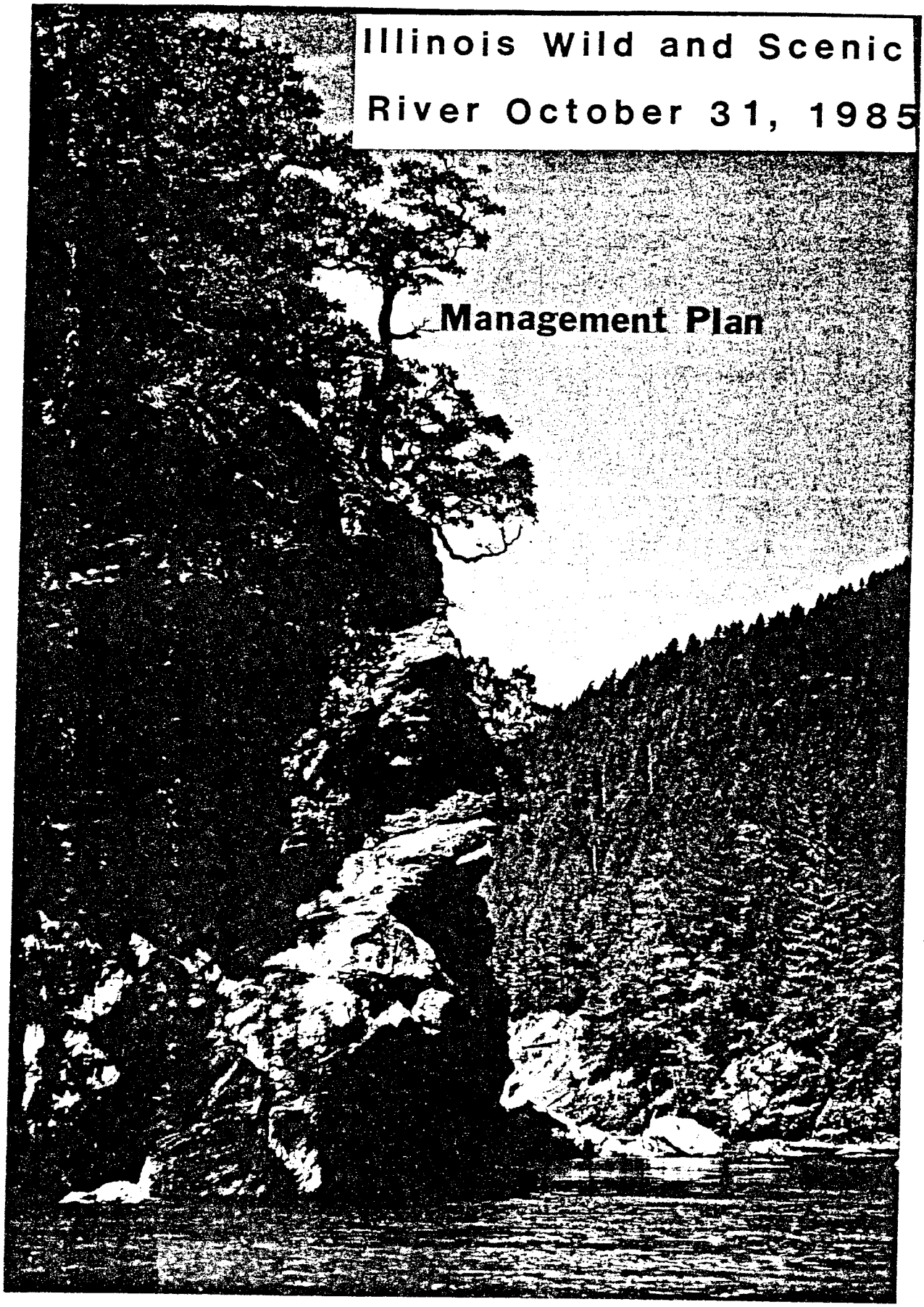
Illinois Wild and Scenic River October 31, 1985



Management Plan

Forest Service · USDA
Pacific Northwest Region
Siskiyou National Forest

ILLINOIS WILD AND SCENIC RIVER

MANAGEMENT PLAN

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Date

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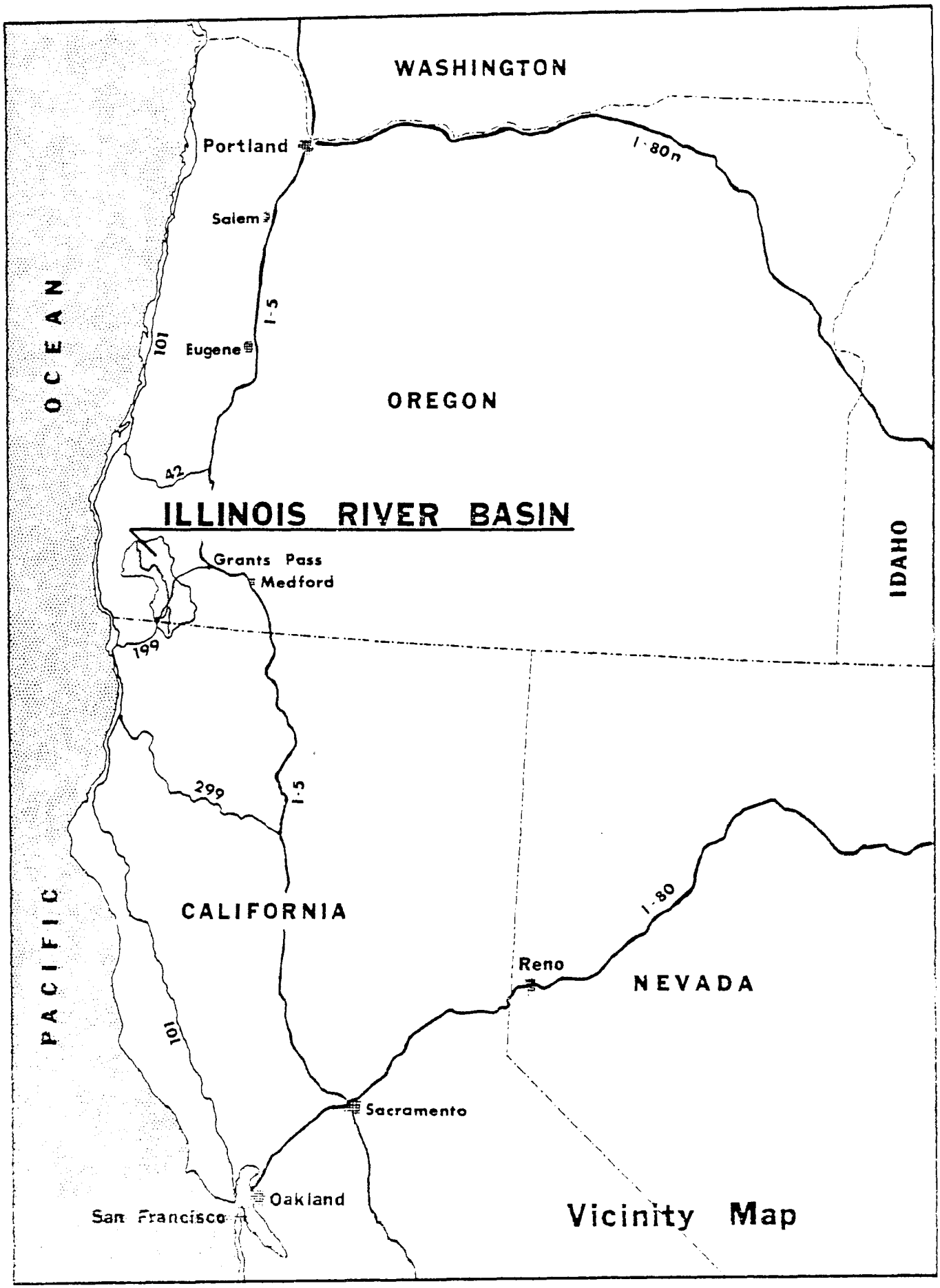
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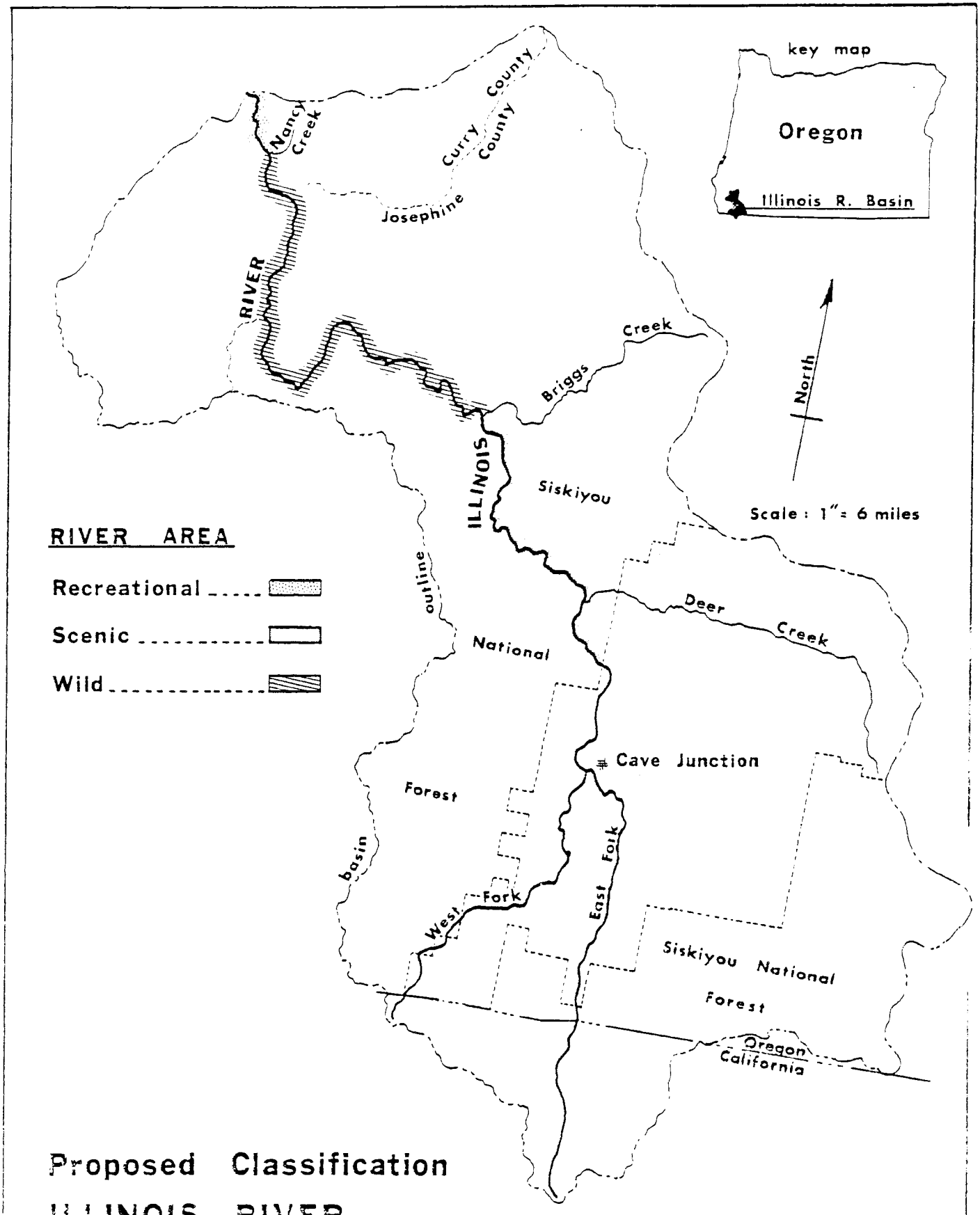


Proposed Classification
ILLINOIS RIVER

RECREATION MANAGEMENT PLAN

FOR THE ILLINOIS RIVER

INTRODUCTION:

In 1968, the Illinois River was named as a candidate for inclusion into the National Wild and Scenic Rivers System. It was legally added to the system by the President and Congress in 1984, (PL 98-494).

