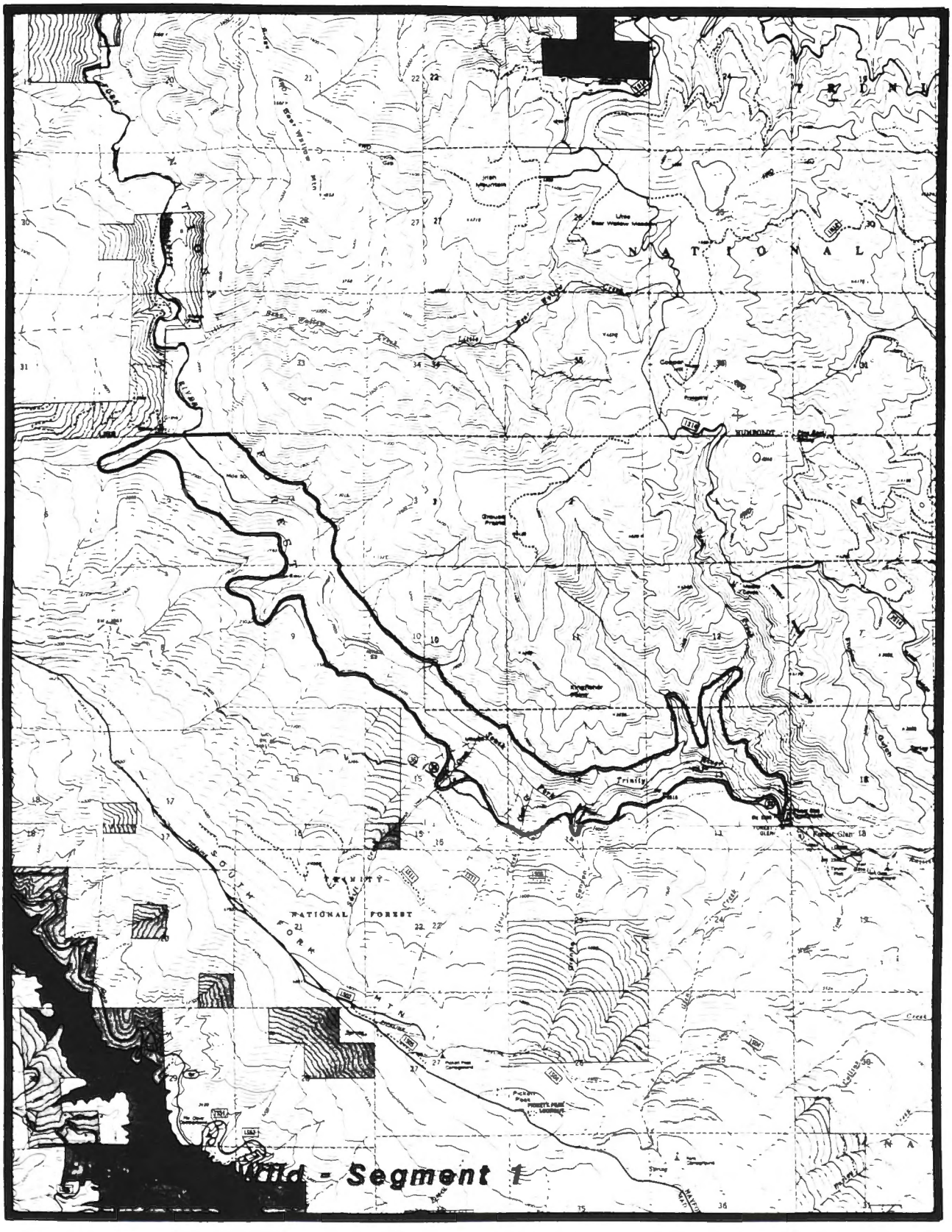
Threatened, Endangered, and Sensitive Species

In management areas, maintain 60% to 80% canopy closure.

Opportunities

Segment 1. Improve river access and clean up garbage at Klondike mine.
Assess Forest Glen road beach access for closure or improvements.
If Pacific Gas and Electric Company transmission line needs replacement in the future, consideration should be given to relocation outside of this segment.

Segment 3.	Improve the French Ranch trailhead and trail.
Segment 6.	Improve river access at Surprise Creek. Acquire Pacific, Gas and Electric Co. land by Grouse Creek Reconstruct the South Fork Trail on the Lower Trinity Ranger District Improve access to Mule Bridge



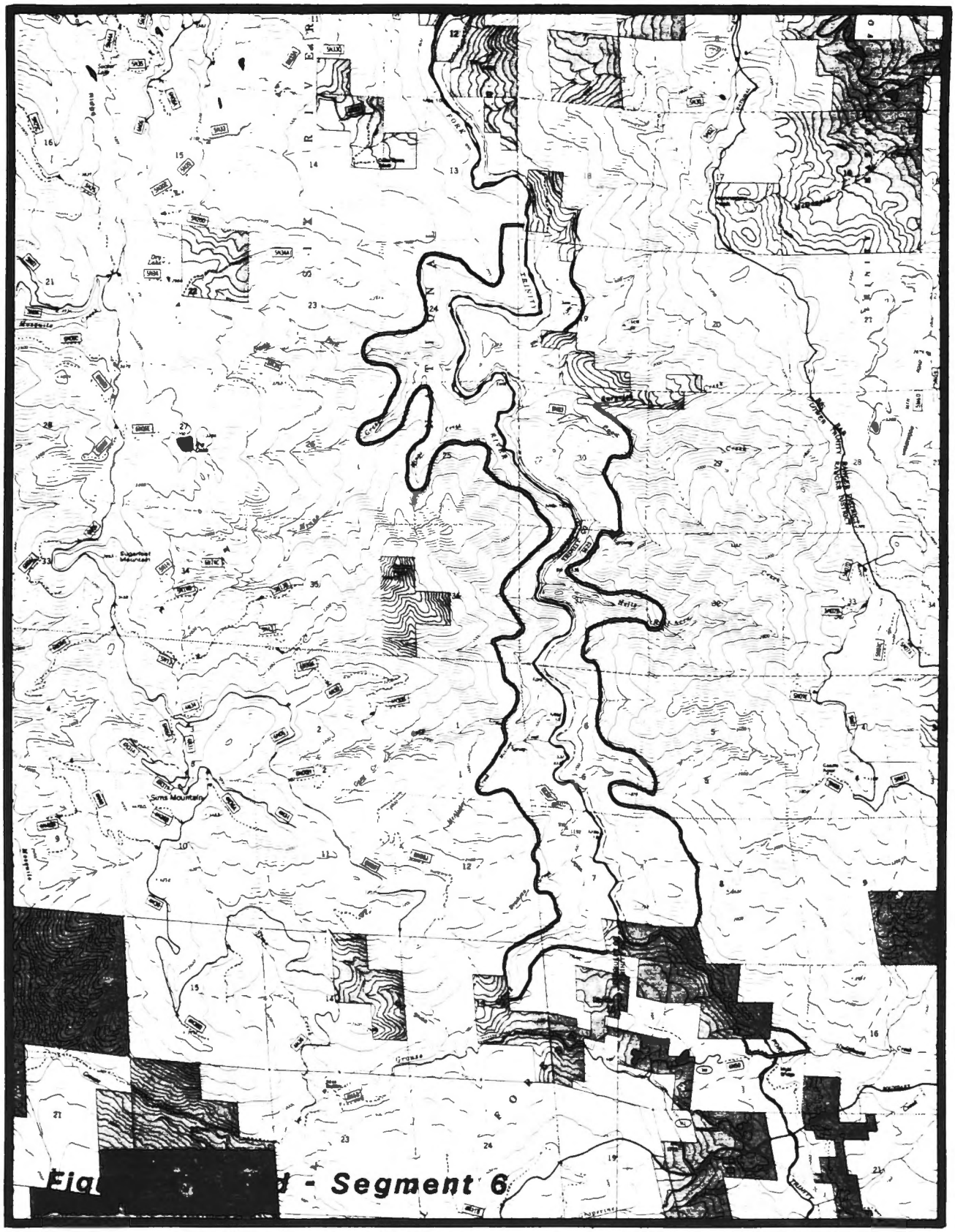


Figure [illegible] - Segment 6

SCENIC

Management Objective

Segments classified as Scenic will be managed for the following desired conditions:

Resource Setting

Scenic segments are a predominantly natural environment. The soil, water, fish, wildlife, and vegetation components of the ecosystem within this class are stable and natural processes operate predominantly free of human induced controls, but controls may be used to enhance vegetation, wildlife, and native fish populations. Natural processes are sometimes moderately affected by resource management activities. Occasionally, visitors impact soil and vegetation in camp areas and along travel routes. Most impacts recover on an annual basis. Disturbances are visually subtle and apparent to only some users. Impacts from other resource users, while few in number, are generally permanent and apparent to more visitors that happen upon them.

Social Setting

Scenic segments provide moderate opportunities for solitude and isolation from others, as well as, opportunities for gregarious activities and day use recreation. Encounters between visitors is moderate during the high use season. Moderate likelihood for visitors to travel unregulated and interact with the natural environment. Opportunities for river-based recreation viewing spectacular scenery and other outdoor experiences are available and accessible with moderate levels of risk.

Managerial Setting

Management focuses on providing river-based recreation experience settings and uniquely developed opportunities. Outside of recreation activities, there are limited resource management activities within the area. Management strives to use methods that contribute to achieving, maintaining, or enhancing the desired recreation conditions, while maintaining resource integrity.

Location Descriptions

Segments 2, 4, and 7 are classified as Scenic.

Segment	*Location Description*
2	From Hidden Valley Ranch to Plummer Creek confluence in Section 8, T1N, R7E
4	From Johnson Creek confluence to the boundary of Sections 25 and 36, T3N, R6E
7	From Todd Ranch to the confluence with the Trinity River

Standards and Guidelines Specific to Scenic Segments

The following Standards and Guidelines are specific to the Scenic segments of the SFTR and are to be used in conjunction with the Standards and Guidelines Common to All Classifications in the management of these segments:

Fire/Fuels

Suppression tactics will favor low impact suppression techniques. Low impact suppression techniques could include favoring handlines as opposed to dozer lines, helicopter water drops as opposed to air tanker retardant drops, and the use of mechanical equipment such as chainsaws and water pumps.

Shaded fuel breaks may be constructed and maintained consistent with Forest-wide direction. Pre-attack facilities are limited to safety zones and helispots. Wildfire suppression camps should be primitive in nature.

Prevention signing is allowed within the corridor.

Land Use and Ownership

Land acquisition will be encouraged in Scenic segments. Any acquisition will be on a willing seller - willing buyer basis, or by donation.

Special Uses

Special use permits will be issued in accordance with current regulation.

Hydroelectric Power

No development of hydroelectric power facilities will be allowed unless such development would not have a direct and adverse effect on the ORV.

Utilities

Where no reasonable alternative exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are indicated, the scenic, recreational, and fish and wildlife values must be evaluated in the selection of the site.

Flood Control

Major flood control dams and levees would be prohibited. Modest channel straightening, rip-rapping and other such modifications could be allowed provided that such works would not have a direct and adverse effect on the river values and not impair the near-natural character of the river area.

Water Supply

All water supply dams and major diversions that would have a direct and adverse effect on the values of the river are prohibited. Modest diversions would be allowed only if there would be no direct and adverse effect on river values.

Mechanized Equipment

Use of the following mechanized equipment will be allowed in Scenic segments:

1) Chainsaws and rock drills.

This is in addition to mechanized equipment use allowed for all classifications.

Mineral Development

New mining claims could be allowed and existing operations allowed to continue. Standards, guidelines and management requirements included in plans of operations will adequately address the need to protect the fisheries resource. Emphasis will be on minimal disturbance, mitigation requirements, and site restoration.

Range

Not more than two incidents per year of negative campground utilization by livestock should be acceptable. If this standard is exceeded, the Forest Service will work with the permittee to mitigate this impact.

Moderate amounts of grazing should be allowed. If this standard is exceeded, the Forest Service will work with the permittee to mitigate this impact.

Recreation

Larger scale public-use facilities such as moderate size campgrounds, public information centers, and administrative headquarters are allowed if such structures are screened from the river. Modest and unobtrusive marinas also can be allowed.

Recreation development will emphasize more development than in Wild segments. These could include maintenance of existing trails and facilities, new trail and mountain bike trail construction, driftboat access, some facilities installation, and interpretive programs.

Signing is allowed along trails and other areas of the river.

Not more than 3 dispersed campsites per mile of river should be acceptable within the river corridor. If the number of campsites exceed this standard, the following mitigating actions may be implemented: Campsite obliteration; Contact repeat users; Changing access conditions; Limit length of stay; Office-Issued Permits

No more than 2 occurrences of defacement of natural features along trails and the river should be acceptable per year. If defacement occurs, the following mitigating actions may be implemented: Closing off the site; Obliterating access to the site; Visitor Contact to discourage defacement; Information and Education; Signing; Enforcement

To prevent littering, the following mitigating actions may be implemented: Institute a pack it in - pack it out policy; Information and Education; Visitor contact/enforcement; Signing; Provide waste disposal facilities.

Not more than 500 square feet of barren ground (excluding stock animals) should be acceptable at dispersed campsites. If this standard is exceeded, the following mitigating actions may be implemented: Close the site for a period of time; Revegetate the area; Information and Education; Prohibit stock at the campsite; Limit the number of stock per group; Limit group size; Close access to the site; Office-Issued Permits.

Not more than one party of recreation users should be camped at dispersed sites within sight or continuous sound of other recreation users during peak use season. If this standard is exceeded, the following mitigating

actions may be implemented: Information and Education; Campsite obliteration; Contact repeat users; Office-Issued Permits; Change access conditions.

There should be 3 or fewer trail group encounters per day with other recreation users during the peak use season. If this standard is exceeded, the following mitigating actions may be implemented: Office-Issued permits to regulate use on trails; Limit sizes of groups using the trail; Change trail accesses; Limit types of use on trails; Allow 1-Way Travel Only on Some Trails

There should be not more than 2 encounters between recreation users and non-recreation users per day during peak use season. If the standard is exceeded, the following mitigating actions may be implemented: Information and Education; Limit group size of non-recreation users.

Human-caused noise that can be heard in the background by other recreation users within the corridor should be the acceptable standard for Scenic segments. If this standard is exceeded, the following mitigating actions may be implemented: Information and Education; Visitor Contact; Limit Group Sizes; Enforcement; Length of Stay Limits.

No more than 4 incidents per season between different user groups should be acceptable. If this standard is exceeded, the following mitigating actions may be implemented: Information and Education; Limit Group Sizes; Office-Issued Permits; Designate user group areas to disperse use.

Interview a sample of visitors regarding their experience. The goal should be that at least 90% of the visitors interviewed should have had a positive river experience. If this standard falls below 90%, the mitigating actions may be implemented based on nature of any negative experience.

Information provided by interpretive services should be made available in areas that access the river such as trailheads, beach accesses, at developed campgrounds, and along trails and the river area.

Recreation Opportunity Spectrum

Management activities will be compatible with Semi-Primitive Motorized Recreation Opportunity Spectrum guidelines. Some sections will be maintained as Roaded Natural.

Resource Improvements

Resource improvements will include the use of native and non-native materials in project areas. Improvements can be natural as well as man-made appearing.

Transportation Systems

Roads

Roads may occasionally bridge the river and short stretches of conspicuous or longer stretches of inconspicuous and well-screened roads could be allowed. Should not include long stretches of conspicuous well-traveled roads closely paralleling the riverbank. Road density for existing and new roads will be planned and managed to insure user contact does not exceed low to moderate levels.

Trails

Trails should be located, designed, constructed, and maintained to allow for foot and horse travel. Specifications should follow those specified in FSH 2309.18 - Trails Management Handbook. Trail density and use will be limited to insure low to moderate freqency of user contact.

Suitable trails and areas may be designated for off-highway vehicle (OHV) and mountain bike use. Such use should be located and scheduled to minimize conflicts with other recreation use and resource needs.

Tree Removal

Tree removal will be primarily for recreation development, stand maintenance and salvage of dead, dying, or high risk trees. A limited amount of salvage regeneration harvest may occur on lands suitable for harvest when not in conflict with protecting values of the river. These regeneration areas will average 5 acres or less.

Vegetation

Vegetation manipulation will be designed to meet recreation and wildlife objectives.

Visual Resources

Manage all Scenic segments to meet a visual quality objective of "retention" in the river corridor. Exceptions meeting "partial retention" will be acceptable for resource improvements and recreation developments.

Wildlife

Inventory snag densities in high visitor use and management activity areas. If densities fall below 3 snags per acre due to visitor utilization or management activities the following mitigating actions may be implemented: Mark remaining snags with metal "Wildlife Tree" signs (#26-3) or paint "SAVE" or "WILDLIFE" in contrasting paint on snag boles; Girdle and/or blast green trees to create snags; Provide "Animal Inn" literature for recreational users at District Office and at developed campgrounds on the necessity of snags in forest ecosystems.