The State of Oregon classified the Illinois, from Deer Creek to its mouth, as a Scenic Waterway in 1970. The Department of Transportation was directed to protect the River, with its outstanding values, in a free-flowing condition. The authority given them is presently in effect.

Prior to 1970, the Illinois River from Briggs Creek to Nancy Creek received very little recreation use; this was due to poor accessibility. Since the early 1970's, however, white water rafting became popular and its effect on the Illinois was noticeable. Most of the use, to date, has been by private or nonprofessional users. Three (3) professional outfitters have operated on the River. In 1976 the Siskiyou National Forest, after consulting with the Oregon Scenic Waterways Advisory Committee, limited commercial use to three outfitters. This action was taken because of the number of requests (7) for commercial permits.

This Plan is prepared at the direction given by Congress in a 1984 amendment to the Wild and Scenic Rivers Act and the guidelines which were prepared by the Secretaries of Agriculture and Interior (Appendix C). It serves two objectives: first, it has been used to better identify the impacts which would occur after the River was classified; second, this Plan is intended to be used as a guide for future planning efforts. It should not be construed as being the final plan. The Forest Service should continue to refine the concepts, and tailor them to meet the needs of the people and the River. Continued coordination with the State should be sought in the development of future plans.

PURPOSE AND SCOPE OF PLAN:

This Plan has three primary purposes: (1) finalize classification, (2) establish the final boundary, and (3) present a plan for management.

This Plan is directed at the classified section of the River between the mouth and the Forest boundary. It should be noted, however, that the Illinois River from Deer Creek to the mouth is affected by various existing rules and regulations. These restrictions are:

A. Those restrictions identified in ORS 390.805-390.925 (Oregon Scenic Waterways Act) and the Oregon Transportation Commission's Rules and Regulations Pertaining to the Oregon Scenic Waterways System, June 25, 1974.

B. No motorboat use between Deer Creek and Horsesign Butte Creek as per State Administrative Rule - Chapter 250, Division 3, Number 30-030 (1) (6). (The State will be requested to revise this Rule to read "No motorboat use between Deer Creek and Nancy Creek....").

C. A special use permit will be required for commercial use of National Forest lands and waters.

In the past few years, use of the Illinois River for recreational float boating has increased tremendously. Management activity by the USDA Forest Service has also become much more intensive. Additional changes in the next few years can be foreseen as a result of Wild and Scenic designation.

This Plan is predominately a recreation use management plan: it seeks to provide a framework for management decisions and actions relating to river management on the Illinois Wild and Scenic River. Issues such as range management, wildlife management, and minerals management are considered in the plan only to the extent that they relate to recreational use and to protection of the wilderness and river resource. Coordination has been carried out to ensure that the provisions of this Plan does not significantly conflict with other resource management values.

AREA WITHIN THE ILLINOIS WILD AND SCENIC RIVER

The boundary for the Illinois Wild and Scenic River is delineated in Appendix M. The acreage included within the boundary averages approximately 320 acres per river mile. The boundary for the most part is located one-quarter mile from the river on both sides, except where private lands are involved. This location was chosen because of the wording in Section 3(b) of Public Law 90-542, and because it most closely resembled the Oregon Scenic Waterway boundary. In the areas where private lands are involved, the boundary was adjusted to coincide with property lines or legal descriptions.

The land area covered by this Plan includes the public lands within a 1/4 mile corridor adjacent to the Illinois River from its mouth upstream to the Forest boundary.

Approximately 15,200 acres are included within the Wild and Scenic River corridor. Key values which include water quality, fishery, scenic, botanical, and recreational qualities were identified in the canyon. Some of the most developable land with the highest potential for recreation use is included in the proposed boundary.

RIVER CLASSIFICATION

The final designation included 50.4 miles of the Illinois River in the National Wild and Scenic Rivers System. (See Appendix 2 for map and legal description.) The upstream boundary would coincide with the National Forest boundary near Sauers Flat. The river would be classified as:

Recreational:	Mouth of Illinois to Nancy Creek	- 3.8 miles
Wild.	Nancy Creek to Briggs Creek	- 28.7 miles
Scenic:	Briggs Creek to Forest Boundary	- 17.9 miles

MANAGEMENT DIRECTION

LEGAL REQUIREMENTS

1. Federal

Public Law 90-542, the Wild and Scenic Rivers Act, established direction by which components of the system are to be managed. Following is a brief summary of this direction:

> Sec. 1(b). "... selected rivers of the Nation which, with their immediate environment possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values shall be preserved in free-flowing condition, and that they and their immediate environment shall be protected for the benefit and enjoyment of present and future generations."
>
> Sec. 2(b) of the Act directs that "Wild River Areas" are to be administered as vestiges of primitive America. The Secretary of Agriculture and the Secretary of the Interior have interpreted primitive to mean that the watershed within the boundaries have a natural-like appearance. Although development is not prohibited, that which does occur should emphasize a natural-like appearance.
>
> Sec. 2(b) of the Act also states that water should be unpolluted. Unpolluted has been interpreted to mean that the quality of the water meets the minimum criteria for primary contact recreation.

The administering agencies are charged to administer rivers so as to emphasize their esthetic, scenic, historic, archeologic, and scientific features (Sec. 10(a)). It further states, "Management plans may establish varying degrees of intensity for its protection and development, based on special attributes of the area."

In addition to the direction given in the Wild and Scenic Rivers Act, the following management direction for "Wild River Areas" was developed by the Secretaries of Agriculture and Interior, and published in the Federal Register September 7, 1982. (Complete copy in Appendix.)

> "The administration of a wild and scenic river area shall give primary emphasis to protecting the values which make it outstandingly remarkable while providing river-related outdoor recreation opportunities. Each component will be managed under a nondegradation and enhancement policy designed to protect and enhance the values for which the river was designated."

PUBLIC LAW 98-494 - October 19, 1984 - An Act to amend the Wild and Scenic Rivers Act by designating a segment of the Illinois River in Oregon as a component of the National Wild and Scenic Rivers System.

PUBLIC LAW 95-237 (36 CFR 243) - February 24, 1978 - The Endangered American Wilderness Act. This law has legal requirements that come into play where the Wild and Scenic River and Wilderness overlap. When this occurs, the most restrictive of the laws will apply.

II. State

The Oregon Scenic Waterways Rules and Regulations stipulate:

SECTION III PUBLIC USE OF SCENIC WATERWAYS

All persons using scenic waterways for recreation shall comply with the provisions of the Act and with the rules and regulations adopted by the Commission under the Act.

A. Private Property

Nothing in the Act or in these rules and regulations affords to any person any right to trespass upon the property of another or in any way alters the rights of private landholders in regard to trespass. The Commission admonishes all persons to respect the rights and sensibilities of those who make their homes and livelihoods within the scenic waterways.

B. Litter and Pollution

Refuse, scrap, trash, and garbage which is not placed in receptacles provided for that purpose at maintained recreation sites shall not be buried or abandoned, but shall be taken out of the scenic waterways for proper disposal. All persons shall avoid pollution of the waters, lands, and air within scenic waterways in any manner whatsoever.

C. Fires

Fires shall be made only in compliance with State Law and only when and where there is no possibility of their causing damage. Conditions of wind and weather, proximity of vegetation or flammable materials, and other factors as prudence dictates, shall be most carefully considered. No open fire shall be made unless a shovel, axe, and bucket of water are nearby. No open fire shall be left untended, and all fires shall be completely extinguished with water after use. Permissible fires shall be of the smallest practicable size.

D. Tree Cutting

Living or standing trees or plants shall not be cut for burning or for any other purpose by persons using the scenic waterways for recreation.

E. Collecting Souvenirs and Relics

Except as provided by law, antiquities, relics, artifacts, fossils, and souvenirs shall not be removed from the site of their discovery or otherwise harmed. Archaeological sites and fossil beds shall not be disturbed without proper authority under law.

F. Livestock

Persons using the scenic waterways for recreation shall not harass or in any way interfere with livestock or domestic animals, whether on private or public land, or damage fences lawfully placed on such lands for their management.

Natural springs shall not be damaged, or in any way rendered unusable by persons or animals.

The Commission asks all persons to leave, in passing, no mark upon the land that might diminish its value to another; for the unspoiled beauty of these waterways of value to the human spirit is the common heritage of all.

SECTION V, C (2)(b)

In order to preserve the river and related adjacent lands in an essentially primitive condition, no new structures or improvements which are visible from the river other than those erected or made in connection with a compatible existing use, or those needed for public recreation or for resource protection, will be permitted. Additional dwellings and commercial public service facilities, including resorts and motels, lodges, and trailer parks which can be seen from the river, will not be permitted.

MANAGEMENT OBJECTIVES IN CONFORMANCE TO WILDERNESS RECREATION OPPORTUNITY SPECTRUM GUIDELINES

Kalmiopsis Wilderness Area overlaps much of the Wild Section of the Illinois River. Exhibits 1 and 2 display management objectives for the various components of the Illinois Wild and Scenic River using wilderness recreation opportunity spectrum guidelines that apply. The objectives for the Wild Section will essentially be the same as those developed for wilderness primitive categories outlined in the Wilderness Recreation Opportunity Spectrum Guidelines. (See Forest Service Manual 2320, Region 6 Supplement No. 56.) These guidelines will be the control where they conflict with or are more limiting than normal guidelines developed for the Wild component of the Illinois Wild and Scenic River. A presentation of normal Wild and Scenic River guidelines follow Exhibits 1 and 2.

One overriding objective of management is the maintenance of an extremely challenging white water boating experience in one of the most primitive settings in the Continental U.S. The Illinois River's exceptionally rugged, undeveloped character, presents a rare opportunity to provide for an experience where the recreationist must depend upon one's self to a high degree. The spiritual value of "doing it yourself" is most compatible with the Illinois Wild River objectives and, therefore, will be favored over commercially guided experiences.