Inventory hardwood densities in high visitor use and management activity areas. If densities fall below 30 sq ft Basal Area due to visitor utilization or management activities, the following mitigating actions may be implemented: Mark remaining hardwoods with metal "Wildlife Tree" signs (#26-3) or paint "SAVE" or "WILDLIFE" in contrasting paint on snag boles; Plant hardwood root stock or seed with acorns; Provide "Animal Inn" literature for recreational users at District Office and at developed campgrounds on the necessity of hardwoods in forest ecosystems.

Inventory down woody material tonnage in high visitor use and management activity areas. If tonnages fall below 20 tons per acre due to visitor utilization or management activities the following mitigating action may be implemented: Mark remaining large down logs with metal "Wildlife Tree" signs (#26-3) or paint "SAVE" or "WILDLIFE" in contrasting paint on snag boles; Replace lost material with cull material generated from harvest activities outside the corridor; Provide "Animal Inn" literature for recreational users at District Office and at developed campgrounds on the necessity of woody material in forest ecosystems.

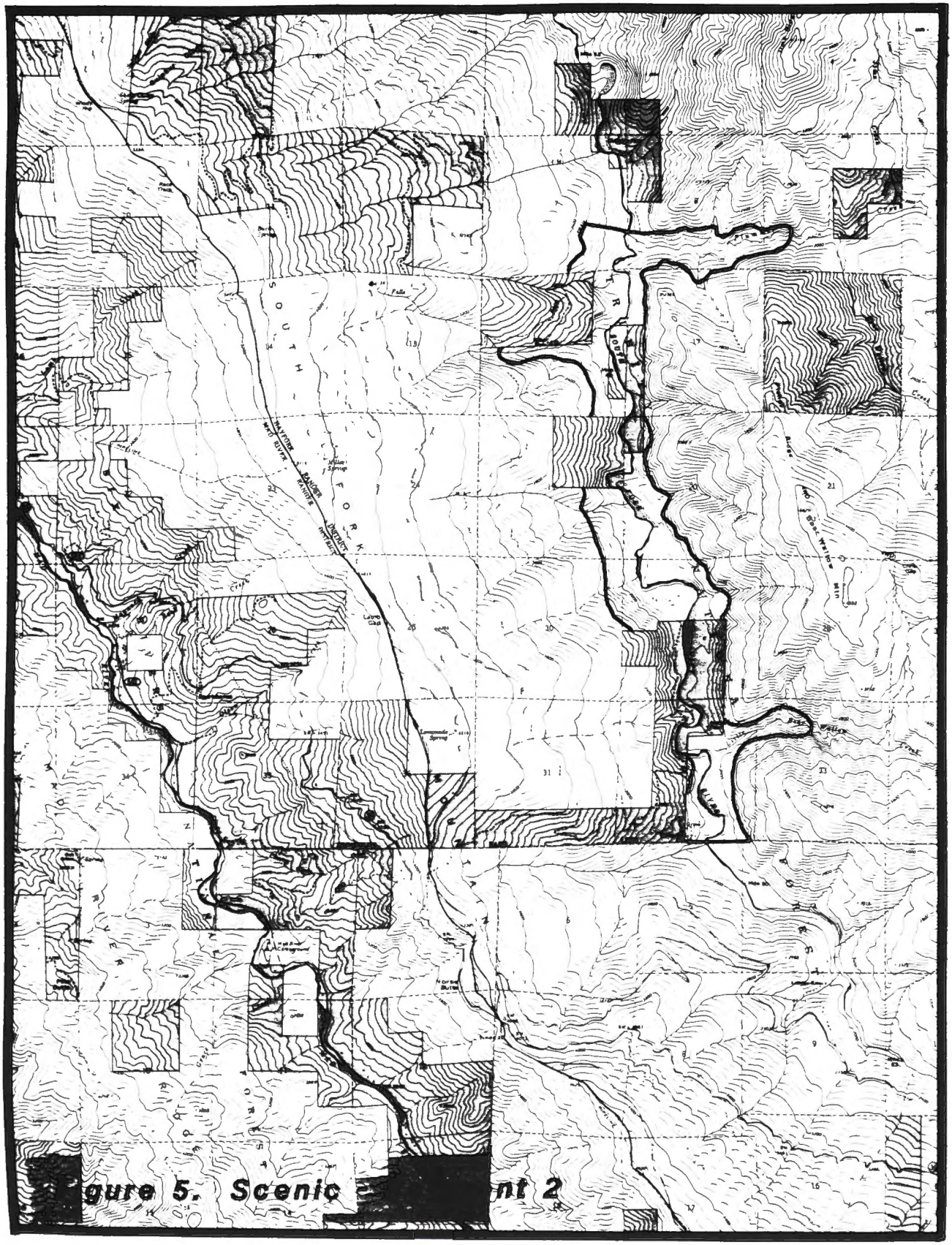
Review reports of negative campground utilization by wildlife. If the number of incident reports exceeds 6 incidents per year, the following mitigating actions may be implemented: Investigate reports and determine exact cause of the negative situation; Provide appropriate wildlife-proof waste facilities at designated campgrounds; Provide literature for recreational users at District Office and at developed campgrounds on methods of "wildproofing" campsites.

Threatened, Endangered, and Sensitive Species

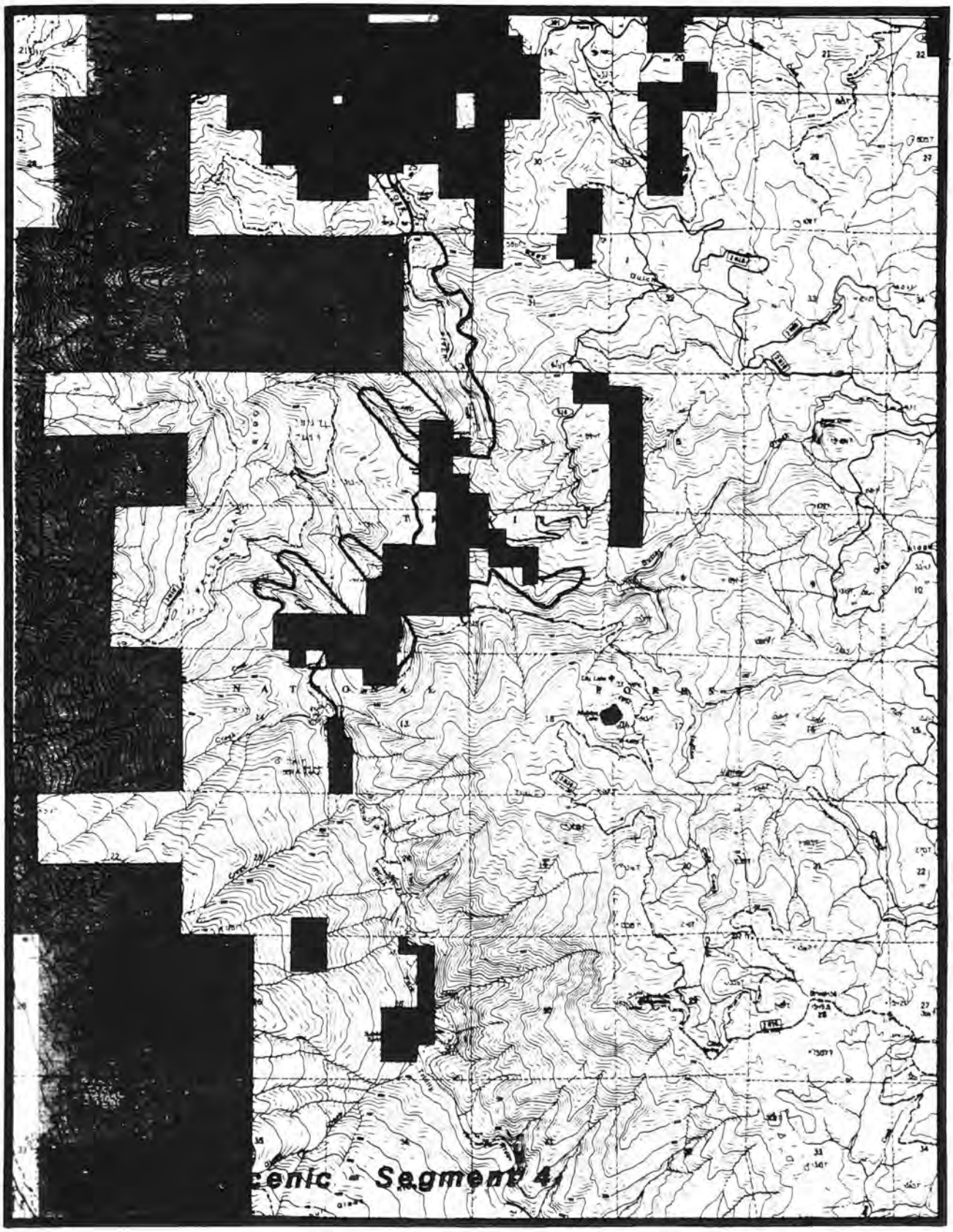
In management areas, maintain 60% to 80% canopy closure.

Opportunities

Segment 2.	Improve access to Porcupine Flat. Watershed/landslide stabilization above Porcupine Flat. Install hatchboxes at Plummer Creek.
Segment 4.	Wintoon Flat trail improvement. Install hatch boxes at Butter Creek.
Segment 7.	Develop campground facilities at Sandy Bar. Resolve the Ammon, Streamfellow, Senter, and Bussell Small Tracts Act cases. Develop river access at Todd Ranch.



gure 5. Scenic nt 2



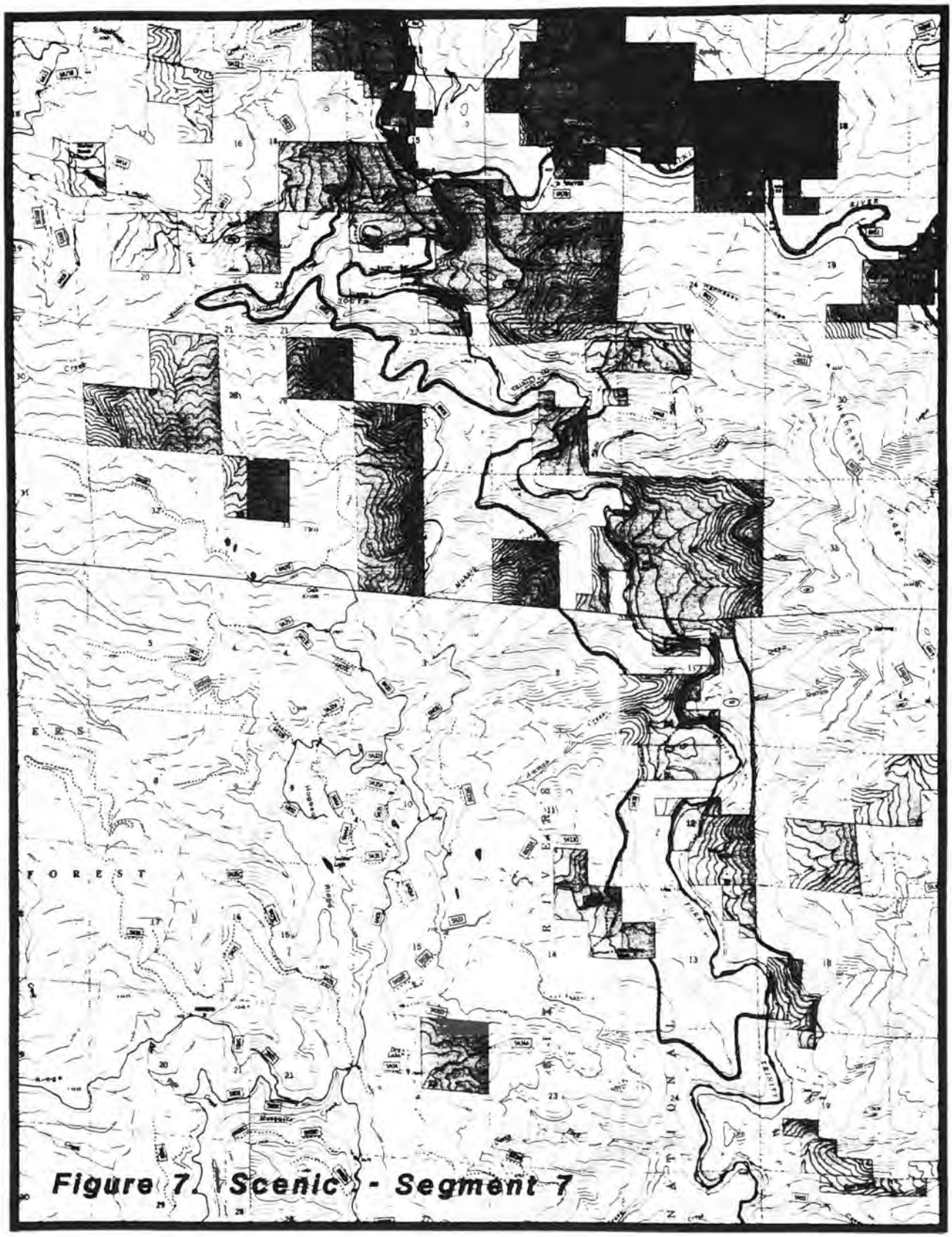


Figure 7 - Scenic - Segment 7

RECREATIONAL

Management Objective

The segment classified as Recreational will be managed for the following desired conditions:

Resource Setting

The Recreational segment is the most developed recreation-oriented class. Focus will be on protection and enhancement of the OR Value (fisheries) while providing a wide variety of river-based and land-based opportunities within a natural environment. The soil, water, fish, wildlife, and vegetation components of the ecosystem are operating within the influence of human activities except for locations with Threatened, Endangered, and Sensitive species. Natural processes moderately affected by resource management activities. Visitors may impact soils and vegetation in camp areas, travel routes, and along the river. Typically, impacts are minor and temporary, but some heavily used areas are heavily impacted on an annual basis. Impacts in most of these areas persist from year to year. Disturbances may be apparent to visitors but acceptable. Developments and impacts from other resource uses are generally permanent and apparent to those who happen upon them.

Social Setting

This classification provides opportunities for highly gregarious opportunities in a modified natural environment. Encounters between visitors are common while in camp areas and traveling. Visitors may encounter a regulated environment. There are opportunities to utilize outdoor skills and river oriented skills in a highly accessible environment with low levels of risk.

Managerial Setting

Management focuses on providing a wide range of recreation experience settings. Management strives to use methods that contribute to the ORV of the river while providing a wide variety of river and land-based recreation opportunities.

Location Descriptions

Segment 5 is classified as Recreational.

Segment	*Location Description*
5	From the boundary of Sections 25 and 36, T3N, R6E, to the footbridge near the mouth of Underwood Creek

Standards and Guidelines Specific to Recreational Segments

The following Standards and Guidelines are specific to the Recreational segment of the SFTR and are to be used in conjunction with the Standards and Guidelines Common to All Classifications in the management of this segment:

Fire/Fuels

Suppression tactics will favor low impact suppression techniques. Low impact suppression techniques could include favoring handlines as opposed to dozer lines, helicopter water drops as opposed to air tanker retardant drops, and the use of mechanical equipment such as chainsaws and water pumps.

Pre-attack facilities should be located in areas of minimum conflict with the prescribed recreation activities.

Prevention signing is allowed within the corridor.

Land Use and Ownership

Acquisition will be on a willing seller - willing buyer basis, or by donation.

Special Uses

Special use permits will be issued in accordance with current regulation.

Hydroelectric Power

No development of hydroelectric power facilities will be allowed unless such development would not have a direct and adverse effect on the ORV.

Utilities

Where no reasonable alternative exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are indicated, the scenic, recreational, and fish and wildlife values must be evaluated in the selection of the site.

Flood Control

New flood control structures are prohibited. Straightening, rip-rapping and other modification of the waterway could be allowed if there would not be a direct or adverse effect on river values. Existing flood control works would be maintained.

Water Supply

Major water supply dams and diversions are prohibited unless there would be no direct and adverse effect on river values.

Mechanized Equipment

Use of the following mechanized equipment will be allowed in Recreational segments:

1) Hand portable yarder as necessary.

This is in addition to mechanized equipment use allowed for all classifications.

Mineral Development

New mining claims are allowed and existing operations are allowed to continue. Standards, guidelines and management requirements included in plans of operations will adequately address the need to protect the fisheries resource. Emphasis will be on minimal disturbances, mitigation requirements, and site restoration.

Range

Not more than two incidents per year of negative campground utilization by livestock will be acceptable. If this standard is exceeded, the Forest Service will work with the permittee to mitigate this impact.

Moderate amounts of grazing will be allowed. If this standard is exceeded, the Forest Service will work with the permittee to mitigate this impact.

Recreation

Campgrounds and picnic areas may be established in close proximity to the river. However, Recreational classification does not require extensive recreation development.

Recreation development would emphasize more development over that in Scenic segments. These could include maintenance of existing trails and facilities, new trail and mountain bike trail construction, driftboat access, off-highway vehicle trails, facilities installation, and interpretive programs.