Exhibit 1

MANAGEMENT OBJECTIVES: WILD SECTION - PRIMITIVE (TRAILLESS)
(Pine Creek to Collier Bar)

PRIMITIVE(TRAILLESS) DESCRIPTION	PHYSICAL/BIOLOGICAL SETTING OBJECTIVES	SOCIAL SETTING OBJECTIVES	MANAGERIAL SETTING
Area is characterized by an extensive unmodified natural environment. Natural processes and conditions have not and will not be measurably affected by the actions of users. The area is managed to be as free as possible from the influence of man's activities. Man is only a brief visitor. No facilities are required to protect the wilderness resource. Terrain, vegetation, trail density, and reasonable travel methods provide an area generally large enough to allow at least 2 days cross-country travel without crossing a constructed trail. Experience Opportunity: Provides the most outstanding opportunity for isolation and solitude, free from evidence of man's past activities and with very frequent encounters with current users.	Ecological Elements: Management will be to sustain or enhance the natural ecosystems. Adjacent areas and classes will be managed to protect the natural integrity of the trailless area. A. Soils: 1. Displacement and erosion of soil resulting from human activity will be limited to a rate that closely approximates the natural process. 2. Soil compaction should not exceed limits which will prevent natural plant establishment and growth. B. Water: Maintain the natural quality of streams and lakes. There should be no measurable degredation of water quality as a result of man's activity, including Forest Service administration activity.	Encounters: Maintain opportunity to travel with not more than one encounter per day between groups. Group Size: Maximum party size not exceeding 12 (without written authorization). To protect the opportunity for a high degree of solitude, to foster the feeling of traveling where few have traveled before, and to protect natural conditions, special authorizations will not normally be provided for oversized parties in this class except for winter. Camps: Overnight camp encouraged in adjacent primitive class or never more than one night in one site within the class. No other camps are visible from any one site.	Off-Site Evidence Of Control: Management control necessary to protect the ecological and social elements throughout the Region's wildernesses and at trailheads and boundary portal. Formal regulations, orders, and/or permits may be necessary to achieve management objectives. Formal and informal user education programs will be initiated to inform users about what to expect and how to use the area for optimum benefit of all. Actions are designed to help meet management objectives, not to promote use. On-Site Evidence of Controls: Patrols and monitoring of conditions by Forest service and other appropriate state and Federal agency personnel as necessary to achieve management objectives. Scientific study and ecological monitoring actions will be scheduled to meet social setting criteria.

Exhibit 1 (Continued)

MANAGEMENT OBJECTIVES: WILD SECTION - PRIMITIVE (TRAILLESS)
(Pine Creek to Collier Bar)

PRIMITIVE(TRAILLESS) DESCRIPTION	PHYSICAL/BIOLOGICAL SETTING OBJECTIVES	SOCIAL SETTING OBJECTIVES	MANAGERIAL SETTING
The user has outstanding opportunity to travel cross-country utilizing a maximum degree of outdoor skills, often in an environment that offers a high degree of challenge and risk. The river in this area is extremely challenging and should only be attempted by those who have intermediate or very experienced boating skills.	C. Vegetation: 1. Maintain healthy, native vegetation in campsites. At more traditionally used sites, ground cover loss will not exceed 100 sq.ft. There will be no loss of trees. 2. There should be no long-term modification of natural plant succession as a result of man's activities. Acceptable modifications are those which will recover in one growing season. D. Fish and Wildlife: Manage to allow natural ecological successions, including natural infestations of insects, to operate freely, insofar as they do not endanger significant resources outside wilderness.	Livestock: To provide an opportunity free from the influence of man's activities and to maintain the integrity of natural ecological processes. This class will not include allotments where livestock grazing is presently permitted. Pets: Pets must be under reliable voice control and/or physical restraint to protect both people and wildlife within this class.	Signs: Within the class provide only minimum signing necessary to protect the wilderness resource. Trails: User travel will be managed so trails will not become established. Where trails have been created from heavy use of certain routes they will not be shown on maps or Forest Service trailguides. Fire: Require use of firepans.

Exhibit 1 (Continued)

MANAGEMENT OBJECTIVES: WILD SECTION - PRIMITIVE (TRAILLESS)
(Pine Creek to Collier Bar)

PRIMITIVE(TRAILLESS) DESCRIPTION	PHYSICAL/BIOLOGICAL SETTING OBJECTIVES	SOCIAL SETTING OBJECTIVES	MANAGERIAL SETTING
	Maintain fish and wildlife indigenous to the area immediately prior to designation with emphasis on preservation of threatened and endangered species. 1. No facility development or habitat alteration exists or is permitted. 2. Allow natural process, as far as possible, to control wilderness ecosystems and their fish and wildlife. 3. Reestablishment of native species or establishment of an endangered or threatened species permitted provided the action is for correcting an undesirable condition resulting from influences of man. 4. Stocking and transplanting of lakes and streams may continue if practiced prior to wilderness classification. E. Visuals Retain visual quality which presently exists.		

Exhibit 2

MANAGEMENT OBJECTIVES: WILD SECTION - PRIMITIVE (TRAILED)
(Briggs Creek to Pine Flat & Collier Bar to Nancy Creek)

PRIMITIVE(TRAILED) DESCRIPTION	PHYSICAL/BIOLOGICAL SETTING OBJECTIVES	SOCIAL SETTING OBJECTIVES	MANAGERIAL SETTING
Area is characterized by essentially unmodified natural environment. Concentration of users is low and evidence of human use is minimal. The area is managed to be essentially free from evidence of man-induced restrictions and controls. Only essential facilities for resource protection are used and are constructed of native or natural appearing materials. No facilities for comfort or convenience of the user are provided. Spacing of groups is informal and dispersed to minimize contacts with other group individuals. Experience Opportunity: Extremely high opportunity for exploring and experiencing considerable isolation (from the sights and sounds of man): independence,	Ecological Elements: A. Soil: 1. Displacement and erosion of soil resulting from human activity will be limited to a rate that closely approximates the natural process. 2. Soil compaction should not exceed limits which will prevent natural plant establishment and growth, except at some campsites (see vegetation) administrative facilities, and designated trail tread. B. Water: Maintain the natural quality of streams and lakes. Activities should not degrade water quality except for temporary changes which are transitory in nature; i.e., the water quality returns to its previous level when the activity ceases.	Encounters: No more than 6 encounters with other traveling groups per day during 80% of the use season. Group Size: Maximum group size may not exceed 12 (without written authorization). Written authorization for larger parties, not to exceed a total of 30 people, may be provided where FL and RM planning indicates area objectives will accommodate them. The special-use permit authorizing the large group will specify route of travel, camp locations, and other conditions necessary to meet management objectives.	Off-Site Evidence Of Control: Management control necessary to protect the ecological and social elements throughout the Region's wildernesses and at trailheads and boundary portals. Formal regulations, orders, and/or permits may be necessary to to achieve management objectives. Formal and informal user education programs will be initiated to inform users about what to expect and how to use the area for optimum benefit to all. Actions are designed to help meet management objectives, not to promote use. On-Site Evidence of Control: Periodic presence of Wilderness Rangers, technicians engaged in monitoring or project work, trail crews, ete. Mangement groups will conform to party size limitations, established social and ecological element standards, and where feasible, work

Exhibit 2 (Continued)

MANAGEMENT OBJECTIVES: WILD SECTION - PRIMITIVE (TRAILED)
(Briggs Creek to Pine Flat and Collier Bar to Nancy Creek)

PRIMITIVE(TRAILED) DESCRIPTION	PHYSICAL/BIOLOGICAL SETTING OBJECTIVES	SOCIAL SETTING OBJECTIVES	MANAGERIAL SETTING
closeness to nature; tranquility and self-reliance through application of primitive recreation skills in an environment that offers a high degree of challenge and risk. The river in this area is extremely challenging and should only be attempted by those who have intermediate or very experienced boating skills.	C. Vegetation: At more heavily used areas loss of ground cover should not exceed 200 sq.ft. at any one site or 0.5% of any acre. There will be no loss of trees. 2. There should be no long-term modification of natural plant succession as a result of man's activities on areas outside of accepted campsites, trails, and administrative sites. Acceptable modifications are those which will recover in one growing season. 3. Dead standing (snags) and down vegetation should be managed to approximate natural conditions.	Camps: Not more than one campsite should be visible from any campsite. Camps should be separated from other campsites and set back from trails, meadows, lakes and streams at least 200 feet. Livestock: Commercial transportation livestock grazing is permitted under approved management plans to the extent that such use is compatible with wilderness use and other resource values.	will be scheduled for low-use periods. On-Site Evidence of Controls: (Continued) Wilderness Rangers contact an average of 20% of the parties using the area during the peak use season. Signs: Within the class provide minimum signing necessary to protect wilderness resources. User takes primary responsibility for personal safety. A maximum of two directional signs with a maximum of two destinations per sign to be placed at trail junctions. Distances will not be provided. Geographic features will be labeled on maps but will not be signed.

Exhibit 2 (Continued)

MANAGEMENT OBJECTIVES: WILD SECTION - PRIMITIVE (TRAILED)
(Briggs Creek to Pine Flat and Collier Bar to Nancy Creek)

PRIMITIVE(TRAILED) DESCRIPTION	PHYSICAL/BIOLOGICAL SETTING OBJECTIVES	SOCIAL SETTING OBJECTIVES	MANAGERIAL SETTING
	All dead standing vegetation should be left in place. Dead down vegetation may be removed in amounts that can be replaced annually through natural accumulation. 4. Vegetation impacts along trails will be confined to the planned location and design specifications of the trail. D. Fish and Wildlife: Manage to allow natural ecological successions, including natural infestations of insects, to operate freely, insofar as they do not endanger significant resources outside wilderness. Maintain fish and wildlife indigenous to the area immediately prior to designation with emphasis on preservation of threatened or endangered species.	Pets: Pets must be under reliable voice control and/or physical restraint to protect both people and wildlife within this class.	Trails: Some loop trail systems may be developed to obtain dispersion. New construction will be primitive. Trails will generally receive Level 1 and 2 maintenance and are to accommodate light to moderate travel. Routes will be maintained only for resource protection and to protect the investment. The modification of natural environment would be minimal. The route should provide the user with an opportunity for testing skills and experiencing a sensation of physical exertion and a feeling of accomplishment.

Exhibit 2 (Continued)

MANAGEMENT OBJECTIVES: WILD SECTION - PRIMITIVE (TRAILED)
(Briggs Creek to Pine Flat and Collier Bar to Nancy Creek)

PRIMITIVE(TRAILED) DESCRIPTION	PHYSICAL/BIOLOGICAL SETTING OBJECTIVES	SOCIAL SETTING OBJECTIVES	MANAGERIAL SETTING
	1. Improvements and activities necessary for fish and wildlife management and in existence prior to designation are permitted and maintained provided work is performed with nonmotorized equipment and subject to management plan guidelines. 2. Chemical treatment of water permitted to prepare water for the reestablishment of native species, to establish endangered or threatened species, or to correct undesirable conditions resulting from the influence of people. 3. Reestablishment of native species or establishment of an endangered or threatened species permitted provided the action is for correcting an undesirable condition resulting from influences of people. 4. Barren lakes and streams may be stocked after State and Forest Service agree that there will be no appreciable loss of scientific values or adverse effects on wilderness resources.		

Exhibit 2 (Continued)

MANAGEMENT OBJECTIVES: WILD SECTION - PRIMITIVE (TRAILED)
(Briggs Creek to Pine Flat and Collier Bar to Nancy Creek)

PRIMITIVE(TRAILED) DESCRIPTION	PHYSICAL/BIOLOGICAL SETTING OBJECTIVES	SOCIAL SETTING OBJECTIVES	MANAGERIAL SETTING
	5. Control of problem animals permitted to reduce degradation on other wildlife and domestic livestock and to remove animals creating a public nuisance related to human interests.		
	E. Visuals		
	Site Modifications:		
	Camping areas to be located on-site within coniferous forest areas where possible. In all cases, sites should be located to take advantage of topographic and vegetative screening. Outside of coniferous areas where no vegetative or topographic screening is available camps to be located, where possible, outside foreground view (200') from lakes, trails, other camps, and key interest features. Site design trails (and campsites) should encourage maximum dispersion of visitors.		
	Retain visual quality which presently exists.		