Signing is allowed along trails and other areas of the river.

Not more than 5 dispersed campsites per mile of river should be acceptable within the river corridor. If the number of campsites exceed this standard, the following mitigating actions may be implemented: Campsite Obliteration; Contact repeat users and educate them on providing the desired recreation objective not only for themselves but also for other users; Changing access conditions; Limit Length of Stay; Office-Issued Permits; Enforcement.

No more than 5 occurrences of defacement of natural features along trails and the river should be acceptable per year. If defacement occurs, the following mitigating actions may be implemented: Closing off the site; Obliterating access to the site; Visitor Contact to discourage defacement; Information and Education; Signing; Enforcement

To prevent littering, the following mitigating actions may be implemented: Institute a pack it in - pack it out policy; Information and Education; Visitor contact/enforcement; Signing; Provide waste disposal facilities.

Not more than 1000 square feet of barren ground (excluding stock animals) should be acceptable at dispersed campsites. If this standard is exceeded, the following mitigating actions may be implemented: Close the site for a period of time; Revegetate the area; Information and Education; Prohibit stock at the campsite; Limit the number of stock per group; Limit group size; Close access to the site; Office-Issued Permits; Enforcement

more than 3 parties of recreation users should be camped at dispersed sites within sight or continuous ınd of other recreation users during peak use season. If this standard is exceeded, the following mitigating ions may be implemented: Information and Education; Campsite obliteration; Contact repeat users; ice-Issued Permits; Change access conditions; Install fire rings to disperse use.

ere should be 5 or fewer trail group encounters per day with other recreation users during the peak use ason. If this standard is exceeded, the following mitigating actions may be implemented: Office-Issued rmits to regulate use on trails; Limit sizes of groups using the trail; Change trail accesses; Limit types of e on trails; Allow 1-Way Travel Only on Some Trails

ıere should be not more than 5 encounters between recreation users and non-recreation users per day ıring peak use season. If the standard is exceeded, the following mitigating actions may be implemented: formation and Education; Limit group size of non-recreation users; Regulate visibility of non-recreation sers during peak use season.

uman-caused noise that can be heard by neighboring recreation users within the corridor should be the cceptable standard for Recreational segments. If this standard is exceeded, the following mitigating actions ıay be implemented: Information and Education; Visitor Contact; Limit Group Sizes; Enforcement; Length f Stay Limits.

lo more than 6 incidents per season between different user groups should be acceptable. If this standard s exceeded, the following mitigating actions may be implemented: Information and Education; Limit Group Sizes; Office-Issued Permits; Designate user group areas to disperse the groups.

nterview a sample of the visitor regarding their experience. The goal should be that at least 85% of the visitors ınterviewed will have had a positive river experience. If this standard falls below 85%, the mitigating actions may be implemented based on nature of any negative experience.

Information provided by interpretive services should be made available in areas such as trailheads, beach accesses, at developed campgrounds, and along trails and the river area.

Recreation Opportunity Spectrum

Management activities will be compatible with Roaded Natural Recreation Opportunity Spectrum guidelines, with a small amount of Rural at the developed campgrounds and minor amounts of Semi-Primitive Motorized.

Resource Improvements

Resource improvements will include the use of native and non-native materials in project areas. Improvements can be natural as well as man-made appearing.

Transportation Systems

Roads

Long stretches of road paralleling the river is allowable. Usually river is readily accessible by road. Roads are normally open to motorized travel but use may be regulated.

Trails

Trails should be located, designed, constructed, and maintained to allow foot, horse travel. Specifications should follow those specified in FSH 2309.18 - Trails Management Handbook. Trail density and use will be limited to insure low to moderate freqency of user contact.

Suitable trails and areas may be designated for off-highway vehicle (OHV) and mountain bike use. Such use should be located and scheduled to minimize conflicts with other recreation use and resource needs.

Tree Removal

Tree removal will be primarily for recreation development, stand maintenance and salvage of of dead, dying, or high risk trees. A limited amount of salvage regeneration harvest may occur on lands suitable for harvest when not in conflict with protecting values of the river. These regeneration areas will average 5 acres or less.

Vegetation

Vegetation management will be designed to meet recreation, visual, and wildlife objectives while maintaining healthy and vigorous stands.

Visual Resources

Manage the Recreational segment to meet the visual quality objectives of "retention" and "partial retention".

Wildlife

Close/gate the road to the Hyampom eagle nest to reduce the threat of disturbance.

Inventory snag densities in high visitor use and management activity areas. If densities fall below 1.5 snags per acre due to visitor utilization or management activities the following mitigating actions may be implemented: Mark remaining snags with metal "Wildlife Tree" signs (#26-3) or paint "SAVE" or "WILDLIFE" in contrasting paint on snag boles; Girdle and/or blast green trees to create snags; Provide "Animal Inn" literature for recreational users at District Office and at developed campgrounds on the necessity of snags in forest ecosystems.

Inventory hardwood densities in high visitor use and management activity areas. If densities fall below 15 sq ft Basal Area due to visitor utilization or management activities, the following mitigating actions may be implemented: Mark remaining hardwoods with metal "Wildlife Tree" signs (#26-3) or paint "SAVE" or "WILDLIFE" in contrasting paint on snag boles; Plant hardwood root stock or seed with acorns; Provide "Animal Inn" literature for recreational users at District Office and at developed campgrounds on the necessity of hardwoods in forest ecosystems.

Inventory down woody material tonnage in high visitor use and management activity areas. If tonnages fall below 5 tons per acre due to visitor utilization or management activities the following mitigating action may be implemented: Mark remaining large down logs with metal "Wildlife Tree" signs (#26-3) or paint "SAVE" or "WILDLIFE" in contrasting paint on snag boles; Replace lost material with cull material generated from harvest activities outside the corridor; Provide "Animal Inn" literature for recreational users at District Office and at developed campgrounds on the necessity of woody material in forest ecosystems.

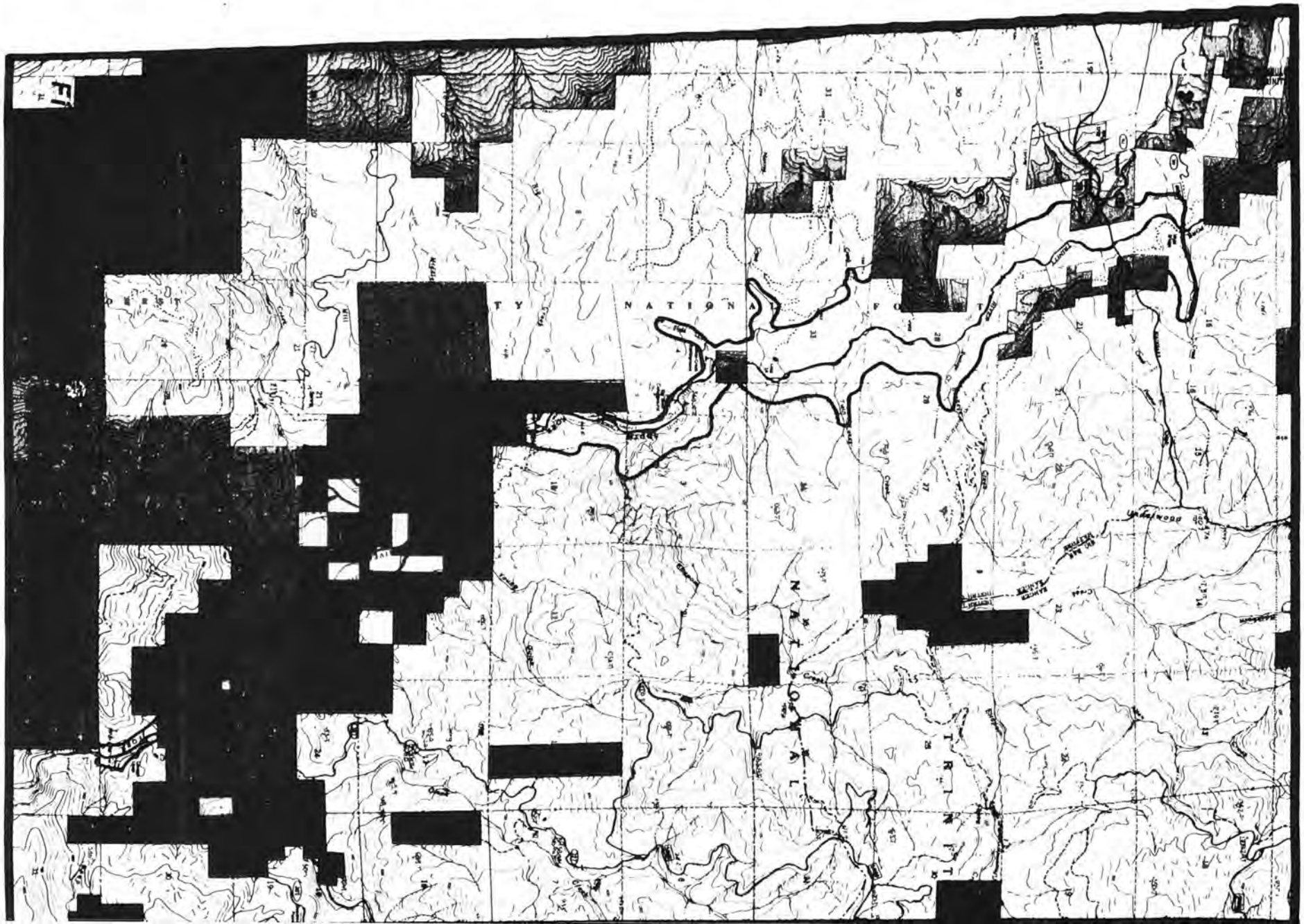
Review reports of negative campground utilization by wildlife. If the number of incident reports exceeds 3 incidents per year, the following mitigating actions may be implemented: Investigate reports and determine exact cause of the negative situation; Provide appropriate wildlife-proof waste facilities at designated campgrounds; Provide literature for recreational users at District Office and at developed campgrounds on methods of "wildproofing" campsites.

Threatened, Endangered, and Sensitive Species

In management areas, maintain 40% canopy closure.

Opportunities

Segment 5.	**Improve the Wintoon trailhead access.** **Assess for watercraft access development.**



CHAPTER 3

MONITORING PLAN

Introduction

Monitoring and evaluating the implementation process, effects, and outputs will determine how well the Management Plan objectives are being met and how closely standards and guidelines are being followed. Monitoring and evaluation, using project environmental analyses, will be used to check for trends of environmental improvement, degradation, and attainment of Management Plan objectives. Significant changes may trigger an administrative review and re-evaluation of the Management Plan.

The Monitoring Plan is divided into four sections:

(1) Monitoring Common to All Classifications
(2) Monitoring Specific to Wild Segments
(3) Monitoring Specific to Scenic Segments
(4) Monitoring Specific to Recreational Segments

The Monitoring Plan Common to All Classifications establishes standards regardless of classification. Monitoring Specific to Wild, Scenic, and Recreational segments are to be used in conjunction with Monitoring Common to All Classifications. This monitoring establishes standards specific to the different classifications. This Monitoring Plan is not limited to the Indicators and Standards listed in this section. Indicators and Standards may be added as needs arise to reflect changing conditions.

Costs for monitoring and plan implementation are not included. They will be determined at the time of actual project planning. Timing of project planning and methodology for project implementation and monitoring will determine these costs. A cost for administrative personnel will need to be included in order to assist in plan implementation and monitoring. Personnel could consist of a river ranger or a recreation technician for a period of 5 months per year.

Monitoring will be required for Fisheries and Watershed. Monitoring for the other resources are prioritized and will be conducted based on availability of funding, or if critical need arises.

Monitoring priority list:

(1) Fisheries and Watershed
(2) Threatened, Endangered, and Sensitive Species
(3) Wildlife
(4) Recreation
(5) Cultural Resources
(6) Transportation Systems
(7) Range
(8) Visual Resources
(9) Noise

MONITORING PLAN
Common to All Classifications

FACTOR	INDICATOR	STANDARD OR OBJECTIVE	MONITORING PROCEDURE	MONITORING PERSONNEL	FREQUENCY	VARIABILITY REQUIRING MANAGEMENT RESPONSE
Cultural Resources	Disturbances of Native American Religious/Sacred Sites	Any disturbances to Native American Religious/Sacred Sites	Field observations, photographic recording	District Archaeologist	Annually or as reported	Evidence of adverse impacts to Native American Religious/Sacred Sites
	Disturbances of Native American Traditional Resource Areas (Not Religious)	Any disturbance to Native American traditional resource areas (Not Religious)	Field observations, photographic recording	District Archaeologist	Annually or as reported	Evidence of adverse impacts to Native American traditional resource areas
	Disturbance on Significant Archaeological Sites	Any adverse impacts on sites determined eligible for listing to the National Register of Historic Places	Field observations, photographic recording	District Archaeologist	Annually or as reported	Evidence of adverse impacts from camping
Fisheries and Watershed	ERA level on private and federal lands in analysis area	Maintain ERA level below Threshold of Concern Value for subwatershed	ERA Analysis and field observations/ calibrations	District Watershed Specialist	Annually and by project	Exceedence of TOC in any subwatershed or indication that sediment dynamics is disequilibrated
	Habitat Ratio between pools and riffles	40% to 60% pools in stream channel	Habitat/Stream channel inventory	District Fisheries Biologist/Watershed Specialist	Every 5 years; Annually in sensitive areas	A trend away from desired percentage of pools
	Change in stream cover	No less than 60% cover in tributary streams	Visual observation	District Fisheries Biologist	Annually	A 10% reduction from standard
Fisheries and Watershed	Changes in stream substrate	30% fines in pool tailouts/riffle crest <6.35mm	Bulk Gravel Sampling	Fisheries Biologist/ Watershed Specialist	3-5 years or after $\geq$5 yr Recurrence Interval storm event	A trend towards a higher percentage of fines
	Stream Water Temperature	Maintenance of Historic Water Temperature	Temperature measurements - Hydrothermograph	District Fisheries Biologist/Watershed Specialist	Daily from May to September or October	Any trend increase from year to year
	Filling of pools or loss of pool habitat	Stable or improving Pool Habitat	Longitudinal Profile	Watershed/Fisheries	3-5 years or $\geq$5 year R.I. storm event	A trend indicating loss of residual pool depth

FACTOR	INDICATOR	STANDARD OR OBJECTIVE	MONITORING PROCEDURE	MONITORING PERSONNEL	FREQUENCY	VARIABILITY REQUIRING MANAGEMENT RESPONSE
	Degree of human impact to riparian vegetation	Maintain or improve	Visual Profile	District Fisheries Biologist; Watershed Specialist or Silviculturist	Annually	A 10% reduction from the standard
Range	Degree of livestock impact to riparian vegetation	Maintain or improve	Visual observation	District Fisheries biologist; Watershed specialist; or Silviculturist	Annually	A 10% reduction from standard
	Range trend	Static or improving range condition	Visual Observation	Range Manager	Annually	Decreased Range Condition
Threatened, Endangered, and Sensitive Species	Wildlife Populations	Greater than or equal to current population numbers over a 3 year period	Use established inventory protocol	District Wildlife Biologist	Annually	Populations fall below the standard.
	Degree of human influence on sensitive plant populations	Maintain or improve sensitive plant population numbers	Record quantity of individuals and the size of the area they occupy	Botany Specialist	Annually	Any decrease in sensitive plant populations that is not attributable to natural causes
Transportation Systems	Trail Conditions	Meets specifications for the type of use the trail was constructed for.	Visual Observation	District Resource Officer, Recreation Technician	Annually	A 10% increase from standard
Visual Resources	Visual Resource Monitoring Plan	Compliance with the Plan and Forest LRMPs for VQO	Establish photo points	Landscape Architect	Every 5 years	Any decrease in VQO class

MONITORING PLAN
Specific to Wild Segments

FACTOR	INDICATOR	STANDARD OR OBJECTIVE	MONITORING PROCEDURE	MONITORING PERSONNEL	FREQUENCY	VARIABILITY REQUIRING MANAGEMENT RESPONSE
Cultural Resources	Archaeological Site Surface Disruption	Any site surface disruption	Field observations, photographic recording	District Archaeologist	Annually or as reported	Evidence of surface impacts
	Archaeological Site Vandalism	Any site vandalism	Field observations, photographic recording	District Archaeologist	Annually or as reported	Evidence of site vandalism
Noise	Human-Caused noise heard by other recreation users within the corridor	Can't be heard by other recreation users	# of Complaints to District Office, Exit Interviews	District Resource Officer	Annually	More than 1 complaint is filed.
Range	Negative campground utilization by livestock	Not more than 1 allowed	Visual counts, # of complaints	Range Manager	Annually	More than 1 incident per year
	Forage Utilization	Light grazing allowed	Visual Observation	Range Manager	Annually	Moderate to Heavy grazing
Recreation	# of Dispersed Campsites within the Corridor per Mile of River	Not more than 1 allowed	Visual Count	District Resource Officer	Annually	More than 1 new campsite per mile of river
	Defacement of Natural Features along Trails and the River	None allowed	Visual observation	District Resource Officer/Law Enforcement	Annually	Any occurrence of defacement.
	Barren ground at dispersed campsites (Excluding stock animals)	No more than 100 sq ft of barren ground	Measure	District Resource Officer	Annually	More than 100 sq ft of barren ground per dispersed campsite

FACTOR	INDICATOR	STANDARD OR OBJECTIVE	MONITORING PROCEDURE	MONITORING PERSONNEL	FREQUENCY	VARIABILITY REQUIRING MANAGEMENT RESPONSE
Recreation	Number of other recreation users camped at dispersed sites within sight or continuous sound of other recreation users.	No parties of recreation users will be camped within site or sound of other recreation users	Visual Count, Exit Interviews	District Resource Officer	Annually	Greater than 20% variance from standard
	Number of trail encounters per day	Not more than 1 trail group encounter per day with other users	Visual Counts, Exit Interviews	District Resource Officer	Annually	Greater than 20% variance from the standard
	Number of encounters between recreation users and non-recreation users per day	No encounters	Visual Counts, Exit Interviews	District Resource Officer	Annually	Greater than 10% variance from the standard
	Conflicts between user groups	Not more than two incidents per season	# of Complaints to the District Office, Exit Interviews	District Resource Officer, Law Enforcement	Annually	More than 2 incidents per season
	Level of River Experience	95% of visitors interviewed had a positive river experience	Exit Interviews, User Survey Forms	District Resource Officer	Annually	Greater than 5% variance from previous years results.
Wildlife	Snag Densities	3 Snags/Acre	Visual Count	District Wildlife Biologist	Annually	Snags/acre is less than the standard.
	Hardwood Densities	30 sq ft BA	Measurement	District Wildlife Biologist	Annually	Hardwood densities fall below the standard.
	Down Woody Material	30 tons/acre	Measurement	District Wildlife Biologist	Annually	Tons/acre falls below the standard.
	Negative campground utilization by Wildlife	6 incident reports/year	Visual observation, # of Complaints	District Wildlife Biologist	Annually	4 incident reports/year

MONITORING PLAN
Specific to Scenic Segments

FACTOR	INDICATOR	STANDARD OR OBJECTIVE	MONITORING PROCEDURE	MONITORING PERSONNEL	FREQUENCY	VARIABILITY REQUIRING MANAGEMENT RESPONSE
Cultural Resources	Archaeological Site Surface Disruption	Any site surface disruption	Field observations, photographic recording	District Archaeologist	Annually or as reported	Evidence of surface impacts
	Archaeological Site Vandalism	Any site vandalism	Field observations, photographic recording	District Archaeologist	Annually or as reported	Evidence of site vandalism
Noise	Human-Caused noise heard by other recreation users within the corridor	Can be heard in the background by other recreation users	# of Complaints to District Office, Exit Interviews	District Resource Officer	Annually	More than 2 complaints filed per season.
Range	Negative Campground Utilization by Livestock	Not more than 2 allowed	Visual Counts, # of complaints	Range Manager	Annually	More than 2 incidents per year
	Forage Utilization	Moderate grazing allowed	Visual observation	Range Manager	Annually	Heavy Grazing
Recreation	# of Dispersed Campsites within the Corridor per Mile of River	Not more than 3 allowed	Visual Count	District Resource Officer	Annually	Greater than 2 new campsites.
	Defacement of Natural Features along Trails and the River	No more than 2 occurrences acceptable per year	Visual observation	District Resource Officer/Law Enforcement	Annually	1 occurrence of defacement
	Barren ground at dispersed campsites (Excluding stock animals)	No more than 500 sq ft of barren ground	Measure	District Resource Officer	Annually	More than 500 sq ft of barren ground per dispersed campsite.

FACTOR	INDICATOR	STANDARD OR OBJECTIVE	MONITORING PROCEDURE	MONITORING PERSONNEL	FREQUENCY	VARIABILITY REQUIRING MANAGEMENT RESPONSE
Recreation	Number of other recreation users camped at dispersed sites within sight or continuous sound of other recreation users.	Not more than 1 party of recreation users will be camped within site or sound of other recreation users	Visual Count, Exit Interviews	District Resource Officer	Annually	Greater than 20% variance from standard
	Number of trail group encounters per day	Not more than 3 trail encounters per day with other users	Visual Counts, Exit Interviews	District Resource Officer	Annually	Greater than 20% variance from the standard
	Number of encounters between recreation users and non-recreation users per day	No more than 2 encounters per day	Visual Counts, Exit Interviews	District Resource Officer	Annually	Greater than 10% variance from the standard
	Conflicts between user groups	No more than 4 incidents per season	# of Complaints to the District Office, Exit Interviews	District Resource Officer, Law Enforcement	Annually	4 incidents per season
	Level of River Experience	90% of visitors interviewed had a positive river experience	Exit Interviews, User Survey Forms	District Resource Officer	Annually	Greater than 10% variance from previous years results.
Wildlife	Snag Densities	3 Snags/Acre	Visual Count	District Wildlife Biologist	Annually	Snags/acre is less than the standard.
	Hardwood Densities	30 sq ft BA	Measurement	District Wildlife Biologist	Annually	Hardwood densities fall below the standard.
	Down Woody Material	20 tons/acre	Measurement	District Wildlife Biologist	Annually	Tons/acre falls below the standard.
	Negative campground utilization by Wildlife	6 incident reports/year	Visual counts, # of complaints	District Wildlife Biologist	Annually	4 incident reports/year

MONITORING PLAN
Specific to Recreational Segments

FACTOR	INDICATOR	STANDARD OR OBJECTIVE	MONITORING PROCEDURE	MONITORING PERSONNEL	FREQUENCY	VARIABILITY REQUIRING MANAGEMENT RESPONSE
Cultural Resources	Archaeological Site Surface Disruption	Any site surface disruption	Field observations, photographic recording	District Archaeologist	Bi-annually or as reported	Evidence of surface impacts
	Archaeological Site Vandalism	Any site vandalism	Field observations, photographic recording	District Archaeologist	Bi-annually or as reported	Evidence of site vandalism
Noise	Human-Caused noise heard by other recreation users within the corridor	Can be heard by neighboring recreation users	# of Complaints to District Office, Exit Interviews	District Resource Officer	Annually	More than 2 complaints filed per season
Range	Negative Campground Utilization by Livestock	Not more than 2 allowed	Visual Counts, # of complaints	Range Manager	Annually	More than 2 incidents per year
	Forage Utilization	Moderate grazing allowed	Visual observation	Range Manager	Annually	Heavy Grazing
Recreation	# of Dispersed Campsites within the Corridor per Mile of River	Not more than 5 per mile of river	Visual Count	District Resource Officer	Annually	More than 5 new campsites per mile of river.
	Defacement of Natural Features along Trails and the River	No more than 5 occurrences acceptable per year	Visual observation	District Resource Officer/Law Enforcement	Annually	3 occurrences of defacement per year
	Barren ground at dispersed campsites (Excluding stock animals)	No more than 1000 sq ft of barren ground	Measure	District Resource Officer	Annually	More than 1000 sq ft of barren ground per dispersed campsite

FACTOR	INDICATOR	STANDARD OR OBJECTIVE	MONITORING PROCEDURE	MONITORING PERSONNEL	FREQUENCY	VARIABILITY REQUIRING MANAGEMENT RESPONSE
Recreation	Number of other recreation users camped at dispersed sites within sight or continuous sound of other recreation users.	No more than 3 parties of recreation users will be camped within site or sound of other recreation users	Visual Count, Exit Interviews	District Resource Officer	Annually	Greater than 20% variance from the standard
	Number of trail group encounters per day	Not more than 5 trail encounters per day with other users	Visual Counts, Exit Interviews	District Resource Officer	Annually	Greater than 20% variance from the standard
	Number of encounters between recreation users and non-recreation users per day	Not more than 5 encounters per day	Visual Counts, Exit Interviews	District Resource Officer	Annually	Greater than 10% variance from the standard
	Conflicts between user groups	Not more than 6 incidents acceptable per year	# of Complaints to the District Office, Exit Interviews	District Resource Officer, Law Enforcement	Annually	6 incidents per season
	Level of River Experience	85% of visitors interviewed had a positive river experience	Exit Interviews, User Survey Forms	District Resource Officer	Annually	Greater than 25% variance from previous years results
Wildlife	Snag Densities	1.5 Snags/Acre	Visual Count	District Wildlife Biologist	Annually	Snags/acre is less than the standard
	Hardwood Densities	15 sq ft BA	Measurement	District Wildlife Biologist	Annually	Hardwood densities fall below the standard.
	Down Woody Material	5 tons/acre	Measurement	District Wildlife Biologist	Annually	Tons/acre falls below the standard.
	Negative campground utilization by Wildlife	3 incident reports/year	Visual Counts, # of complaints	District Wildlife Biologist	Annually	More than 3 incident reports/year

ABBREVIATIONS/ACRONYMS

Listed below are abbreviations and acronyms used in this Management Plan.

BMP	-	Best Management Practices
CDFG	-	California Department of Fish and Game
CHK	-	Chinook Salmon
CHM	-	Chum Salmon
CRMP	-	Coordinated Resource Management Plan
DEIS	-	Draft Environmental Impact Statement
DMUP	-	Hayfork Multiple Use Plan
EHR	-	Erosion Hazard Rating
ERA	-	Equivalent Roaded Acres
ESA	-	Endangered Species Act
EVC	-	Existing Visual Condition
FSH	-	Forest Service Handbook
FSM	-	Forest Service Manual
FVC	-	Future Visual Condition
FWS	-	U.S. Fish and Wildlife Service
HFRD	-	Hayfork Ranger District
IAP	-	Interim Artificial Propagation
IDT	-	Interdisciplinary Team
ISC	-	Interagency Scientific Committee
KSS	-	Klamath Smallscale Suckers
LAC	-	Limits of Acceptable Change
LRMP	-	Land and Resource Management Plan
LTRD	-	Lower Trinity Ranger District
LWD	-	Large Woody Debris
MAA	-	Management Agency Agreement
MOU	-	Memorandum of Understanding
MSSDP	-	Model Steelhead Stream Demonstration Project
NEPA	-	National Environmental Policy Act
NFMA	-	National Forest Management Act of 1976
OHV	-	Off-Highway Vehicle
ORV	-	Outstandingly Remarkable Value
PL	-	Pacific Lamprey
R	-	Rural
RM	-	River Mile
RN	-	Roaded Natural
ROS	-	Recreation Opportunity Spectrum
RT	-	Rainbow Trout
SD	-	Speckled Dace
SFTR	-	South Fork Trinity River
SMZ	-	Streamside Management Zone
SPM	-	Semi-Primitive Motorized
SPNM	-	Semi-Primitive Non-Motorized
SRNF	-	Six Rivers National Forest
STH	-	Steelhead
STNF	-	Shasta-Trinity National Forest
SWQCB	-	State Water Quality Control Board
TE&S	-	Threatened, Endangered and Sensitive Species
TOC	-	Threshold of Concern
TRRP	-	Trinity River Restoration Project
VQO	-	Visual Quality Objective
WHR	-	Wildlife Habitat Relationships
WIN	-	Watershed Improvement Needs
WSR	-	Wild and Scenic River

LIMITS OF ACCEPTABLE CHANGE

Introduction

The Limits of Acceptable Change (LAC) process is a way of setting and meeting specific objectives for managing recreation aras. The process was primarily developed for wilderness areas, but it is applicable to any area where recreation activities occur. It is based on the premise that recreational use of an area can diminish the quality of both the natural environment and the recreation experience.

Concern about overuse causing negative impacts has led managers to try to establish visitor carrying capacities. This approach focused attention on the amount of use and searched for the specific number of people that can be allowed to use an area without causing unacceptable changes to the natural environment or the recreation experience. Much of the adverse impact of recreational use is not the result of too much use, but rather the kind of use, the behavior of visitors, and the timing and distribution of use. A little use in a new area may cause a lot of impact, while a lot more use may cause only a little more impact. Recreation researchers are showing that it makes more sense to manage for acceptable results, rather than for numbers of and locations of visitors.

In applying the LAC concept, managers assume that change to the ecological and social conditions of the area are going to occur, due to both natural and human factors. The goal of management then is to keep the character and rate of change due to human factors within levels acceptable to the ecosystem and within the limits of laws and regulations.

According to the LAC scheme, managers first develop management objectives for the area they are managing and describe the recreation opportunities to be provided. Then they identify the ecological and social factors likely to change and select indicators that can be easily observed and used as a gauge to determine the amount of change occurring. For each indicator, managers then set a standard, which is a threshold value that defines the amount of change that is acceptable and unacceptable. The purpose of selecting indicators and standards is to provide managers with reference points so they can judge whether the recreation opportunity they are trying to manage for is actually being provided over time. The standards serve as a trigger device rather than management policy. If conditions deteriorate and a standard is approached, mitigation action can be taken to avoid unacceptable change. Managers retain the flexibility to implement any of a wide variety of mitigating actions. In the past, limits on the amount of use were often instituted when adverse impacts occurred, but the LAC concept allows the flexibility to implement many other kinds of management actions to control specific problems.

A LAC standard is a maximum permissible level of impact or a critical threshold limit. It is not an objective that one is attempting to achieve. Managers should try to provide the best conditions possible rather than allowing conditions to deteriorate until the standard is reached. On the other hand, managers should not focus solely on the selected indicators, but should consider the whole management situation. As management experience is gained and other issues develop in the future, need may arise to select additional indicators or delete some indicators.

LAC Planning Method as Used in this Plan

Step 1 - *List issues and concerns involving the area.* This was done during the public scoping phase of the planning process and can be found in the companion EIS to this document, and Chapter 1 of this document.

Step 2 - *Define and describe possible opportunity classes for the river corridor.* An opportunity class is a hypothetical but qualitative description of the range of social and resource conditions desired for management of an area. The opportunity class definition provides a rationale against which

the appropriateness of indicators, standards and management actions can be tested. It also establishes management objectives for an area. The river corridor logically fell into three opportunities classes each representative of a classification of the river. Descriptions of each opportunity class can be found in Chapter 2 as the Management Objectives for the Wild, Scenic, and Recreational classifications, and also summarized in the Appendix.

Step 3 - *Select indicators of resource and social conditions*. This step involved defining specific recreation and resource opportunity objectives for which the area will be managed over time. Indicators were developed in response to the issues and concerns.

Step 4 - *Inventory existing resource and social conditions*. Existing resource data was acquired from both districts. Professional experience and judgement were also relied upon as the source of current-situation data. As implementation and monitoring occur, adjustments should occur in this data.

Step 5 - *Define standards for resource and social indicators*. A standard was established for each indicator to describe the amount of change that will be acceptable. The standard is the upper limit of each indicator rather than a desired goal. Mitigating actions should seek to keep the indicator well below the standard if possible.

Step 6 - *Identify opportunity class allocations*. The opportunity classes were assigned to the segments of the river. Opportunity Class I was assigned to Wild segments; Opportunity Class II was assigned to Scenic segments; and Opportunity Class III was assigned to Recreational segments.

Step 7 - *Describe mitigating actions for each opportunity class*. Mitigating actions were prescribed to keep the indicator well below the standard.

Step 8 - *Implement actions and monitor conditions*. This step starts upon approval of this management plan. The monitoring is summarized in Chapter 3. The monitoring will not only track the conditions of the physical and social factors, but will also allow evaluation of the effectiveness of the LAC standards. If more factors, indicators, or standards are needed in the future, additional ones can be selected. Or if some are found to be unnecessary they may be deleted. This feedback mechanism will allow future flexibility in the process as managers acquire experience and better information, as new issures of concerns arise, as other issues fade, or as new tools and technologies become available. As these changes occur, indicators can be modified to assure the desired quality of the resource and its users.

SUMMARY OF RESOURCE, SOCIAL, AND MANAGERIAL SETTING COMPONENTS FOR EACH OPPORTUNITY CLASS

	Opportunity Class I "Wild"	Opportunity Class II "Scenic"	Opportunity Class III Recreational"
Resource Setting:			
General Description	Unmodified Natural Environment	Natural Environment	Natural Environment
1. Components of the Ecosystem	Stable and natural processes operate predominantly free of human induced controls, but controls may be used to enhance vegetation, wildlife, and native fish populations.	Stable and natural processes operate predominantly free of human induced controls, but controls may be used to enhance vegetation, wildlife, and native fish populations.	Operate within the influence of human activities except for locations with Threatened, Endangered, and Sensitive Species.
2. Impact of Resource Management Activities	Natural processes minimally affected by activities.	Natural processes sometimes moderately affected by activities.	Natural processes moderately affected by activities.
3. Prevalence and Duration of Visitor Impacts	Rare with minor, temporary disturbance of soils and vegetation in camp areas and along popular hiking routes. Typically, impacts recover on an annual basis.	Occasionally, visitors impact soil and vegetation in camp areas and along travel routes. Most impacts recover on an annual basis.	Visitors impact soils and vegetation in camp areas, travel routes, and along the river. Typically, impacts are minor and temporary, but some heavily used areas are impacted heavily on an annual basis. Impacts in most of these areas persist from year to year.
4. Visibility of Visitor Impacts	Disturbances are visually subtle and unnoticeable	Disturbances are visually subtle and apparent to only some users.	Disturbances may be apparent to visitors but acceptable.
5. Impacts From Other Resource Users	Rare and temporary.	While few in number, are generally permanent and apparent to more visitors that happen upon them.	Developments and impacts are generally permanent and apparent to those who happen upon them.
Social Setting:			
General Description	Outstanding opportunities for solitude and isolation from other users.	Moderate opportunities for solitude and isolation from others, as well as opportunities for gregarious activities and day use recreation.	Opportunities for highly gregarious activities.
1. General Level of Encounters	Rare whether in camp areas or while hiking.	Moderate during the high use season.	Common in camp areas and while traveling.
2. Interaction with the Environment	Travel is unregulated with opportunities to interact with the natural environment.	Moderate likelihood to travel unregulated and interact with the natural environment.	May encounter a regulated environment.