MANAGEMENT OBJECTIVES IN CONFORMANCE WITH RECREATION OPPORTUNITY SPECTRUM GUIDES FOR VARIOUS WILD AND SCENIC RIVER COMPONENTS

Where private lands are involved, restrictions or constraints will be sought through the purchase of conservation easements. These guides will be used as a basis for determining what restrictions are necessary; however, the specific restrictions will have to be determined on a case-by-case basis. Further explanation of the affects of classification on private landholders is located under the acquisition heading.

The following guidelines have been developed for the Recreational, Scenic, and Wild River components of the Illinois River:

"RECREATIONAL RIVER AREA"

This portion of the River would join the "Agness Recreational Area" of the Rogue National Wild and Scenic River System. Management concepts would be similar to the recreational management direction of the Rogue River. 1/ In addition, the following directions would apply or, where in conflict, supersede the Rogue Management Plan. Management activities proposed for this area will meet visual management objectives inventoried for the area.

Access: The visual impact of new roads would have to meet the criteria for "Retention" as specified in National Forest Landscape Management Vol. 2 Handbook No. 462. A new road would not be permitted if it has the potential to diminish water quality.

Agriculture: A full range of agricultural practices would be permitted. Fencing and structures would be allowed providing they are constructed in a manner compatible with the river view and use.

Improvements: Structures would be required to meet the quality standard of "Retention" as described in the visual management system. 2/ The Agness community area will be recognized as a service center. 3/

Minerals: The Forest will not request that land within the "Recreational River Area" boundary would be withdrawn from mineral entry, however, protection of Wild and Scenic River values will be a primary consideration in the approval of any operating plan submitted for mining purposes. The view from the river will be considered in the development of operating plans for removal of minerals. Noncommercial removal of sand and gravel may be allowed by permit within the river corridor (1/4 mi. either side) but will be limited to minimal amounts (1-2 tons per permit). A similar policy will be requested on private lands within the Wild and Scenic River Corridor through county land use zoning policies, or by purchase of conservation easements. The State Land Board must approve removal of sand and gravel from the bed or banks. The intention is to

1/ Revised Development and Management Plan, Rogue National Wild & Scenic River - Federal Register, July 7, 1972.
2/ National Forest Landscape Management Volume 2, Agriculture Handbook No. 462. (Summary - Appendix H)
3/ A Service Center is defined as an area which generally contains typical facilities such as church, grocery store, gasoline, etc.

not remove sand and gravel from bed or banks. Motorized recreational dredging with intakes of 4" or less and hand panning will be permitted (on lands not already under claim). The use will be monitored. When use causes a reduction in Wild and Scenic River qualities it may be necessary to initiate a regulatory system.

Recreation: Development of recreational facilities by private enterprise or the government would be compatible provided that the free-flowing nature of the river would not be adversely affected. Development 1/ would have to meet the visual quality standard of "Retention." 2/ Control of recreational dredging and placer activity is discussed under minerals.

Vegetation and Timber: Harvesting timber may be allowed providing water quality is not adversely affected and the visual quality standard of "Retention" is met. 2/ On National Forest Lands which are visible from this portion of the river but are outside the Wild and Scenic boundary, timber harvest activities will meet the visual quality standards identified for the area as a result of decisions made in the Forest Planning process. Threatened or endangered plant species will be surveyed and protected in implementing this plan, which includes activities listed under this heading and those described under the heading Recreational Development Plan. No harvesting within 300 yards of the river.

Utilities: New utility lines would be permitted providing existing routes are utilized or that new routes meet the visual management quality standard of "Retention." 2/

Fish and Wildlife: Since timber is managed under the visual constraint of "Retention" a continuing percentage of old-growth will be maintained. Under the Forest snag policy, snags will also be maintained. Priority will be given to management which protects existing fish and wildlife values. Habitat enhancement measures will be encouraged. Hunting will be permitted under appropriate State regulations.

Fire: Normal fire detection, prevention, and control activities will be suitable.

Water: If conflict between water quality and resource uses and activities should occur, protection of water quality would take precedence. Modification of the streambank would not be permitted except in cases where significant investments (i.e., Illinois River Bridge) need protection and where the natural river value would not be unreasonably diminished. Natural channels will not be modified to facilitate powerboat travel.

"SCENIC RIVER AREA"

Access: The Illinois River Road (No. 4103) would be retained at essentially its present standard except for the addition of turnouts, parking, or limited surfacing for the purpose of recreation or safety. New routes would be limited to spur roads giving access to the river or development. These would have to meet the visual quality standard of "Partial Retention." 2/

1/ Forest Service Manual 2330.
2/ National Forest Landscape Management Volume 2, Agriculture Handbook No. 462. (Summary - Appendix H)

Agriculture: A wide range of agricultural uses would be permitted. Fencing would be allowed providing it does not physically interfere with the river uses, and can blend with the environment.

Improvements: Agricultural and residential buildings may be built providing they are not visible from the river. Under State regulations, such improvements must have topographic screening. Improvements such as fences, resource protection devices, and recreational facilities may be constructed providing they meet the "Retention" quality standard as outlined in the Forest Service Visual Management System. 1/

Minerals: The Forest will recommend that the area within the boundary between Deer Creek and Briggs Creek would remain closed to mineral entry. Additional withdrawals from mineral entry will be requested to accomplish this. The view from the river and the effect of mining on water quality will be considered in the operating plans for removal of minerals on preexisting valid claims. Reasonable access to the claims would be permitted providing it meets the quality standard of "Partial Retention." 1/ The removal of sand and gravel from bed and banks on private lands will be limited through the purchase of conservation easements. Removal of common variety minerals within other areas of the river corridor will be limited as described within the Recreation Section. Recreational dredging will be permitted only between the Forest Boundary and Deer Creek (on lands not already under claim). Motorized dredging will be limited to all intakes of 4" (four inches) or less. The activity will be monitored. Preservation of Wild and Scenic River qualities may require some future regulations.

Recreation: The types of recreational facilities which are appropriate to the scenic portion are overlooks, fisherman parking, picnic facilities, swimming sites, camping facilities, hiking trails, and launching points. Facilities of the above mentioned types would be suitable in locations where adverse effects on the scenic, water quality, or recreational values are minimal.

Vegetation and Timber: Timber may be cut within the "Scenic River Area" boundary, providing the visual quality standard of "Retention" is met. 1/ Timber on National Forest Lands outside the Wild and Scenic River boundary but visible from the river could be harvested, providing the visual quality standard allocated for the area through the Forest Planning process is met. 1/ Harvesting activity which would reduce water quality will not be permitted. Threatened or endangered plant species will be protected in implementing this plan which includes activities listed under this heading and those described under the heading Recreational Development Plan. No timber harvesting 300 yards of the river.

Utilities: Utilities would be permitted providing they are located out of sight from the river or trails. Utilities must meet visual objectives.

Fire: Fire control activities will be limited to those which will create the least amount of ground disturbance. Hand lines will be favored over machine constructed lines. Machine constructed lines may be suitable on slopes under 25 percent. Machine constructed lines will be promptly naturalized after control.

1/ National Forest Landscape Management Volume 2, Agriculture Handbook No. 462. (Summary - Appendix H)

Water: If conflict between water quality and resource uses and activities occur, water quality would take precedence. Modification of the streambed would not be allowed except for resource protection or fishery enhancement projects which do not substantially affect the natural river qualities.

Water quality will be monitored for the purpose of detecting pollution.

Fish and Wildlife: Under the Forest Snag Policy the presence of snags will be assured. The visual constraint of "Retention" will insure a continuing percentage of old-growth. Priority will be given to management which protects existing fish and wildlife values. Habitat management measures which meet the visual objective of "Retention" would be encouraged. Hunting will be permitted under appropriate State regulations.

"WILD RIVER AREA"

Access: Motorized land and water travel will be prohibited within the classified boundary, with the exception of the following two trails.

1. Game Lake Trail No. 1169 will be open to motorized travel year-round.

2. Illinois River Trail No. 1161 will be open to motorized travel between the trailhead at Oak Flat (near Nancy Creek) and the private land located in Sec. 4, T. 36 S., R. 11 W., Willamette Meridian, only from September 16 to May 14, the same dates as under current regulation. The remainder of the Illinois River Trail is closed to motorized traffic year-round.

There is to be no other motorized land or water travel within the Wild River boundary. Hiking trails to the River, if any, may be developed off existing Trail No. 1163; provided such trails not be built parallel to the River. Bridges will not be allowed across the river.

Use of aircraft near the River at low elevations would be discouraged during the recreational season. Utilize 3,000 foot advisory over wilderness.

Transportation routes outside the "Wild River Area" boundary, but within sight of the River, must meet the visual quality standard approved for the area.

Agriculture: Existing agricultural use would be allowed to continue (i.e., Briggs Ranch).

Improvements: Expansion of existing structures or improvements on private land would not be allowed. Recreational facilities will not be developed in this part of the River. Any development outside the corridor boundary, but visible from the River, would have to meet visual quality standards approved for the area, and should be limited to a primitive level of development. 1/

1/ Forest Service Manual 2330.

Minerals: The area within the boundary would remain withdrawn from mineral entry. The view from the River and the effect of mining on water quality would be considered in the development of operating plans for removal of minerals on any preexisting valid claims. Access routes to claims would have to be located out of sight from the River and the removal of sand and gravel would be prohibited.

Recreation: The main purpose is to provide a continued opportunity for a primitive-type experience in which solitude is a prime factor. To insure this, primary emphasis would be given to protecting the natural river environment. Controls on the amount of recreational use will be established if the need arises. Float use by private individuals will be favored over commercial use. Motorized recreational dredging is prohibited. Recreational panning for gold may be allowed.

Vegetation and Timber: Timber harvest would not be allowed within the "Wild River Area" boundary. Timber outside the boundary but within view of the River could be managed and harvested when visual quality standards allocated for the area through a Forest Planning process are met. 1/ A natural botanical progression would be favored within the boundary. Threatened and endangered plant species will be surveyed and protected in implementing this Plan, which includes activities listed under this heading and those described under the heading Recreational Development Plan. Harvesting activity which would reduce water quality will not be permitted.

Utilities: Utilities which would be visible from the River or would create a reduction in water quality would not be permitted.

Fire: Use of low elevation aerial detection should be avoided during periods of high recreational use. Fire control should place emphasis on suppression while fires are small, by hand tools and aerial delivery system. Minimum impact on the ground will be paramount.

Water: Modification of the streambed or bank would be pronibited.

Fish and Wildlife: Priority would be given to management which protects the anadromous fish values. Old-growth timber and snags would not be cut; thereby benefitting cavity nesters. Hunting will be permitted under appropriate State regulations.

1/ National Forest Landscape Management Volume 2, Agriculture Handbook No. 462. (Summary - Appendix H)

ACQUISITION PROGRAM

The Forest Service will cooperate with Josephine and Curry Counties in utilizing the zoning powers of the state and local governments to the extent that those zoning classifications and ordinances adequately protect the values which provided the basis for Congressional designation as a Wild and Scenic River.