	Opportunity Class I "Wild"	Opportunity Class II "Scenic"	Opportunity Class III Recreational"
Social Setting: (Continued)			
3. Level of Challenge and Risk	Opportunities to use primitive outdoor skills and experience challenge, self-reliance, and risk are very high.	Opportunities for river-based recreation, viewing spectacular scenery and other outdoor experiences are available and accessible with moderate levels of risk.	Opportunities to utilize outdoor skills and river-oriented skills in a highly accessible environment with low levels of risk.
Managerial Setting:			
General Description	Emphasizes maintaining and, if necessary, enhancing the natural ecosystem and its processes in order to provide a primitive recreation experience.	Emphasis is on providing river-based recreation experience settings and uniquely developed opportunities. Limited resource management activities within the area.	Emphasis is on providing a wide range of recreation experience settings.
Objective	Management strives for use of on-site methods to achieve, maintain or enhance desired conditions for the area while fulfilling other program responsibilities.	Management strives to use methods that contribute to achieving, maintaining, or enhancing the desired recreation conditions, while maintaining resource integrity.	Management strives to use methods that contribute to the ORV of the river while providing a wide variety of river and land-based recreation opportunities.

RECREATION OPPORTUNITY SPECTRUM

While the goal of the recreationist is to obtain satisfying experiences, the goal of the recreation resource manager becomes one of providing the opportunities for obtaining these experiences. By managing the natural resource settings, and the activities which occur within it, the manager is providing the opportunities for recreation experiences to take place. Therefore, for both the manager and the recreationist, recreation opportunities can be expressed in terms of three principal components: the activities, the setting, and the experience.

For management and conceptual convenience possible mixes or combinations of activities, settings, and probable experience opportunities have been arranged along a spectrum, or continuum. This continuum is call the Recreation Opportunity Spectrum (ROS) and is divided into six classes. The six classes, or portions along the continuum, and the accompanying class names have been selected and conventionalized because of their descriptiveness and utility in Land and Resource Management Planning and other management applications.

Each class is defined in terms of its combination of activity, setting, and experience opportunities. Subclasses may be established to reflect local or regional or national summaries. An example of a subclass may be a further breakdown of Roaded Natural into subclasses based on paved, oiled, or dirt surfaced roads, which in turn reflects amount of use, or a further breakdown of Primitive based upon aircraft or boat use.

The ROS provides a framework for defining the types of outdoor recreation opportunities the public might desire, and identified that portion of the spectrum a given National Forest might be able to provide.

Primitive	Semi-Primitive Non-Motorized	Semi-Primitive Motorized	Roaded Natural	Rural	Urban
Area is characterized by essentially unmodified natural environment of fairly large size. Interaction between users is very low and evidence of other users is minimal. The area is managed to be essentially free from evidence of human-induced restrictions and controls. Motorized use within the area is not permitted.	Area is characterized by a predominantly natural or natural appearing environment of moderate to large size. Interaction between users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized use is not permitted.	Area is characterized by a predominantly natural or natural appearing environment of moderate to large size. Concentration of users is low, but there is often evidence of other users. The area is managed in such a way that minimum on-site controls and restrictions may be present, but are subtle. Motorized us is permitted.	Area is characterized by predominantly natural appearing environment with moderate evidences of the sights and sounds of man. Such evidences usually harmonize with the natural environment. Interaction between users may be low to moderate, but with evidence of other users prevalent. Resource modification and utilization practices are evident, but harmonize with the natural environment. Conventional motorized use is provided for in construction standards and design of facilities.	Area is characterized by substantially modified natural environment. Resource modification and utilization practices are to enhance specific recreation activities and to maintain vegetative cover and soil. Sights and sounds of humans are readily evident, and the interaction between users is often moderate to high. A considerable number of facilities are designed for use by a large number of people. Facilities are often provided for special activities. Moderate densities are provided far away from developed sites. Facilities of intensified motorized use and parking are available.	Area is characterized by a substantially urbanized environment, although the background may have natural appearing elements. Renewable resource modification and utilization practices are to enhance specific recreation activities. Vegetative cover is often exotic and manicured. Sights and sounds of humans, on-site are predominant. Large numbers of users can be expected, both on-site and in nearby areas. Facilities for highly intensified motor use and parking are available with forms of mass transit often available to carry people throught the site.

Acres/Segment Excluding Private Tracts

Segment	Classification	Acres
1	Wild	1,386
2	Scenic	1,086
3	Wild	2,182
4	Scenic	553
5	Recreational	1,839
6	Wild	2,786
7	Scenic	2,101
	Total	11,933

Number of River Miles

Segment	Classification	Federal Miles	Private Miles
1	Wild	5.9	0
2	Scenic	3.4	2.1
3	Wild	6.1	1.5
4	Scenic	2.0	2.4
5	Recreational	6.1	4.1
6	Wild	7.3	1.6
7	Scenic	6.4	4.2
	Total	37.2	15.9

South Fork Trinity River and Tributaries with Anadromous Fish Habitat

South Fork Trinity River Tributaries with Anadromous Fisheries Habitat

Stream	Total Length (Miles)	Available Anadromous Habitat (Miles)
Madden Creek	10.7	1.0
Ammon Creek	2.6	2.6
Mingo Creek	4.8	1.2
Coon Creek	4.8	1.1
Grouse Creek	29.9	1.6
Underwood Creek	3.6	0.1
Eltapom Creek	3.0	0.5
Big Creek (Hyampom)	5.0	0.5
Mill Creek	3.2	1.0
Kerlin Creek	3.4	1.0
Pelletreau Creek	6.2	1.0
Hayfork Creek	49.0	44.0
Olsen Creek	4.0	1.0
Grassy Flat Creek	2.4	0.25
Corral Creek	11.8	0.1
Miners Creek	6.0	3.7
West Fork Miners Creek	3.1	0.5
Bear Creek	4.8	0.5
Rusch Creek	5.2	3.5
Little Creek	6.6	4.5
Tule Creek	6.1	1.0
East Fork Tule Creek	3.9	0.25
West Fork Tule Creek	2.9	2.0
Salt Creek	9.0	8.5
Big Creek	12.4	9.5
Donaldson Creek	2.1	1.2
Limestone Creek	1.9	1.0
East Fork Big Creek	1.3	0.6
Barker Creek	6.6	3.5
Little Barker Creek	2.9	1.5
Carr Creek	2.8	1.0
Summit Creek	5.0	0.5
Gardners Gulch	2.4	0.5
Duncan Creek	4.2	0.5
East Fork Hayfork Creek	5.9	5.5
Potato Creek	3.4	2.75
Dubakella Creek	3.0	2.0
Butter Creek	10.0	3.0
Cold Creek	0.6	0.25
Sulphur Glade Creek	2.7	1.5
Plummer Creek	7.2	3.0
Little Bear Wallow	4.2	0.25
Cave Creek	2.8	1.0
South Fork Trinity above Forest Glen (WSR Boundary)	27.0	20.0
Rattlesnake Creek	9.2	8.0
Little Rattlesnake Creek	3.1	2.0
North Rattlesnake Creek	4.8	3.5
Post Creek	6.0	0.6
Mud Creek	1.0	0.25
Charlton Creek	2.0	0.25
Cable Creek	3.9	0.5
Silver Creek	3.2	2.4
Smoky Creek	5.6	2.8
East Fork South Fork Trinity	10.0	9.0
Prospect Creek	5.0	0.5

VEGETATION

Acres/Seral Stage

	Segments							
Seral Stage	1	2	3	4	5	6	7	Total
1	4	9	15	0	38	0	9	75
2	46	0	0	8	12	68	34	168
3a	262	269	402	210	851	463	304	2761
3b&c	326	171	263	22	101	311	391	1585
4a	217	176	330	49	99	321	274	1466
4b&c	53	122	265	111	12	70	43	676
4c+	80	17	251	67	16	52	85	568
Hardwoods	308	106	197	66	310	147	84	1218
Chaparral	90	113	245	0	72	92	95	707
Nonforested/ Noncommercial	0	103	214	20	328	1262	782	2709
TOTAL	1386	1086	2182	553	1839	2786	2101	11933
Old-Growth	133	139	516	178	28	122	128	1244

VEGETATION

Vegetation by Seral Stage and Classification

Seral Stage	Classification	Acres
1	Wild	19
	Scenic	18
	Recreational	38
2	Wild	114
	Scenic	42
	Recreational	12
3a	Wild	1127
	Scenic	783
	Recreational	851
3b&c	Wild	900
	Scenic	584
	Recreational	101
4a	Wild	868
	Scenic	499
	Recreational	99
4b&c	Wild	388
	Scenic	276
	Recreational	12
4c+	Wild	383
	Scenic	169
	Recreational	16
Hardwoods	Wild	652
	Scenic	256
	Recreational	310
Chaparral	Wild	427
	Scenic	208
	Recreational	72
Nonforested/ Noncommercial	Wild	1476
	Scenic	905
	Recreational	328
TOTAL		11933
Old-Growth	Wild	771
	Scenic	445
	Recreational	28

POTENTIAL THREATENED, ENDANGERED, SENSITIVE AND RARE PLANT SPECIES

Scientific Name Common Name	Status	Habitat
Allium hoffmanii Hoffman's onion	USFS R5 USFWS Category 3C CNPS List 4	Ultramaphic Rock Outcrops
Antennaria suffrutescens Evergreen everlasting	USFS R5 USFWS CNPS List 4	Ultramaphic Rock Outcrops
Cypripedium californicum California lady's slipper	USFS R5 USFWS CNPS List 4	Wet Areas on Ultramaphic Substrate
Epilobium oreganum Oregon willow-herb	USFS R5 USFWS Category 3C CNPS List 4	Riparian, usually on Ultramafic Substrate
Lewisia cotyledon var. heckneri Heckner's lewisia	USFS R5 Sensitive USFWS Category 3C CNPS List 1B	Rock Outcrops, Banks, in Mixed Conifer to Montane Forests
Madia dorsi-nilesiae Niles' madia	USFS R5 Sensitive USFWS CNPS List 1B	Rocky slopes of Ultramaphic Substrate, often in Jeffrey Pine Woodland
Sedum laxum ssp. flavidum Pale yellow stonecrop	USFS R5 Sensitive USFWS CPNS List 4	Rock Outcrops and Cliff Faces, often on Ultramaphic Substrate parent material
Sedum laxum ssp heckneri Heckner's stonecrop	USFS R5 USFWS Category 3C CNPS List 4	Rock Outcrops and Cliff Faces, often on Ultramaphic Substrate

The definitions of each listed status are as follows:

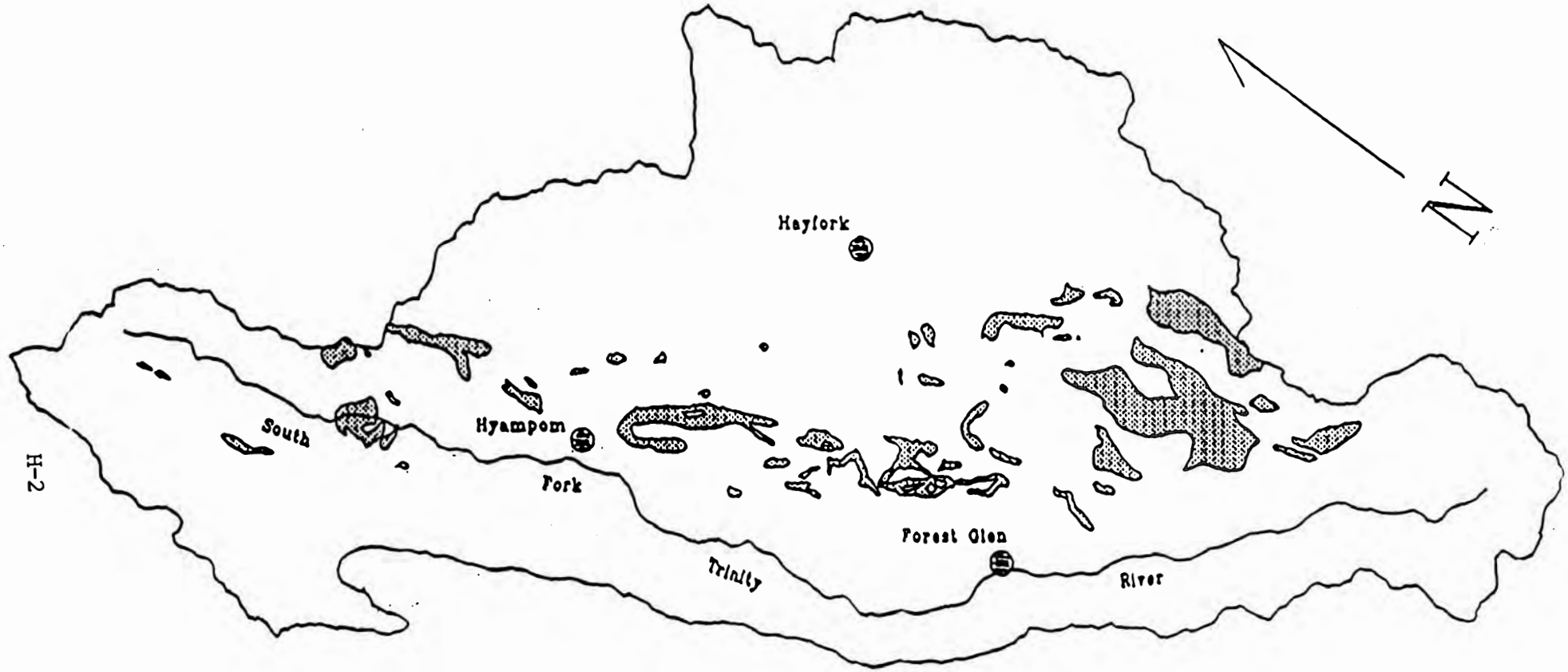
USFS Sensitive - Species for which population viability is a concern as evidenced by 1) significant current or predicted downward trends in population numbers or density or 2) significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.

USFWS Category 3C - Plants previously considered candidates but too widespread or not threatened at this time.