County and State zoning will be the preferred method of protecting natural values from incompatible activities on private land. In the event that zoning does not provide the assurance of permanent protection offered by ownership of some interest in land, the Forest Service will use conservation easement for fee simple acquisition, as appropriate. Congress, recognizing activities on private ownerships, could be in conflict with the objectives of the Wild and Scenic River designation, authorized purchase of fee simple estates, or the acquisition of conservation easements where local zoning authority does not provide adequate protection. The preferred method of acquisition in the Wild Section is by either land exchange or purchase of conservation easements. The Forest will seek a conservation easement on one major parcel in the Wild Section in order to attain preservation objective.

A conservation easement provides the Government the right to control use of private land for protection of the scenic qualities. Less-than-fee acquisition avoids displacement of current residents, allowing the land to be retained in private ownership, and may allow the continuation of traditional uses, such as cropping or grazing. The landowner receives a monetary payment for the property right granted to the Government, the amount of consideration being dependent upon land values and the nature of the rights obtained. In addition, any regular use exercised prior to the acquisition of an easement would not be eliminated without the consent of the landowner. Fair market value will be paid for all easements acquired.

Approximately 10 percent of the land within the proposed Wild and Scenic River boundary is in private ownership. As the Government already owns more than 50 percent of the area, it can acquire fee simple estates only on a willing seller-willing purchaser basis. Acquisition of conservation easements by condemnation is authorized by the enabling legislation, but until such time that a conservation easement is purchased, the Federal Government has no control over the use of private land.

Acreage by river classification area and ownership is listed in the following table:

(Note: Table indicates 15,229 acres total while legal description in Appendix 2 lists 16,059.66 acres. Differences are acres outside quarter mile corridor but within the legally described corridor).

Table I

Acreage by Ownership and River Area

River Area	Acres		
	Public	Private	Total
Recreational	440	608	1,048
Scenic	5,143	476	5,619
Wild	8,435	127	8,562
TOTAL	14,018	1,211	15,229

Josephine County - 12,290 acres.
Curry County - 2,939 acres.

Most of the private lands originate from homestead entry patents, and they are being utilized at present for homesites, agricultural uses, and timber production.

When county zoning does not assure adequate protection of Wild and Scenic River values, conservation easements will be acquired which specify exactly what uses will be allowed to continue and what uses will be restricted. Controls will vary, depending upon the river area within which a property is located, but restriction will be more in the Wild River Area than in the Scenic or Recreational River Areas.

Among the rights considered for acquisition are the following:

1. Exclusion of industrial activity except for prior established uses.

2. Requirement that easement area be maintained in an orderly condition with no accumulation of trash, garbage, or unsightly material.

3. Retention of the topographical features in the condition existing at the time of acquisition unless changes are authorized by the Forest Service. No changes will be authorized on easements within the Wild River Area.

4. Limitations upon the type, size, number, placement, and appearance of structures or facilities built or moved into the easement area. In the Wild River Area structures will be limited to those existing at the time of acquisition. Replacement in kind and existing owner utility will be the goal for any future development.

5. Approval and concurrence of the Forest Service for any timber harvest activities proposed within the Scenic and Wild River Areas to assure maintenance of visual quality standards, except that trees which are dead, diseased, or a hazard to safety may be cut. Within the Wild River Area, no timber cutting will be allowed except those trees which are a hazard to safety.

6. Prohibition of incompatible signing which would be visible from the river.

7. The right of the public to incidental use of a strip of land along the edge of the Illinois River in conjunction with boating and rafting needs. There may also be instances where a separate trail easement will be acquired for traverse, portage, or access uses.

8. Limitations to agriculture and grazing. In the Wild River Area agriculture and grazing uses will be administered to maintain private lands in a pristine condition similar to adjacent public lands.

Priority for acquisition of conservation easements is given to those properties within the Wild River Area, followed by the Scenic River Area, with Recreational River Area properties last.

Among the rights not acquired in conservation easements are the following:

1. Public access or entry to the easement area.

2. Use of the area for appropriate farming, grazing, gardening, and orchard uses.

3. Regular uses exercised prior to the acquisition of the easement, unless otherwise agreed to by the owner.

4. Sale, transfer, donation, or passage or title to the land.

5. Performance of maintenance on existing roads, structures, buildings, and other improvements, nor the replacement of any existing road, structures, buildings, and other improvement at the time of acquisition with similar facilities in substantially the same locations.

Easement can be used most effectively when some but not all rights of ownership are needed to meet management objectives. It is the Forest Service's intention to acquire only those rights necessary to meet Congressional direction to protect the immediate environment of Wild and Scenic Rivers for the benefit and enjoyment of present and future generations. However, purchase of the full fee simple estate will be considered in those situations where the landowner chooses to sell all interests in the land in an independent determination.

WATER RESOURCE PLAN

Streamflow and water quality during the late summer and early fall months are the most questionable factors when evaluating the river values against the criteria established for including rivers into the Wild and Scenic Rivers System. The Secretaries' guidelines state:

> "There should be sufficient volume of water during normal years to permit, during the recreation season, full enjoyment of water-related outdoor recreation activities generally associated with comparable rivers."

The guidelines further indicate that the river should be of high quality water or susceptible of restoration to that condition. Water quality should also meet criteria for fish and other aquatic life.

Section 13(d) of the Wild and Scenic Rivers Act directs that jurisdiction of the state over waters shall be unaffected by this Act to the extent that such jurisdiction may be exercised without impairing the purpose of Wild and Scenic Rivers.

Although water quality and flow meet the criteria for inclusion, except for intermittent short periods. Flow could be improved to compensate for the amount of water removed for irrigation purposes or by developing storage facilities.

The ability to reduce the amount of water removed from the river under the Wild and Scenic Rivers Act could be accomplished; however, the degree and effectiveness is questionable. Water rights could be obtained through the purchase of lands or scenic easements. The willingness of landowners, however, to relinquish their water rights is doubtful. In addition, some water rights are located a considerable distance from the river or tributaries. To obtain these rights, the boundary of the Wild and Scenic River would have to be expanded, in some cases, to an unreasonable extent.

If summer irrigation drawdown is to be offset in the Illinois Valley, it appears that it could best be accomplished through storing winter runoff. Several reservoir sites have been identified on the upper river, outside the designated Wild and Scenic River Corridor, and through the development of one or more, streamflow in the summer could be augmented. To date, none of the reservoir projects appear economically feasible for irrigation purposes.

In future consideration of reservoir projects, augmentation of summer flows, to replace irrigation drawdown, should be encouraged as well as existing streamflows protected from further withdrawal. Cooperation with the Oregon Water Resources Board should be initiated to achieve these goals.

The Forest Service will contact the Oregon Department of Environmental Quality to encourage initiation of adequate water quality monitoring standards in their regulations. These regulations should be designed to maintain those qualities for which the river was classified.

RECREATION DEVELOPMENT PLAN

Conceptual recreation development is directed at protecting and preserving the Illinois River while providing suitable receational facilities for appropriate use. The developments are identified to provide a basis for estimating the cost of development within the Wild and Scenic River. This plan expresses the best judgment as to recreational development at this point; however, it should be used only as a guide for the managing agency. More detailed planning is needed before actual development takes place.

Access:

Of the 50.4 miles of the Illinois River which are included in the Wild and Scenic Rivers System, approximately 21 miles are accessible by road. No expansion of this road system is planned other than that which is in respect to recreational facilities.

The Illinois River Road from the Forest boundary to Briggs Creek should not be upgraded so as to encourage a significant increase in recreational use or an additional impact on the view from the river. Some improvement may be needed to make the road safe for the existing level of use.

The development of a trail near the river in the Wild River Area is not feasible. The impact on the scenic qualities and solitude presently available appears to be excessive; in addition, soil problems indicate an unwarranted expense. New alignment of the Pine Flat Trail should be considered to reduce the present excessive grades and maintenance costs.

The possibility of expanding the Illinois River Trail from Briggs Creek upstream to the Forest boundary appears to be valid from the standpoint of receational use. The feasibility of constructing this trail would need to be investigated. If the trail is constructed it would be desirable to locate it on the west side of the river. Fishing use would benefit as well as hiking use. Easement may be necessary across private lands.

When needed, public access easements will be sought in the "Recreational River Area" as this portion is mostly in private ownership. Public access would only be acquired to provide for use of the river's edge (fishing or traversing up and down the riverbank).

Recreational Facilities:

Presently a minimal amount of recreational facilities exist on the Illinois River. The recreation experience planned for in each river area would require various levels of facilities.

Because of the distinct character (absence of evidence of man, solitude) of the "Wild River Area" the primary objective would be to retain this environment with a minimal amount of development.

In the "Recreational River Area" the majority of the land is in private ownership. Development of a site appears to be dependent on the Government acquiring a tract of suitable land. Encourage use of existing private campground in the Agness area.

In the "Scenic River Area" there is a need for campgrounds and picnic facilities, overlooks, and interpretive facilities, hiking trails and trailheads, launch points, fishermen parking, and swimming points. These sites will be located and designed to create a minimum impact on the natural river qualities. Higher standard facilities (convenience type) should be restricted to the upstream end of the Scenic River Area. The downstream end of the scenic area will generally have more primitive facilities. In the Wild Section a "pack it in, pack it out" policy will be enforced. Users will also be encouraged to pack out human waste.

The Recreational Facility Map, next page, illustrates areas which appear suitable for recreational development. Sites shown in the Wild Section will not be developed to include any facilities. Initial plans have been prepared, but development may not reach the extent indicated, depending on needs and further planning; however, the following cost estimate is based on this preliminary plan:

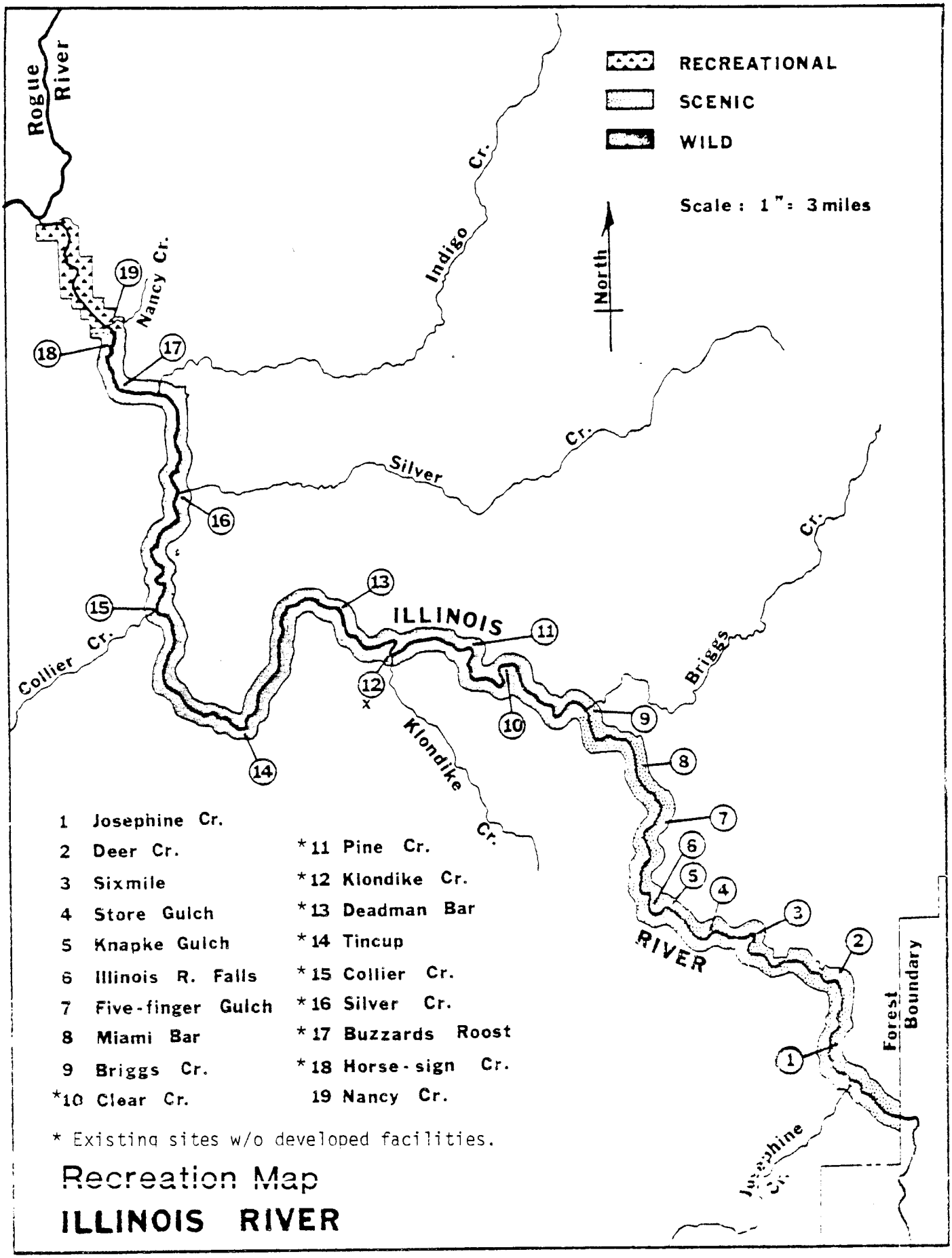
Archeologic Survey	$ 44,000
Illinois River Road Enhancement	177,000
Trail Development (Scenic River Area)	162,000
Campground Development	1,085,000
Picnic Ground Development	95,000
Overlook Development	20,000
Parking and Access	15,000
Total	$1,598,000

*1984 costs

Maintenance 10%/year	$ 159,800

FIVE YEAR ESTIMATED PROGRAM COST

ACTIVITY	YEAR 1st	2nd	3rd	4th	5th	Beyond	Total
Management 1 person-full time 2 person-recreation season	55,000	57,800	60,500	63,250	66,000		302,550
Acquisition Purchase price & administrative costs	500,000	1,000,000	600,000	- -	- -	- -	2,100,000
Development Planning	25,000	50,000	50,000	- -	- -	- -	125,000
Site Development	- -	- -	209,375	508,750	145,000	7,500	870,625
Refer to Table K (Following Page)			Site 2, 3, 4 & 6	Site 1, 5 & 8	Site 9, 19	Site 7	
Trail Development				80,000	82,000		162,600
Road Enhancement				177,000			177,000
Archeologic Survey	44,000						44,000
TOTAL	624,000	1,107,800	919,875	829,000	293,000	7,500	3,781,775



Recreation Map

ILLINOIS RIVER

TABLE K

POTENTIAL FIVE YEAR RECREATION DEVELOPMENT - ILLINOIS RIVER

Site No.	Location	Type*	Estimated Cost
1	Josephine Cr. to Deer Cr.	C.G., T.H., L., P./A	493,750
2	Deer Cr. O.L.	O.L.	12,000
3	Sixmile	C.G., P./A.	100,000
4	Store Gulch	P.G.	65,000
5	Knapke Gulch	P./A.	7,500
6	Illinois River Falls	P./A., P.G.	30,000
7	Five-Finger Gulch	O.L.	7,500
8	Miami Bar	P./A., L.	7,500
9	Briggs Creek	C.G., T.H.	137,500
19	Nancy Creek	P./A.	7,500
20	Trail - Josephine Creek to Briggs Creek (16 miles)	Hiking	162,000
	TOTAL		1,030,250

*C.G. - Campground
T.H. - Trailhead
L. - Launch
P.G. - Picnic Ground
P./A. - Parking/Access
O.L. - Overlook
S. - Sanitation Facility

LIMITATIONS:

Physical

The narrow confining nature of the Illinois River canyon does not yield itself to large campsites. Many of the identified sites will accommodate only small parties and many are not suitable for the development of sanitary facilities because they are below the flood plain.

Assuming most trips take 3 1/2 days (8 miles/day), the known campsites would fall in the following sequence (proposed "Wild" area is 28.7 miles):

NIGHT	SITE	CAPACITY P.A.O.T.	ABOVE FLOOD PLAIN
1st	1. Panther Bar	30+	Yes
	2. Nome Creek	5 - 10	No
	<3. Nobles Garden	20 - 30	Yes
	<4. Clear Creek	10 - 20	Yes
	5. Pine Flat	20 - 30	Yes
	<6. Lower Pine Flat	30+	Yes
	<7. Maiden Hair Falls	20 - 30	No
	8. Florence Creek	10 - 20	Partial
	9. Klondike	10 - 20	Yes
2nd	10. Deadman Bar	30+	Yes
	11.	1 - 6	No
	12.	1 - 6	No
	<13.	1 - 6	No
	<14.	1 - 6	No
	<15. So. Bend Mtn.	10 - 20	No
	<16. Woody Creek	1 - 6	No
	17. Big Slide	1 - 6	No
	18. Green Wall	1 - 6	No
	19.	1 - 6	No
3rd	20. Collier Creek	5 - 10	Partial
	21. Miners Shaft	10 - 15	No
	22. Tri-Falls	10 - 20	No
	23. Silver Creek	10 - 20	Yes
	24. Horsesign Creek	10 - 20	No

< = Sites which are within sight of each other.

The third night is the most limiting, with five sites available for use. During the second night there are only two sites which have a capacity larger than six people.

Vegetation in this area is sparce, which reflects the harsh growing con ditions. Jeffrey pine, incense ceda and sugar pine are widely spaced wit an understory of scattered shrubs, such as manzanita and ceanothus.

Vegetative Cover in Upper Canyon

The riverbed varies from a few feet to 150 feet in width. Broad expanses of gravel beds no longer are evident. The accumulation of debris is also absent. Streambank erosion is confined to local spots. The river profile is like stairsteps, a series of stillwater pools and rapids. Deep pools (more than 30 feet) are often associated with the still waters. Both the Illinois River Falls and the Little Illinois River Falls are in this section.

Manmade impacts which are visible from the river are basically confined to old mining activity and roads. A few structures are visible but are not significant.

Lower River Canyon: The Lower River Canyon is similar to the Upper River Canyon in respect to landform. The river flows through several gorgelike areas. At Buzzards Roost the canyon wall rises approximately 1000 feet above the river.

Narrow Gorge Near South Bend Mountain.

The most notable change between the Upper and Lower River Canyon is in regard to access and vegetation. Growth is much more luxuriant in the Lower River Canyon, due to an increase in moisture and better soils. Douglas-fir, madrone, oak, ponderosa pine, and other species provide continuous cover. Shrubs such as huckleberry, azalea, dogwood, and tanoak are important components of the plant communities. Ferns and herbacious plants are common where moisture is abundant.

Vegetative Cover in Lower Canyon.

The riverbed also changes characteristics in this area. Upstream of South Bend Mountain large boulders are scattered through the river channel. In numerous places the river flows between gaps in the rock that are only four to six feet in width. Below Collier Creek the riverbed is composed of solid bedrock with no boulders present.

Between Briggs Creek and Lawson Creek, there is virtually no visible manmade impact. The rugged canyon walls, the variety of vegetation, and crystal clear blue-green water provides an unexcelled setting.

Illinois River Near Its Mouth.

Mouth of River: From Lawson Creek to the mouth of the river, the landform changes from a narrow canyon to that of a valley with sizable benches. Vegetation is similar to that of the lower river canyon except where logging and agriculture has taken place.

Social

Social limitations basically deal with the experience users desire or expect. These factors become quite complex because of the large variety of desires being sought. Specific information concerning attitudes of visitors who use the Illinois is available. This information supports the conclusion that the users who travel on the river do so for the primitive qualities which exist, solitude, and the white water adventure (see Bo Shelby 1981 publication - Appendix 1).

An estimated 200 users traveled the river during 1975 and 1976. This accounts for 700 user days (1 individual for 24 hours). Most of this use occurred during May and June, the normal floating season. Current use patterns are changing with use, occurring during every month of the year.

To help visualize the effect of various levels of restriction the following table was developed:

Parties Per Day	People Per Party	Number of People Per Day	Parties at One Time on River (3 1/2-Day Trip)	Avg. Spacing Between Parties (Miles)	Seasonal User Days (60-Day Season)
1	10	10	3.5	8.2	600
	12	12			720
	15	15			900
	20	20			1200
2	10	20	7	4.1	1200
	12	24			1440
	15	30			1800
	20	40			2400
3	10	30	10.5	2.7	1800
	12	36			2160
	15	45			2700
	20	60			3600
4	10	40	14	2.0	2400
	12	48			2880
	15	60			3600
	20	80			4800
5	10	50	17.5	1.6	3000
	12	60			3600
	15	75			4500
	20	100			6000

Existing use is most comparable to one start per day of 12 people each.

Additional insight into use levels is possible by comparing the Illinois to other rivers. The Selway-Idaho, Tuolumne-Calif., and Rogue-Oregon were selected for comparison. The Selway, Tuolumne, and Rogue are classified as Wild and Scenic Rivers.

River	Length of River	Length of Trip	Parties Allowed Per Day	Parties On River At One Time	Avg. Space Between Parties
Selway	47 Miles	5 Days	1	5	4.6 Miles
Tuolumne	18 Miles	2 1/2 Days	2	5	3.6 Miles
Rogue	33 Miles	3 Days	8 (av. 120 people)	24	1.4 Miles

On the Selway River, in order to achieve a semblance of solitude, use was restricted to one launch per day. With trail use being somewhat equal, the management plan states the river is saturated to a point that additional use would detract from the wilderness experience.

The operating plan on the Tuolumne River which we reviewed does not speak to capacity levels; however, it is assumed that it does reflect an acceptable capacity. Nonprofessional starts were about equal to professional starts.

Capacity on the Rogue River has been debated for years. Whether the capacity is proper or not is immaterial in this analysis; however, the managing agencies feel solitude is no longer available at a level commensurate to primitive conditions.

USE CAPACITY

The capacity of a river to accommodate recreation use is difficult to determine because of changing river conditions and different individual values. The capacity of the Illinois was established not only on its own attributes but also on its role toward meeting recreation needs in relation to other rivers.

If river oriented recreation experiences were put on a scale with primitive experiences being at one end and social experiences at the other, the opportunity which is presently available on the Illinois would surely place it at the extreme primitive end.

RECREATION EXPERIENCES

Primitive — Social

ILLINOIS SELWAY TUOLUMNE ROGUE

This primitive value with the opportunity for solitude is the major consideration in establishing a use level or capacity on the Illinois.

In order to retain a maximum of one or two intergroup contacts per trip, the number of groups starting down the river below Briggs Creek should be limited to two per day. This will provide an average spacing of 4.1 miles between parties. Even though trail use may affect capacity it would be minor. In order for party size to be commensurate with the primitive experience level they will be limited to 12 individuals (including guides). This size is compatible to raft sizes and capacities and wilderness recreation opportunity standards.