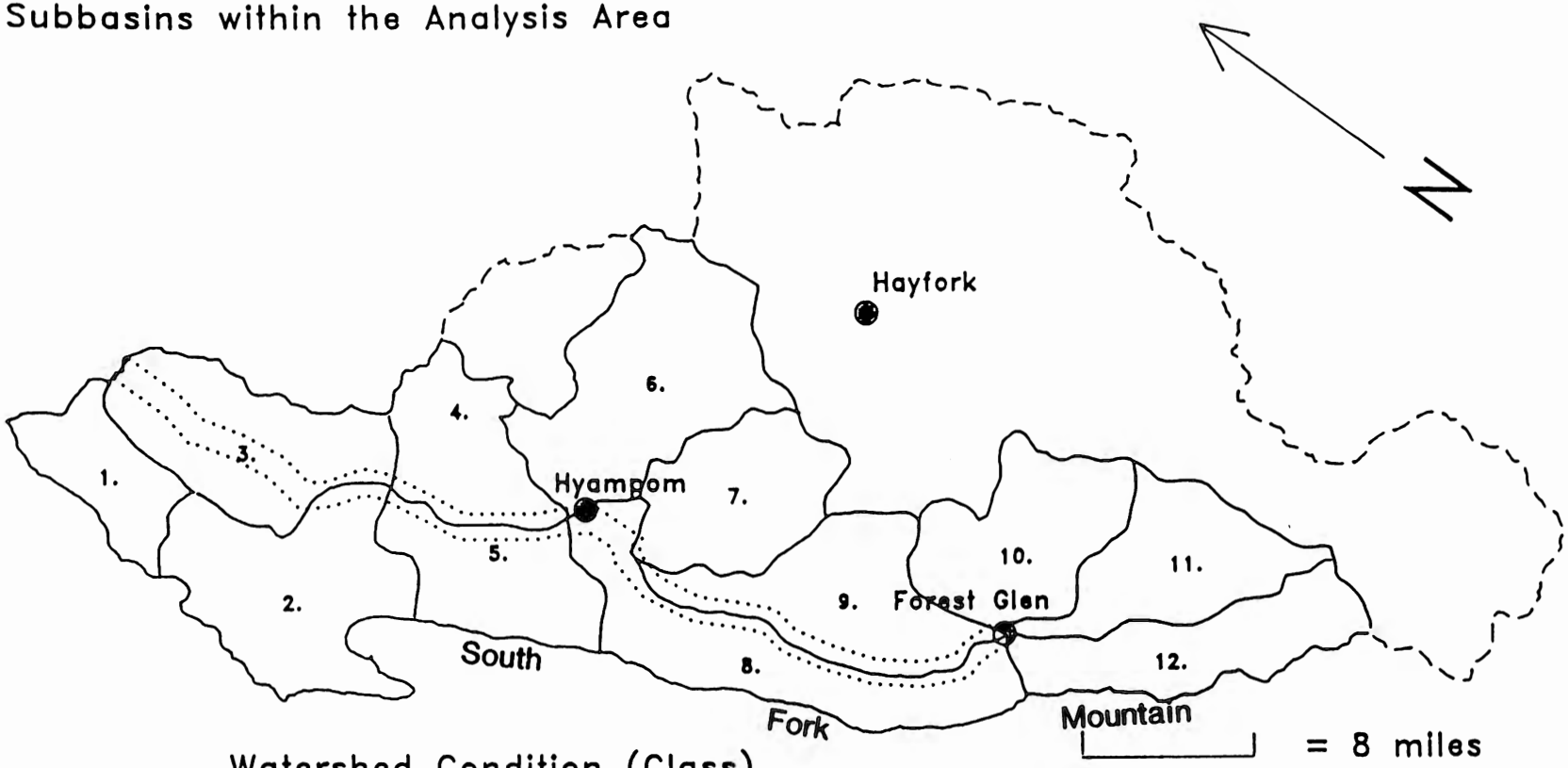
CNPS List 1B - Plants rare, threatened or endangered in California and elsewhere.

CNPS List 4 - Plants of limited distribution - a watch list.

South Fork Trinity River Watershed
Location of Ultramafic Rock Outcrops



South Fork Trinity River Watershed
Subbasins within the Analysis Area



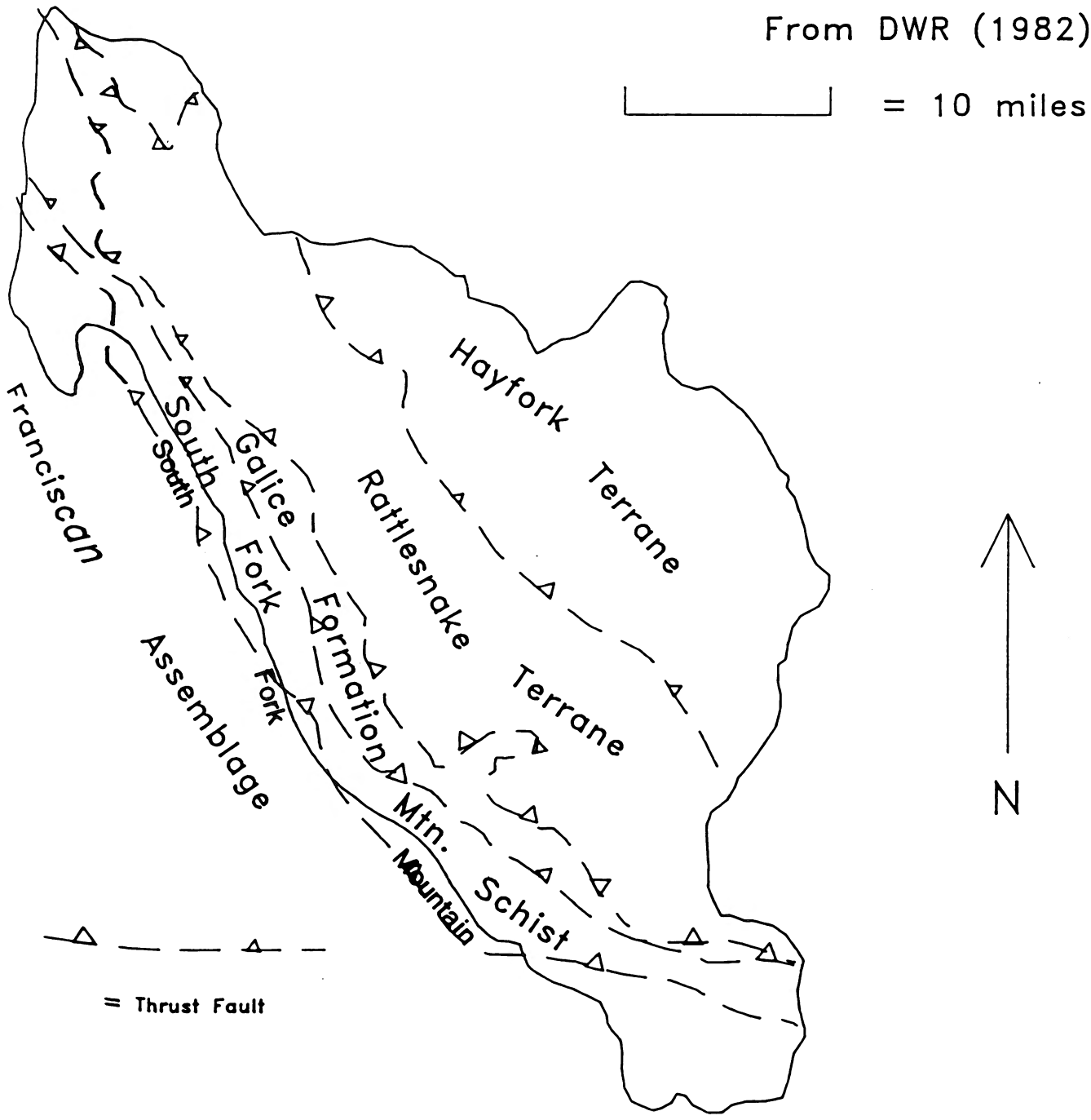
Watershed Condition (Class)

1. Madden Creek (2)
2. Grouse Creek (3)
3. Lower S.F.Trinity (2)
4. Gulch (3)
5. Hyampom (3)
6. Lower Hayfork (1)
7. Butter (3)
8. Hidden Valley (2)
9. Plummer Creek (3)
10. Rattlesnake (3)
11. Smoky Creek (2)
12. Happy Camp Creek (2)

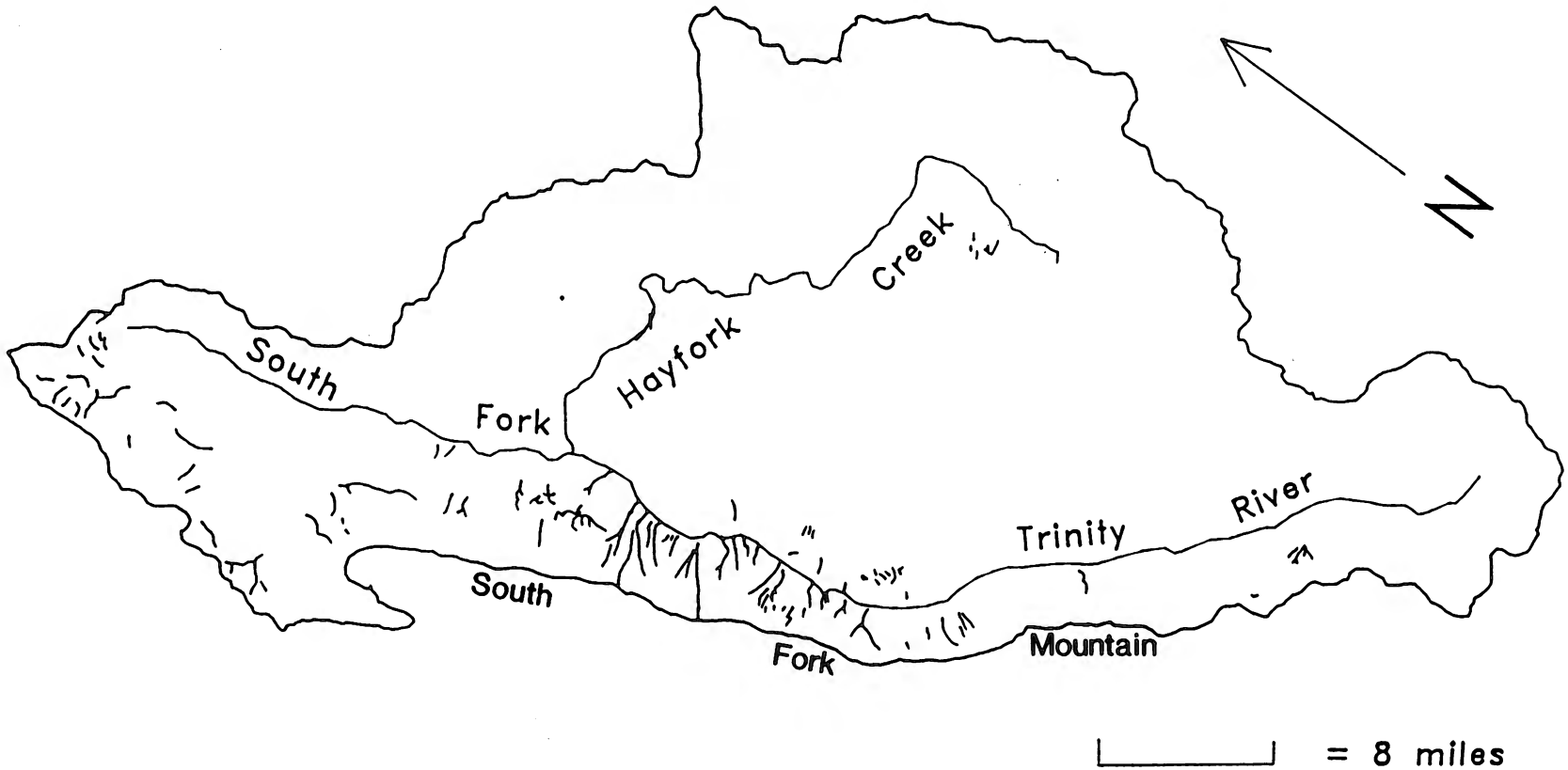
= Wild and Scenic Section of South Fork Trinity River

= Portion of the South Fork Basin Not Included in Analysis Area

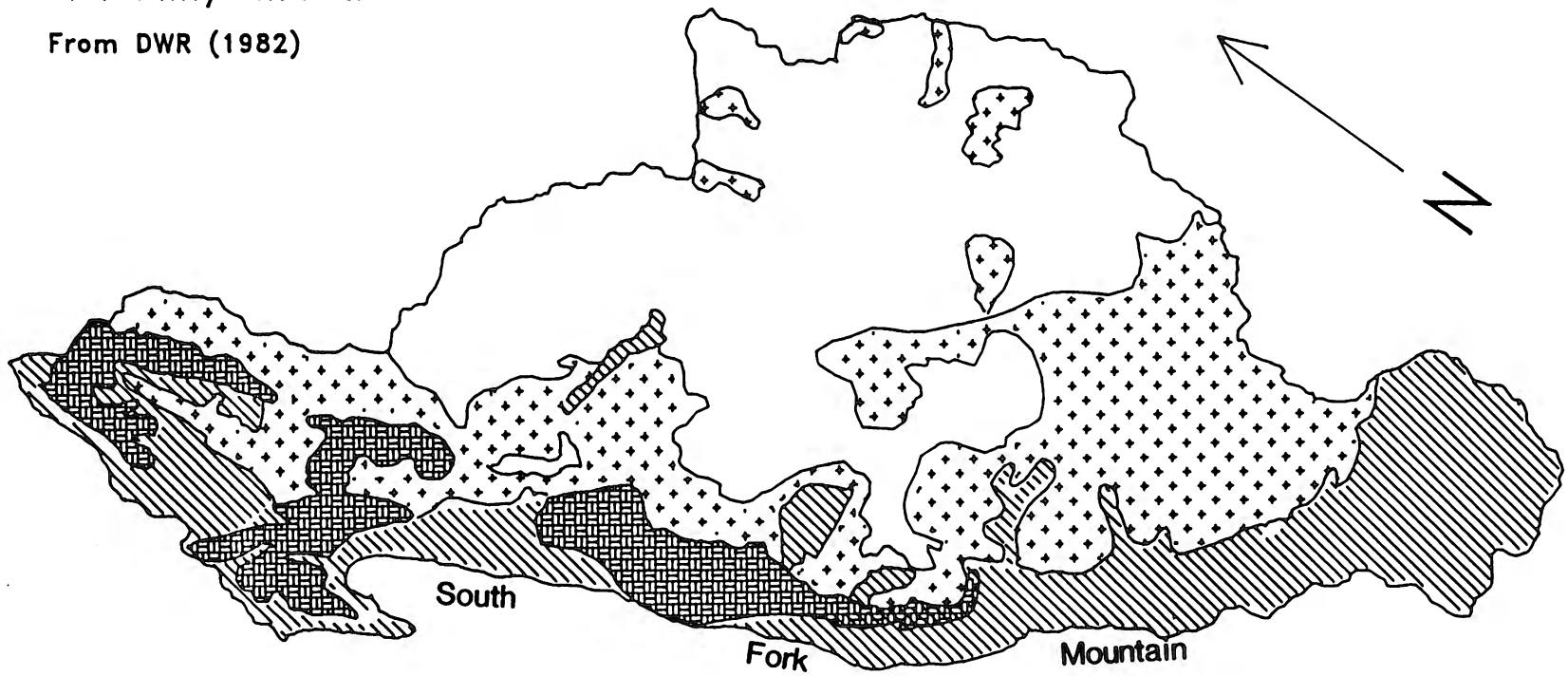
South Fork Trinity River Watershed
Geologic Setting



South Fork Trinity River Watershed
"Gutted" Streams



South Fork Trinity River Watershed
Instability and Erosion Hazards
From DWR (1982)



Legend

= Low

= Moderate

= High

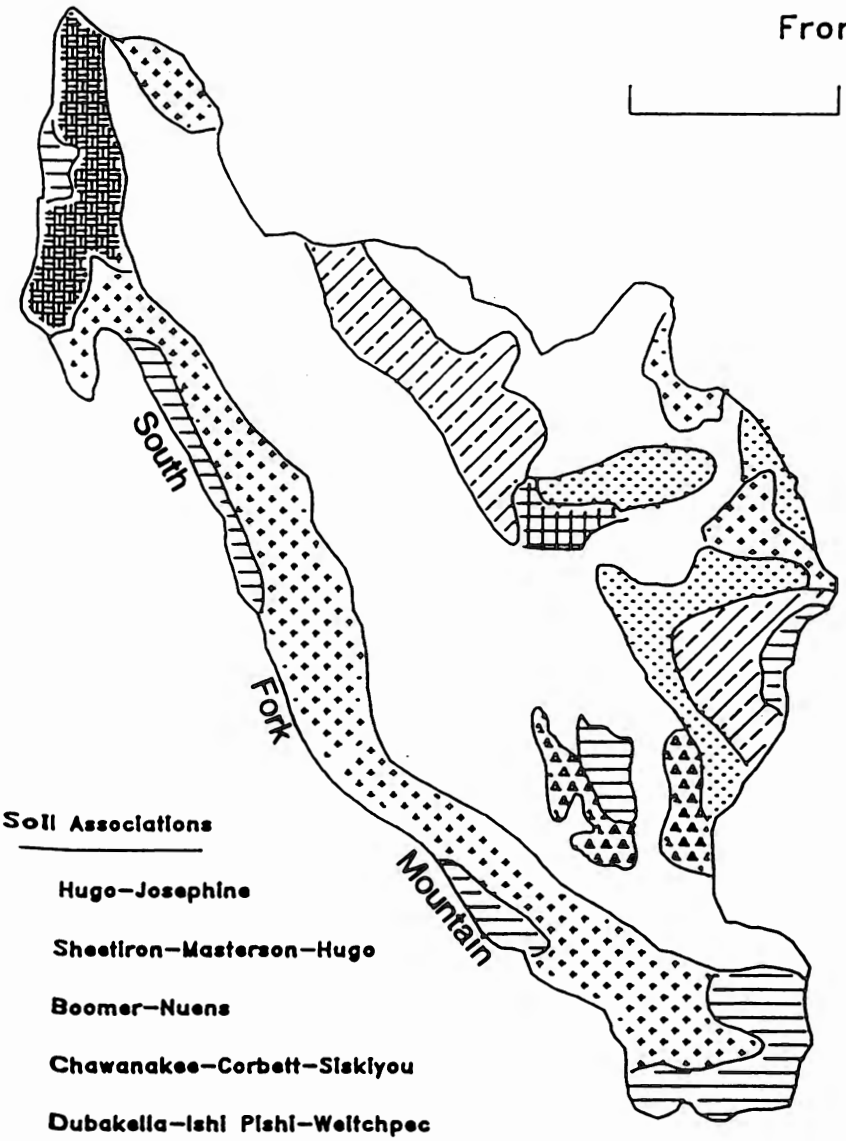
= Extreme

= 8 miles

South Fork Trinity River Watershed
Generalized Soil Map

From DWR (1982)