Because accurate use figures have not been gathered to date, the Forest Service will monitor use. Upon review of this information, changes may be necessary in forthcoming years.

PROPOSED PERMIT SYSTEM

Regular Season March 1 - June 30

In the Wild Section, the allocation of permits between commercial outfitters and private users will favor private use. The Illinois River's exceptionally rugged, undeveloped character presents a rare opportunity to provide for an experience where the recreationist must depend upon one's self to a very high degree. The spiritual value of "Doing it Yourself" is most compatible with the Illinois Wild River objectives. The actual details of the permit application and selection system will be flexible enough to be adjusted, if necessary, to ensure that objective of favoring non-outfitted use is implemented and achieved.

A closure order will be published for the Wild Section of the river, requiring a permit to float from March 1 through June 30. During the period of March 1 through June 30, all users of the Illinois between Briggs Creek and Nancy Creek must obtain a permit. Permits will be available on a mandatory self-issuing basis until use exceeds 2 trips per day for any 10 or more days during the use season in two consecutive years. Three existing commercial permittees will maintain their one commercial trip per week for each permitted outfitter. When non-guided use level is reached a permit system will be initiated that will include the following:

1. The number of parties will be limited to 2 per day. This daily total will include both commercial and private parties.

2. Parties shall remain at a maximum of 12 individuals (including guides).

3. A freedom of choice system (see following explanation).

Commercial use of the river requires a special use permit at any time of the year. Three outfitters are presently authorized to offer commercial trips on the Illinois. No additional permits will be issued for commercial operations, and the three existing outfitters will be limited to use only between March 1 and June 30.

The "Freedom of Choice" system will be instituted on the Illinois due to its consistency with the unique and wild character of the River. This system will use a single permit application and selection process that includes both commercial and private users. No discrimination will be made between these two groups in the selection process. Once an individual has received a permit, he or she is then free to decide whether to contact and go with a commercial outfitter or to arrange and outfit their own private trip. Permits will be assigned to specific applicants and not to the commercial outfitter those applicants may select. Commercial outfitters may not intervene as agents for permit applicants or permit holders in the application, confirmation or reservation processes. No fixed allocations on available trips will be imposed on either commercial or private river users under this "Freedom of Choice" system.

Other Potential Use Periods

In addition to the regular permit season, two additional use periods are experiencing growth in popularity. These seasons are:

1. Summer Season 7/1 - 10/30

2. Winter Season 11/1 - 4/30

Should use continue to build during these two seasons it may be necessary to initiate permit systems to preserve the values of solitude established for the Illinois River. The same trigger mechanism suggested for initiating a permit system for the regular season is also proposed for the summer and winter seasons.

OTHER REGULATIONS

1. Pack it in - Pack it out policy.

2. Firepans will be required in the Wild Section for floaters and encouraged in Recreation and Scenic Sections at this time.

3. Panning will be allowed on the Wild Section and on the Scenic Section between Briggs Creek and Deer Creek. Motorized suction dredges with intakes of 4" (four inches) or less will be allowed on the Recreation Section and on the Scenic Section between the Forest Boundary and Deer Creek.

4. No aircraft landings, except for emergency equipment, in the Wild Section.

5. No motorized water craft in the Wild Section

6. No development, including toilets, in Wild Section.

LIMITS OF ACCEPTABLE CHANGE

Limits of acceptable change will be established for key indicators. As these limits are approached, take management action to keep within acceptable range (see Monitoring Plan Exhibit). Management action may vary but is designed to accomplish objectives outlined for the various components of the river.

Following is a partial list of other regulatory actions and the changes that will trigger them:

1. Initiate a mandatory permit system when two or more of the following occur:

a. More than two other parties encountered during a three-day trip 10 percent of the time.

b. Informal portage lanes being cleared around the green wall.

c. Toilet paper fields become common.

2. Initiate a mandatory policy to pack out human waste when extensive toilet paper fields become common and green vegetation is being destroyed.

3. Initiate a monitoring process for observing motorized recreational placer and dredging activity. When density, intensity, or duration of activity creates major conflicts with other recreation activity or if water quality and clarity can not be maintained additional regulation, such as permit requirement, may be implemented.

SAFETY TO RIVER USERS

White water rafting and boating on the Illinois River can be extremely dangerous due to large fluctuation in the volume of water in the River. Rescue is very difficult and expensive, and in most cases must be accomplished with helicopters. Pamphlets and brochures about the River should identify its hazardous nature, and should discuss the minimum boating skill levels needed to successfully float the River.

MONITORING PLAN

Indicators, Standards, and Monitoring Procedures
for the Wild Section of the Illinois River

Indicator	Standard	Monitoring Procedure		
		Inventory Method	Sampling Procedure	Frequency
1. Encounters per day with other float parties on the river.	Max. of two other parties encountered during a 3-day trip.	a. Visual Count b. Verbal survey of users.	a. Count & record all sightings during patrol floats. b. Random survey at Oak Flat take-out.	a. Minimum of 2 per year. b. Minimum of 2 per year.
2. Campsite density.	Out of sight, out of sound from other camps.	Same as #1.	Same as #1.	Same as #1.
3. Capacity of Wild Section is exceeded.	Use exceeds 2 trips per day for 10 days out of the use season.	a. Visual Count. b. Number of self-issuing permits completed.	a. Count and record launches on random days. b. Count permits issued. c. Issue closure notice requiring permits.	a. Minimum of 4 per year. b. Each week.
4. Water quality.	Equal or better than that existing in 19896.	Establish base line and subsequent data.	Standard sampling.	Semi-annually
5. Natural conditions along Green Wall Rapids.	No informal portage lanesdeveloped in which vegetation is cleared.	Visual observation.	View and Photograph.	Annually
6. Compliance with easements.	No developments not approved of in advance.	Visual observation.	Observe on floats or visits to property.	Annually
7. Campsite Condition.	No destruction of green vegetation; no development of extensive toilet paper fields.	Visual observation. Photographic comparison.	Observe on float trips through the Wild Section. Maintain photo inventory.	Annually

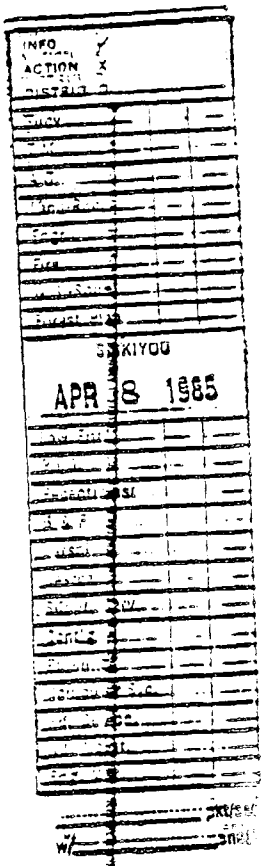
MONITORING PLAN

Indicators, Standards, and Monitoring Procedures
for the Wild Section of the Illinois River

Indicator	Standard	Monitoring Procedure		
		Inventory Method	Sampling Procedure	Frequency
8. Recreational dredging will be compatible with other recreation and Scenic River values.	Water quality and clarity maintained. Conflict with other recreation, minimal.	Visual Observation.	Observe activity on site.	Twice per month.

APPENDICES

APPENDIX I



Encounter Norms in Backcountry Settings: Studies of Three Rivers

Bo Shelby

ABSTRACT: *Crowding in recreation settings has been discussed in the carrying capacity literature, and a major problem has been defining and measuring norms to see "how many is too many." Vaske (1978) develops a scheme for representing the structure of crowding norms using Jackson's (1965) return potential model, but his measurement technique requires much repetition of items. A different approach was developed which requires less repetition and gives more information. Respondents were asked to think of study areas as providing opportunities for three different kinds of experiences, and for each one they specified norms for encounters occurring in different locations. There was remarkable similarity in social norms across study areas, even though perceptions of experiences currently available and ideas about what should be provided were different for each river. Results also suggest that there is less shared agreement about norms for higher density experiences. Further work is needed to help identify and describe different kinds of recreation experiences.*

KEYWORDS: *Crowding, carrying capacity, norms, encounters, wilderness.*

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Crowding is an evaluative term describing reactions to a particular level of density (Stokols 1972; Rapaport 1975). It implies some normative definition of the appropriate number of people for a given situation. Crowding is discussed as a specific management problem in the recrea-

non literature. Many situational attributes affect opportunities for different kinds of recreation experiences (Driver and Brown 1978), and the number of other people seen appears to be an important component, particularly in backcountry areas. But this leaves a difficult question: What is the "right" number of people for a particular experience? Carrying capacities or use limits have received a great deal of attention in recreation research, but a major problem has been defining and measuring user norms to see "how many is too many."

There have been a number of efforts to develop normative components of carrying capacity. Lucas (1964) asked users to indicate how many groups should be encountered in a "wilderness" area and found that standards differed for contacts with motorized and non-motorized parties. Hendee *et al.* (1968) developed a "wilderness purism" scale to differentiate users on the basis of their values regarding wilderness use. Hadley (1974) developed a purism measure based on the Wilderness Act and found that strong purists had different preferences about encounters with other parties. Shelby (1976, 1980) showed that situational definition had a greater effect on perceived crowding than level of use or number of encounters with other parties, and Heberlein *et al.* (1979) showed that expectations have a similar effect.

The diversity of these efforts suggests that there are many ways normative factors enter into crowding problems. But there is general agreement about the need to more precisely determine the nature of crowding norms. In a study of canoers on the Bois Brule River in Wisconsin, Vaske (1978) developed a scheme for representing the structure of crowding norms using Jackson's (1965) return potential model. This approach identifies five important characteristics. "Personal norms" refer to individual standards, while "social norms" refer to collective standards. The "range of tolerable contacts" defines the scope of acceptable encounter levels, "intensity" shows how strongly norms are held, and "crystallization" is a measure of group agreement. For example, norms defining a wilderness experience might have a low range of tolerable contacts, high intensity, and high crystallization, while norms for a city sidewalk would show a greater tolerable range, lower intensity, and less group agreement (Heberlein 1977). With Brule River data, Vaske shows that canoers have different norms regarding contacts with fishermen, tubers, and other canoers.

Vaske's approach adds clarity and precision to the assessment of crowding norms, but the operational measurement of variables is quite cumbersome. Canoers were asked to rate the pleasantness of meeting 1, 2, 3, 5, 7, 9, 15, 20, and 25 fishermen, canoers, and tubers; this required 27 separate items which were identical except for the number and type of encounters. The measurement process, then, is tedious for respondents. But it also provides less information than researchers might like. There are no data about encounter levels outside the specified range, interpolation is required within the range, norms may vary for encounters in different locations (e.g., river encounters versus camp encounters), and

there may be different definitions for the same location if people think of the area in different ways (e.g., as a wilderness area rather than as a more developed area). Exploring issues such as these usually requires additional sets of repetitive questions.

This paper presents data collected in a different manner. The technique gives a measure of most of the normative components specified by Vaske and requires less repetition of items. It also provides more information because respondents were asked to consider three different kinds of experiences for each of the study areas.