= 10 miles

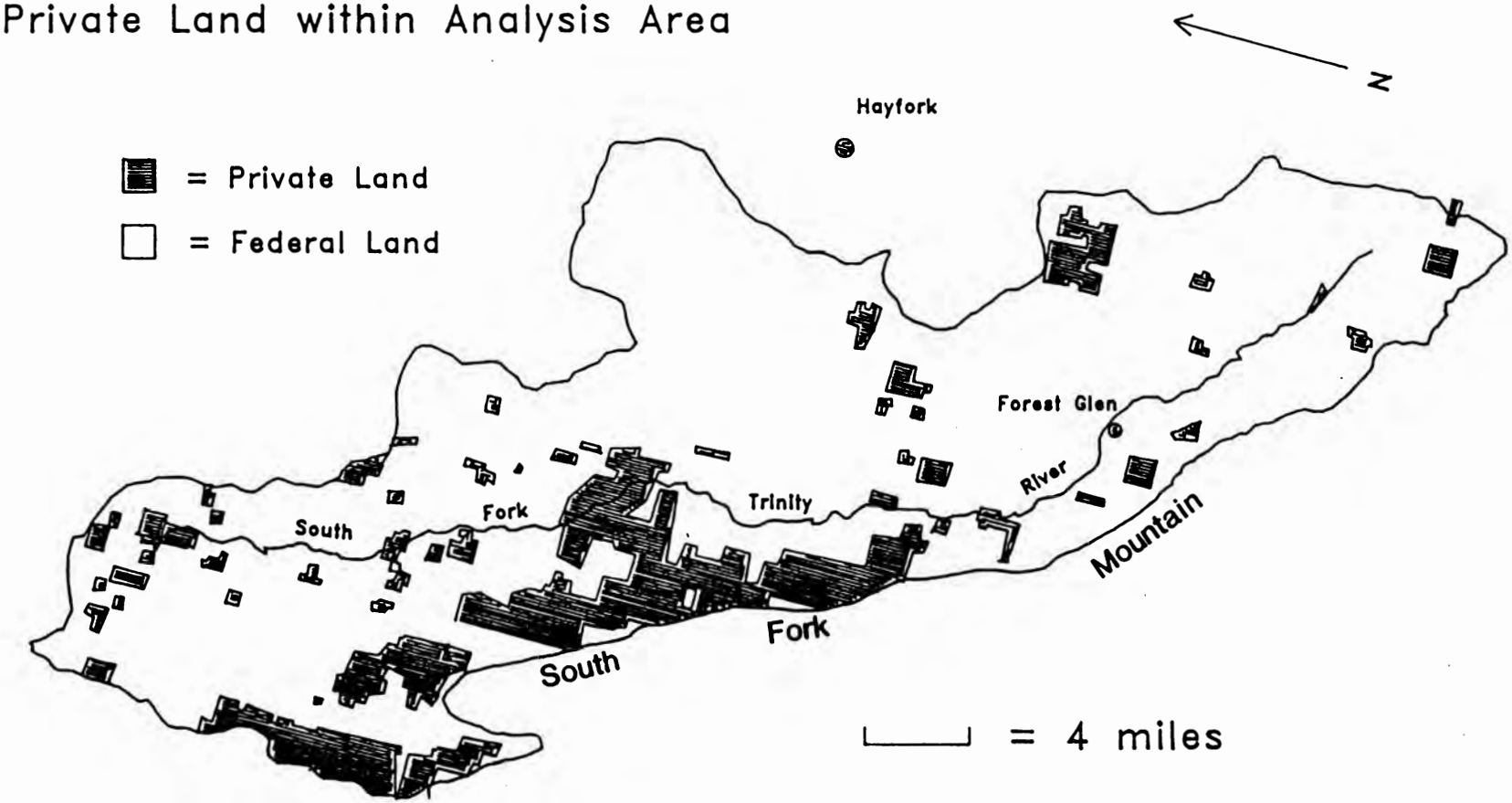


N

Soil Associations

- Hugo–Josephine
- Sheetiron–Masterson–Hugo
- Boomer–Nuens
- Chawanakee–Corbett–Siskiyou
- Dubakella–Ishi Pishi–Weitchpec
- Josephine–Sites–Maymen
- Kilarc–Plumas
- Various rock land associations

South Fork Trinity River Watershed
Private Land within Analysis Area



WILDLIFE SPECIES LIST

The following is a list of most species that are highly associated with assemblage habitats or components as derived from the California Wildlife Habitat Relationships Program, North Coast Cascades Zone Species Habitat Matrix and A Guide to Wildlife Habitats of California and found in the SFTR basin. (* Threatened, Endangered, and Sensitive species)

LATE SERAL STAGE (4a, 4bc, and 4c-older)

*	northern spotted owl	*Strix occidentalis*
*	northern goshawk	*Accipiter gentilis*
	pileated woodpecker	*Dryocopus pileatus*
	Hammond's flycatcher	*Empidonax hammondii*
	brown creeper	*Certhia familiaris*
	golden-crowned kinglet	*Regulus satrapa*
	ruby-crowned kinglet	*Regulus calendula*
	hermit warbler	*Dendroica occidentalis*
*	fisher	*Martes pennanti*
*	marten	*Martes americanus*
	Trowbridge shrew	*Sorex trowbridgii*
	little brown bat	*Eptesicus fuscus*
	yuma myotis	*Myotis yumanensis*
	Townsend's chipmunk	*Eutamias townsendii*
	Northern flying squirrel	*Glaucomys sabrinus*

OPENINGS AND EARLY SERAL STAGE (meadows, and plantation stages 1 & 2)
(Does not include chaparral community.)

western fence lizard	*Sceloporus occidentalis*
racer	*Coluber constrictor*
western spadefoot toad (western Hayfork and Yolla Bolla districts)	*Scaphiopus hammondi*
western meadowlark	*Sturnella neglecta*
Brewer's blackbird (too 'urban')	*Euphagus cyanocephalus*
turkey (multi habitat assemblage)	*Meleagris gallopavo*
loggerhead shrike (Shasta side only)	*Lanius ludovicianus*
dark-eyed junco	*Junco hyemalis oreganus*
white-crowned sparrow	*Zonotrichia albicollis*
lark sparrow	*Chondestes grammacus*
Mountain quail	*Oreortyx pictus*
fox sparrow	*Passerella iliaca*
California quail	*Lophortyx californicus*
song sparrow (shrub stage)	*Melospiza melodia*
western harvest mouse (bush/shrub stage)	*Reithrodontomys megalotis*
brush mouse	*Peromyscus boylii*
black bear (multi-habitat)	*Ursus americanus*
pinyon mouse	*Peromyscus truei*
mule deer (multi-habitat)	*Odocoileus hemionus*
California vole (grass/forb stage)	*Microtus californicus*
long-tailed vole	*Microtus longicaudus*
Oregon vole	*Microtus oregoni*
black-tailed jackrabbit	*Lepus americanus*

	brushrabbit	*Sylvilagus bachmani*
	striped skunk	*Mephitis mephitis*
	Botta's gopher	*Thomomys umbrinus*
	Mazama gopher	*Thomomys mazama*
	(limited distribution)	
	Mt.gopher (eastside distribution)	*Thomomys monticola*
	Heerman's kangaroo rat	*Dipodomys heermanni*
MULTI-HABITAT		
	mule deer	*Odocoileus hemionus*
	elk	*Cervus canadensis*
	black bear	*Ursus americanus*
	turkey	*Meleagris gallopavo*
*	wolverine	*Gulo gulo*
SNAG AND DOWN LOG		
	long-toed salamander	*Ambystoma macrodactylum*
	ensatina	*Ensatina eschscholtzi*
	sagebrush lizard	*Sceloporus graciosus*
	rubber boa	*Charina bottae*
	sharp-tailed snake	*Contia tenuis*
	Calif mt king snake	*Lampropeltis zonata*
	ruffed grouse	*Bonasa umbellus*
	western screeh owl	*Otus asio*
(as a cavity nester guild)		
	pygmy owl	*Glaucidium gnoma*
	(as a cavity nester guild)	
	saw-whet owl	*Aegolius acadicus*
	(as a cavity nester guild)	
	Vaux's swift	*Chaeturi vauxi*
	flicker	*Colaptes auratus*
	pileated woodpecker	*Dryocopus pileatus*
	(conifer forests)	
	Lewis' woodpecker	*Melanerpes lewis*
	(open pine and hardwood savannah)	
	yellow-bellied sapsucker	*Sphyrapicus varius*
	Williamson's sapsucker	*Sphyrapicus thyroideus*
	hairy woodpecker	*Picoides villosus*
	(conifer forests)	
	downy woodpecker	*Picoides pubescens*
	(pine or oak forests)	
	Nuttall's woodpecker	*Picoides nuttallii*
	(limited range)	
	ash-throated flycatcher	*Myiarchus cinerascens*
	violet-green swallow	*Tachycineta thalassina*
	tree swallow	*Tridoprocne bicolor*
	(snags within/near openings)	
	chickadee species	*Paridae* family
	plain titmouse	*Parus inornatus*
	nuthatch species	*Sittidae* family
	bewick's wren	*Thryomanes bewickii*
	mountain bluebird	*Sialia currucoides*
	western bluebird	*Sialia mexicana*

	brown creeper	*Certhia familiaris*
	little brown bat	*Myotis lucifugus*
	silver-haired bat	*Lasionycteris noctivagans*
	big brown bat	*Eptesicus fuscus*
	long-legged myotis	*Myyotis volans*
	bat species	*Vespertilionidae, Phyllostomatidae &Molossidae* families
	long tailed weasel	*Mustela frenata*
	mink	*Mustela vison*
	western red backed mouse	*Clethrionomys occidentalis*
	porcupine	*Erethizon dorsatum*
	black bear	*Ursus americanus*

RIPARIAN (indicator of vegetation)

	California red legged frog	*Rana aurora*
	Pacific tree frog	*Hyla regilla*
	Pacific giant salamander	*Dicamptodon ensatus*
	black salamander	*Aneides flavipunctatus*
	California slender salamander	*Batrachoseps attenuatus*
	California mt. king snake	*Lampropeltis zonata*
	house wren	*Troglodytes aedon*
	solitary vireo	*Vireo solitarius*
	yellow warbler	*Dendroica coronata auduboni*
	common yellow throat	*Geothlypis trichas*
	yellow breasted chat	*Icteria virens*
	Wilson's warbler	*Wilsonia pusilla*
	red winged blackbird	*Agelaius phoeniceus*
	northern oriole	*Icterus galbula bullockii*
	blackheaded grosbeak	*Pheucticus melanocephalus*
*	willow flycatcher	*Empidonax traillii*
	cooper's hawk	*Accipiter cooperii*
	black bear	*Ursus americanus*
	raccoon	*Procyon lotor*
	opposum	*Didelphis marsupialis*
	marsh shrew	*Sorex bendirii*
	shrew mole	*Neurotrichus gibbsii*
	little brown bat	*Myotis lucifugus*
	yuma myotis	*Myotis yumanensis*
*	fisher	*Martes pennanti*
	mountain beaver	*Aplodontia rufa*
	beaver	*Castor canadensis*
	western jumping mouse	*Zapus princeps*

AQUATIC (conditions monitored by riparian and fish)

	tailed frog	*Ascaphus truei*
	Cascade frog	*Rana cascade*
	foothill yellow-legged frog	*Rana boylei*
	common aquatic garter snake	*Thamnophis couchi*
	western pond turtle	*Clemmys marmorta*
	osprey	*Pandion haliaetus*
*	bald eagle	*Haliaetus leucocephalus*
	kingfisher	*Megaceryle alcyon*
	herons, egrets, ducks, shorebirds	*Ardeidae,Anatidae&Laridae* families
	river otter	*Lutra canadensis*
	water shrew	*Sorex palustris*
	muskrat	*Ondatra zibethica*
	Summer-run Steelhead	*Onchorhynchus mykiss*
	Winter-run Steelhead	*Onchorhynchus mykiss*
	Spring-run Chinook (King) Salmon	*Onchorhynchus tshawytscha*
	Fall-run Chinook (King) Salmon	*Onchorhynchus tshawytscha*
	Chum Salmon	*Onchorhynchus keta*
	Coho (Silver) Salmon	*Onchorhynchus kisutch*
	Pacific Lamprey	*Lampetra tridentata*
	Klamath Smallscale Sucker	*Catostomus rimiculus*
	Speckled Dace	*Rhinichthys osculus*
	Riffle Sculpin	*Cottus gulosus*
	Rainbow Trout	*Onchorhynchus mykiss*
	Green Sturgeon	*Actpenser medirostris*

HARDWOODS

	acorn woodpecker	*Melanerpes formicivorous*
	Nutalls woodpecker (limited distribution)	*Picoides nuttallii*
	Lewis' woodpecker	*Melaneroes lewis*
	scrub jay	*Aphelocoma coerulescens*
	plain titmouse	*Parus inornatus*
	white breasted nuthatch	*Sitta carolinensis*
	Hutton's vireo	*Vireo huttoni*
	evening grosbeak	*Hesperiphona vespertina*
	black bear (multi habitat)	*Ursus americanus*
	American robin	*Turdus migratorius*
	bluegrey gnatcatcher	*Polioptila caerulea*
	red-tailed hawk	*Buteo jamaicensis*

CHAPARRAL

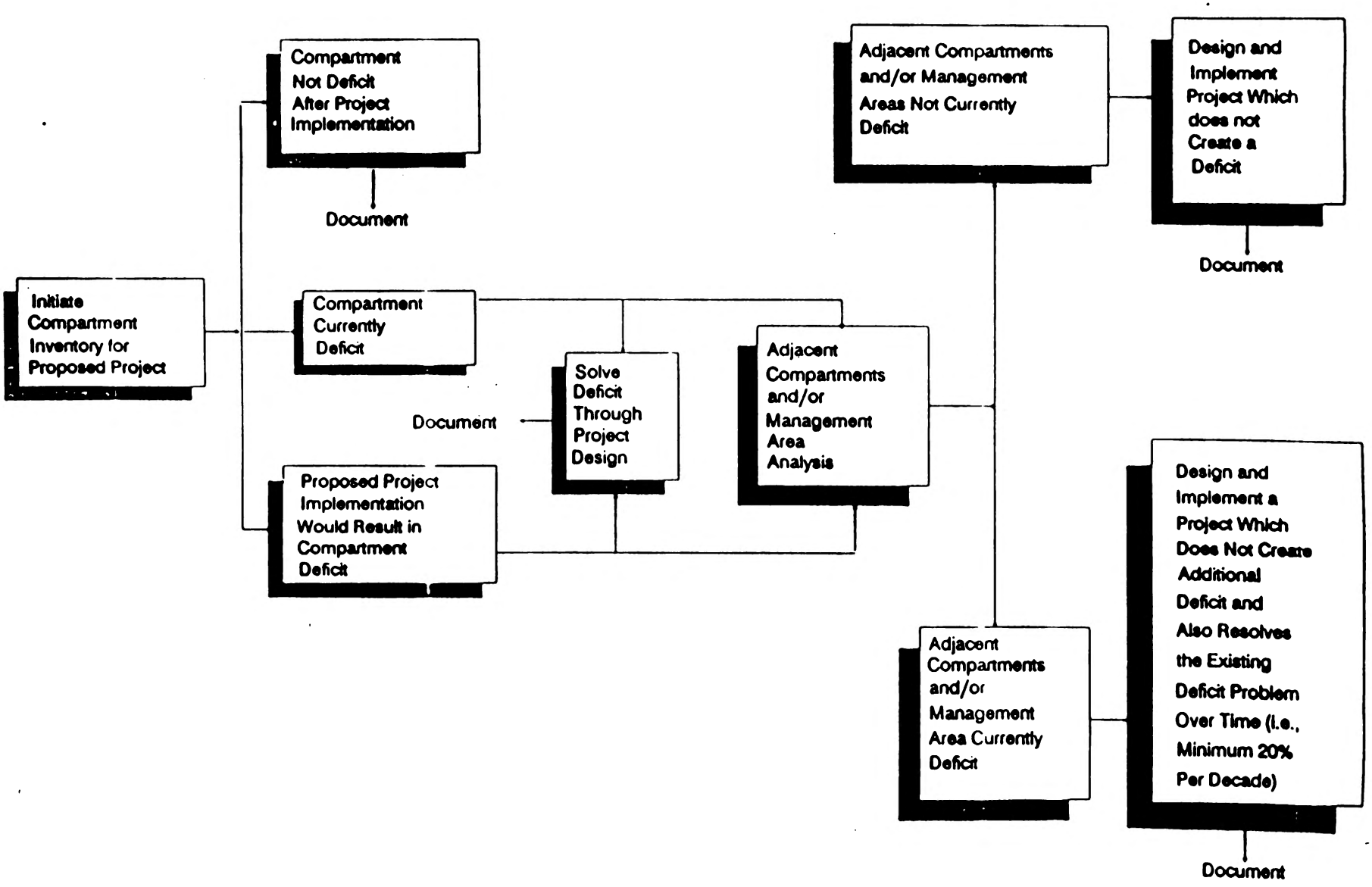
	sagebrush lizard	*Sceloporus graciosus*
	green-tailed towhee	*Pipilo chlorurus*
	golden eagle	*Aquila chrysaetos*
	prairie falcon	*Falco mexicanus*
	wrentit	*Chamaea fasciata*
	bushtit	*Psaltriparus minimus*
	california thrasher (limited southern range)	*Toxostoma redivivum*
	mountain lion	*Felis concolor*

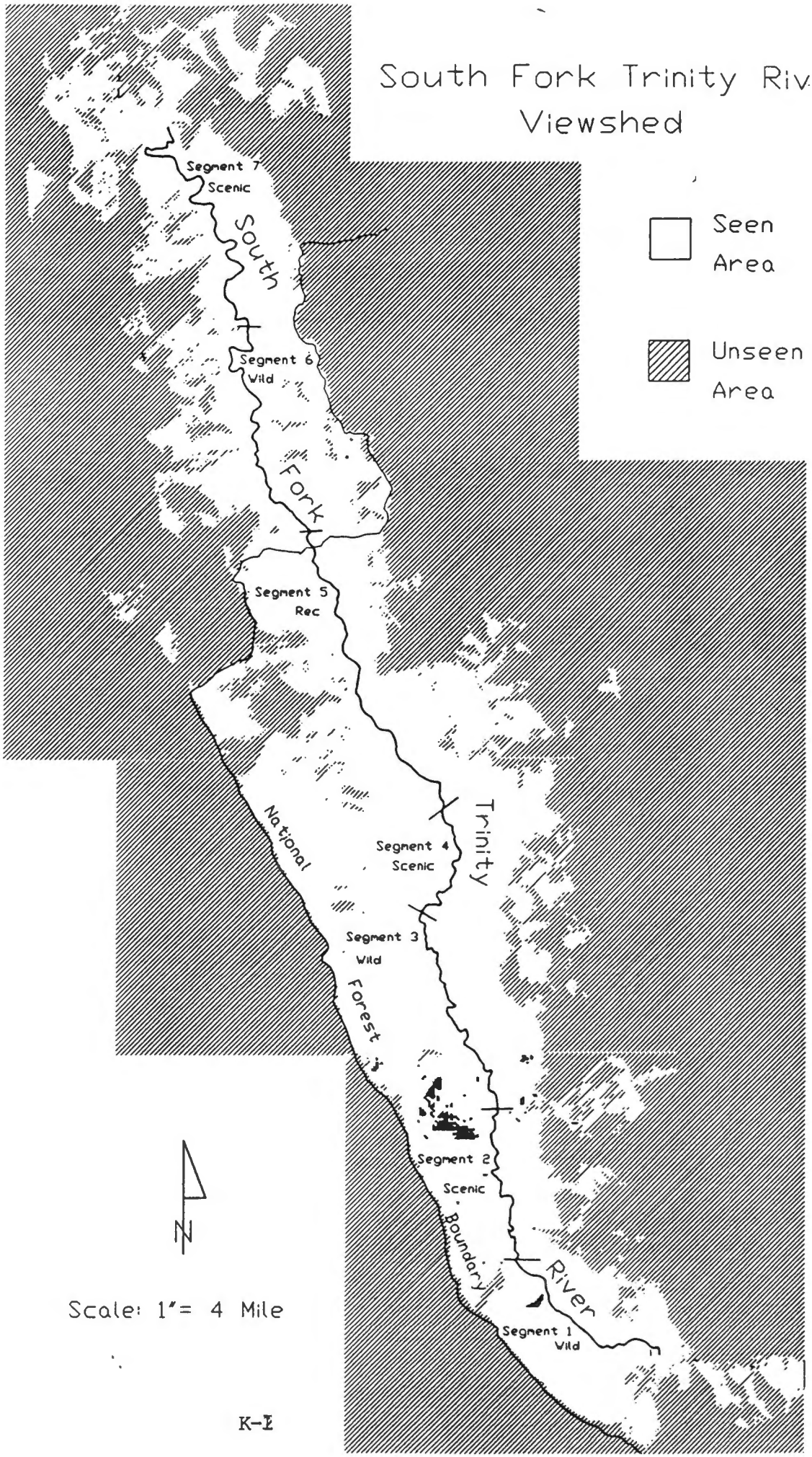
	great basin pocket mouse (limited range)	*Pergnathus parvus*
	western spotted skunk (limited distribution)	*Spilogale putorius*

CLIFFS, CAVES, TALUS, AND ROCK OUTCROPS

	Shasta salamander (limited limestone areas)	*Hydromantes shastae*
	rock wren	*Salpinctes obsoletus*
*	peregrine falcon	*Falco peregrinus*
	Pacific big eared bat	*Plecotus townsendii*
	pika (Shasta side)	*Ochotona princeps*
	california myotis	*Myotis californicus*
	bushy tailed woodrat	*Neotoma cinerea*

Diversity Decision Flow Chart

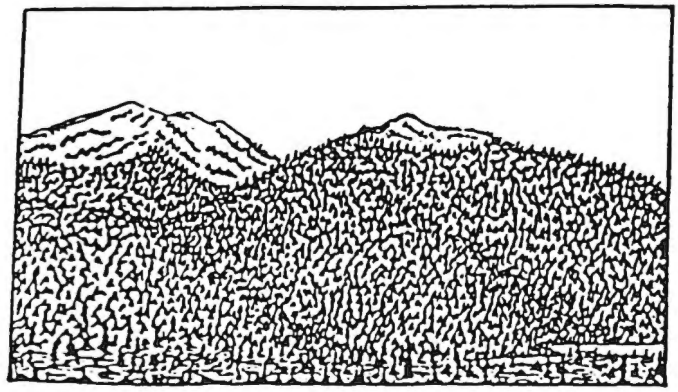




VQO PRESERVATION

VC I Untouched

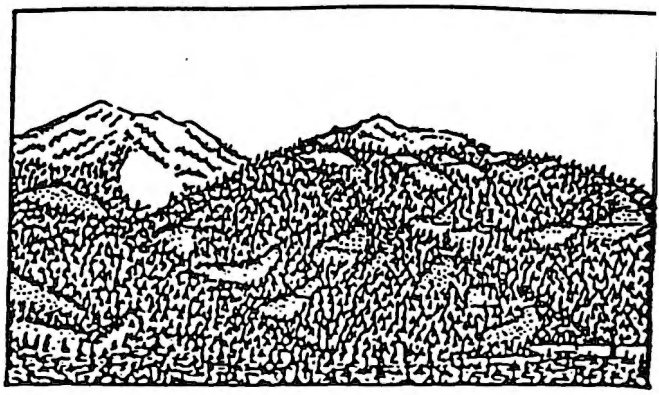
Predominantly ecological changes.



VQO MODIFICATION

VC IV Disturbance

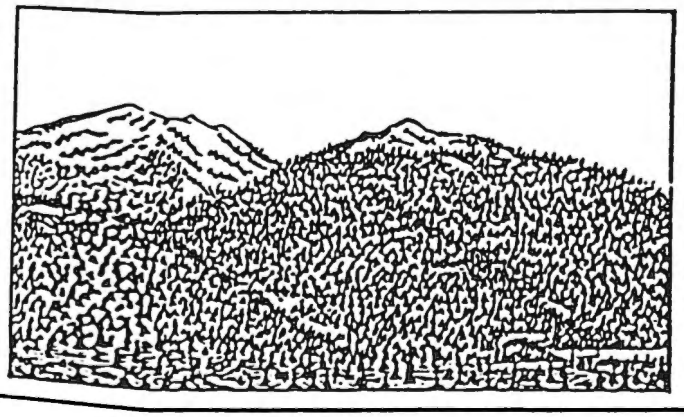
Changes are easily noticed and attract attention.



VQO RETENTION

VC II Unnoticed

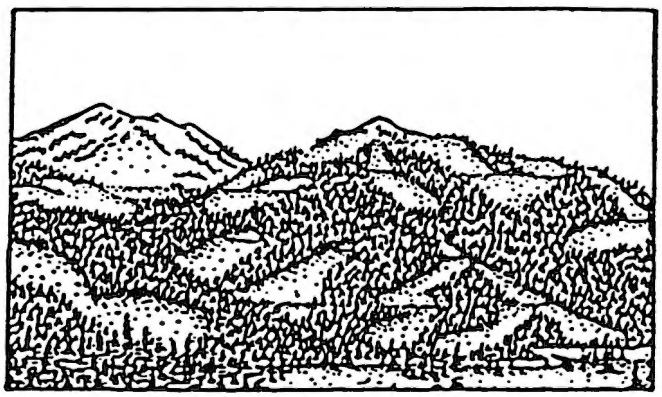
Changes are not visually evident.



VQO MAXIMUM MODIFICATION

VC V Major Disturbance

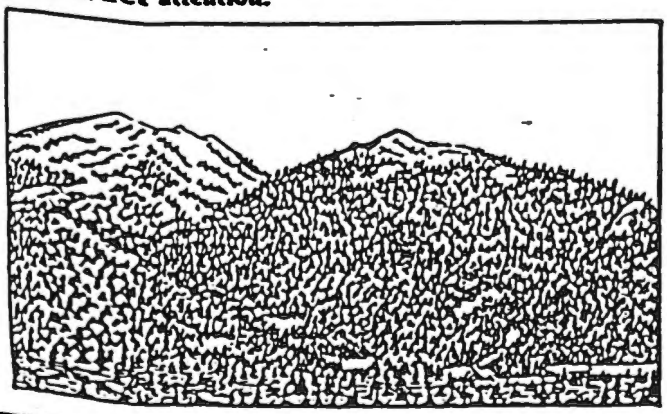
Changes are very strong and attract attention.



VQO PARTIAL RETENTION

VC III Minor disturbances

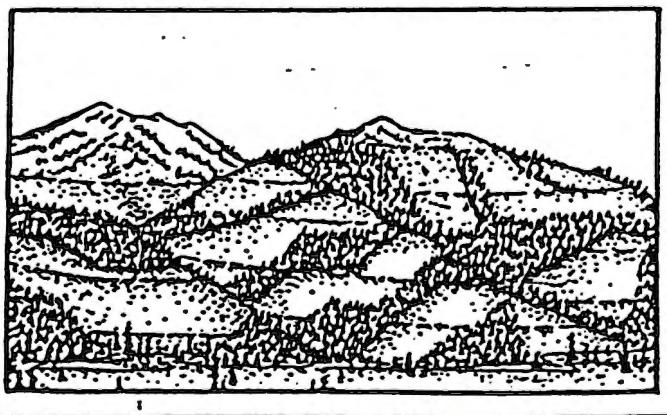
Changes are noticed, but do not attract attention.



VQO UNACCEPTABLE MODIFICATION

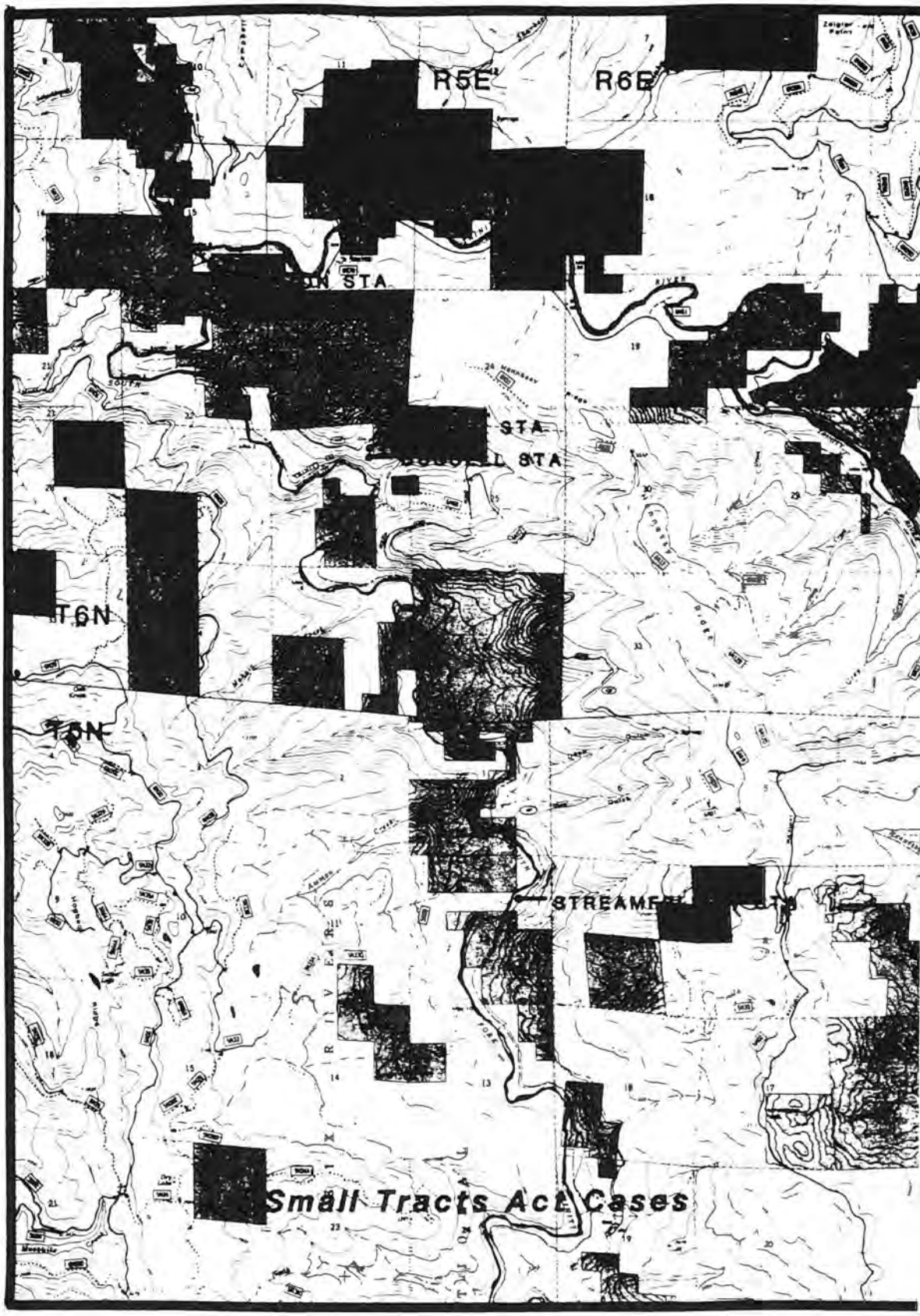
VC VI Drastic disturbance

Changes are in glaring contrast and disharmony with natural patterns.



NATURAL CHARACTER DOMINATES

ALTERED CHARACTER DOMINATES



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BOUNDARY DESCRIPTION

South Fork of the Trinity
Wild and Scenic River

The boundary line of the segments of the designated section of the SFTR from Forest Glen to it's confluence with the Trinity River will be as shown on 1979 7 1/2 minute U.S.G.S. Quadrangle sheets revised 1983. Quadrangle sheets with original boundary lines will be kept on file in the Hayfork Ranger District office. Boundary lines are shown by a series of lines and angle points, or by an offset distance from the center line of an existing road. Angle points are shown by a break in the line with the angle point marked by a small dot. Each angle point is identified by the unique label marked adjacent to it. Offset lines from the center line of an existing road will be marked with the offset distance.

Private Property

It is not intended that the boundary lines shown on the above maps will include any private property. Boundary lines along private property will be shortened or lengthened so there will be no overlap or gap between the boundary and the private property.

Digitizing Angle Points

At such time as it becomes necessary to define the boundary line on the ground, the following procedures will be used to determine coordinates for the angle points shown on said quadrangle maps.

1. The map will be oriented using the N.A.D. 1927 grid ticks marked on the quadrangle maps.

2. Angle points will be digitized to an accuracy of +- 0.10 of an inch of its position marked on the map.

Monumentation

When it becomes necessary to establish a monument on the ground, the monument will be set to an accuracy of +- 50 feet of the coordinate digitized from said map. Once a monument is established on the ground for an angle point, said monument will control the location of that angle point, unless it can be shown that the monument is not within +- 50 feet of the coordinate derived from the map. The monument will be stamped with the unique identifier label shown on the map and the date it was set.

Marking Boundary Lines

Boundary lines that are offset from the center line of an existing road will be established on the ground to an accuracy of +- 10 feet of the offset distance from the center line of the road. Once the boundary line is posted on the ground the posted line will be the boundary, unless it can be shown that the posting is not within the limits of +- 10 feet of the offset distance shown on the map. Boundary lines marked between monuments set on the ground will be posted to an accuracy of +- 1 foot of true line.