Method

Data came from participants at public meetings regarding the proposed River Management Plan for Grand Canyon and from floaters on the Rogue and Illinois Rivers in Oregon (study designs are described later). A self-administered questionnaire told respondents that we were interested in their feelings about encounters with other groups and asked them to indicate the highest number they would tolerate before their experience changed. Users responded by completing a sentence such as "OK to have as many as ____ river encounters per day."

Analysis of each item produced estimates of the normative characteristics discussed earlier. Personal norms were represented by individual responses, and the social norm was defined as the median response (e.g., 50% of respondents would tolerate 2 or fewer river encounters per day).[1] The range of tolerable contacts for individuals was between zero and the number they specified, with the assumption that any lower number of encounters would also be acceptable. The range of tolerable contacts for the aggregate was from zero to the median response.[2] Crystallization was represented by the standard deviation for each distribution. The only component specified by Vaske which was not measured in this study was norm intensity.

This technique required only one item for each encounter norm, so it was possible to learn about encounters occurring in different locations. Five different items asked about encounters on the river during the day, time spent in sight of others, the number of stops at which another group might be seen, the chances of meeting others at the most popular stops, and the number of nights spent camping within sight of another party.

Because the "right" number of encounters depends on people's ideas about the kind of experience to be provided, we asked respondents to think of the study areas in different ways. The idea was to specify three

[1] The social norm can be defined by other measures. The arithmetic mean is convenient but was not used here because the distributions were skewed, with most responses concentrated on the low end. It is also possible to use a higher criterion than the 50 percent median (e.g., a two thirds majority or even 90 percent near unanimity).

[2] In distributions which are less skewed the tolerable range could be represented by the mean plus and minus the standard deviation.

low to medium density alternatives. It was important to make the alternatives different enough so that they were realistic possibilities, but also to have them sufficiently similar that people could help define the experience in terms of appropriate encounter levels. For Grand Canyon and the Rogue River, the questionnaire asked people to "imagine the [study location] as a 'wilderness,' a place generally unaffected by the presence of man. If [it] were this kind of area, which of the following encounter levels would be appropriate? Indicate the highest level you would tolerate before the trip would no longer be a wilderness experience." After answering the five encounter questions, respondents were asked to "imagine the [area] as a 'semi-wilderness,' the kind of place where complete solitude is not expected. In this case, which encounter levels would be appropriate? Indicate the highest level you would tolerate before the trip would no longer be a semi-wilderness experience." Finally, respondents were asked to "imagine the [Grand Canyon or Rogue] as an 'undeveloped recreation area,' the kind of place where a natural setting is provided but meeting other people is part of the experience. . . . Indicate the point at which there would be too many people for even this kind of undeveloped recreation experience." With just 15 items, we have information about three different alternatives, each defined by five kinds of encounters. Subjects then indicated which kind of experience they felt was currently available and which they thought should be provided. The questionnaire for the Illinois River was identical except that the experience names (wilderness, semi-wilderness, and undeveloped recreation) were deleted.

Study Samples

The Grand Canyon sample came from public meetings. In January 1978 the National Park Service published the Draft River Management Plan for the Colorado River (USDI 1978). Based on earlier research, the plan proposed a redistribution of use which would minimize encounters among parties using the river. To document public reaction to the plan, Park Service personnel held meetings in Flagstaff, Phoenix, Denver, San Francisco, Los Angeles, Salt Lake City, and Washington, D.C. Signs at the meeting room entrance instructed participants to take an attendance card as well as a questionnaire, and people were reminded during the program to fill out both forms and turn them in as they left. Of the 1,107 attending the meetings, 61 percent (675) turned in name and address cards and 39 percent (434) completed questionnaires.[3] Respondents to the Grand Canyon questionnaire were thus an ad hoc group of private boaters, passengers on commercial trips, commercial boatmen, conservation group members, and other interested people.

The Rogue River study was based on a sample of river floaters. During the summer of 1977, participant observers accompanied a stratified random sample of 34 commercial float trips. At the end of the trip, passengers were asked to complete a short one-page interview form where they reported immediate reactions and gave their name and address. During the same time period, we contacted river runners on 11 private trips as they left the river and asked them to fill out the one-page interview form. Completed interviews were received from 97 percent of the commercial passengers and 74 percent of the private users. In the follow-up phase of the project, a more extensive questionnaire, was mailed to those who had completed interviews. This measured various perceptions, preferences, and opinions, including normative definitions. Of the 343 commercial passengers who had completed interviews, 78 percent (268) returned the questionnaire, as did 83 percent (161) of the 194 private floaters. These were weighted according to their proportions in the river running population and combined into a single sample.

The Illinois River study was also based on river users. During the spring of 1979 a researcher contacted river parties at the put-in point. He explained the study and asked one participant from each group to record stops and encounters during the trip in a carefully structured diary. At the end of the trip, another researcher met the parties, collected the diaries, and asked all participants to complete a short two-page interview. Normative definitions were measured in a mailed follow-up questionnaire. Of those contacted at the take-out, 92 percent completed the interview; of those completing the interview, 90 percent returned the mailed questionnaire.

Results

Social norms are shown in Tables 1–3. Figures are medians, so for 50 percent of the respondents the highest tolerable level was between zero and the number specified. The tolerable range for the aggregate is from zero to the median.

The most remarkable finding is the similarity across locations of the norms defining the three types of experiences. For river encounters per day, for example, the wilderness norm was .9 for Grand Canyon, 1.5 for the Rogue, and .7 for the Illinois. The semi-wilderness norm ranged from 2.0 river contacts on the Illinois to 2.9 on the Rogue, and the undeveloped recreation norm ranged from 2.7 river contacts on the Illinois to 4.4 on the Rogue.

For camp encounters, respondents from all three studies defined a wilderness experience as being away from others virtually all of the time. A semi-wilderness experience allowed camp encounters approximately 1–2 out of 10 nights, and for an undeveloped recreation experience this

[3] The 39 percent response rate was somewhat disappointing, but not all of those attending meetings were greatly concerned with providing input, as evidenced by the 61 percent return of simple name and address cards. In addition, the voluntary nature of the questionnaire (dictated by Office of Management and Budget guidelines) and the conduct of meetings by non-research personnel prohibited sampling and follow-up techniques which would have increased response rates.

TABLE 1

Social Norms for River Experiences in the Grand Canyon

Question	Wilderness	Semi-Wilderness	Undeveloped Recreation
What are appropriate encounter levels in terms of:*			
river encounters per day	9	24	40
hours in sight of others while on river each day	5	7	15
number of stops (out of 10) with encounters	7	20	38
chances of meeting 10–30 people at popular places on the river	9%	23%	11%
number of nights (out of 10) camped near others	0	13	30
Which experience does a river trip provide *now*?	20% (80)	54% (215)	26% (103)
Which do you think a river trip *should* provide?	60% (243)	34% (136)	6% (23)

*Figures are medians, which can be read as "Fifty percent preferred ___ or fewer" encounters, hours in sight, etc.

increased to 2–4 out of 10.[4] Again, the similarities of the normative definitions across study areas are quite striking.

There are interesting differences in respondents' perceptions about the kinds of experiences currently available in the study areas and what they think should be provided. Most people (54%) think Grand Canyon currently *offers* a semi-wilderness experience. Although the river is remote and undeveloped, the presence of motorized trips probably explains this classification. In terms of the desired experience, however, a majority (60%) of respondents felt river trips in the Canyon should offer an opportunity for a wilderness experience.

The situation is somewhat different on the Rogue. As with Grand Canyon, most people (63%) think the river currently offers a semi-wilderness experience (actual encounter levels are higher than in Grand Canyon, and motorized jet boats travel the lower 12 miles of the river). However, there is no clear consensus about the kind of opportunity

[4] The reader will note that the Grand Canyon questionnaire asked about the number of nights out of *10*, while the Rogue used 5 and the Illinois used 3. The questions were worded this way to reflect actual differences in trip lengths among the three areas. A similar rationale explains the differences in questions about stops with encounters. Rough comparisons can be made by, for example, doubling the number of "nights out of 5" to get the number "nights out of 10."

TABLE 2

Social Norms for River Experiences on the Rogue

Question	Wilderness	Semi-Wilderness	Undeveloped Recreation
What are appropriate encounter levels in terms of:*			
river encounters per day	15	29	44
hours in sight of others while on river each day	0.5	1.0	1.9
number of stops (out of 5) with encounters	0	1.0	2.4
chances of meeting 5–20 people at popular places on the river	12%	28%	11%
number of nights (out of 5) camped near others	0	1.1	2.1
Which experience does a river trip provide *now*?	26% (97)	63% (236)	11% (42)
Which do you think a river trip *should* provide?	48% (182)	46% (176)	6% (24)

*Figures are medians, which can be read as "Fifty percent would tolerate ___ or fewer" encounters, hours in sight, etc.

TABLE 3

Social Norms for River Experiences on the Illinois

Question	Wilderness	Semi-Wilderness	Undeveloped Recreation
What are appropriate encounter levels in terms of:*			
river encounters per day	0.7	2.0	2.7
hours in sight of others while on river each day	0.1	0.9	1.6
number of stops (out of 5) with encounters	0.2	1.3	1.8
number of nights (out of 5) camped near others	0	0.2	0.7
Which experience does a river trip provide *now*?	69% (128)	21% (39)	7% (12)
Which do you think a river trip *should* provide?	68% (125)	24% (44)	8% (16)

*Figures are medians, which can be read as "Fifty percent preferred ___ or fewer" encounters, hours in sight, etc.

TABLE 4

Crystallization of River Encounter Norms[a]

Study Area	Wilderness	Semi-Wilderness	Undeveloped Recreation
Grand Canyon	2.1	3.0	5.0
Rogue River	3.3	4.5	7.5
Illinois River	2.3	2.9	2.8

[a] Entries are standard deviations for "river encounters per day" (first variable in Tables 1–3). All differences within study areas are significant ($p < .01$) except for semi-wilderness and undeveloped recreation on the Illinois.

which should be available; 48 percent favor wilderness and 46 percent favor semi-wilderness. The only agreement is that higher density undeveloped recreation is most desirable.

User assessments of the Illinois are fairly clear-cut. The majority (60%) feel that the river currently provides an opportunity for a wilderness experience. This makes sense because, in a rare set of circumstances, the study was initiated before anyone felt there were crowding problems. In addition, there is a strong consensus (68%) that this is the kind of experience the area should offer.

Crystallization for river encounter norms is shown in Table 4. Taken together, they show an interesting pattern. For both Grand Canyon and the Rogue River, there is less agreement about norms as one moves from lower density experiences to higher density ones. The same is true for the Illinois as one goes from wilderness to semi-wilderness, but for semi-wilderness and undeveloped recreation norms, crystallization is essentially the same.

Discussion

Several conclusions are suggested by these findings. First, *crowding involves normative definitions of what is appropriate.* The social psychology literature suggests this, and the present paper adds to the evidence. The "right" number of encounters varies, depending on the experience desired. This is true even when other aspects of the recreation setting are presumed to remain constant.

Second, *it is possible to measure and analyze characteristics of encounter norms.* Several of the studies mentioned at the outset (most notably, Lucas 1964 and Stankey 1973) provide some information, and Vaske's (1978) work develops a more comprehensive framework. The approach used here is more parsimonious and gives more information, although it does not measure norm intensity. Only social norms (medians), tolerable ranges, and crystallization (standard deviations) are presented in this paper, but it is possible to analyze data differently for other purposes. For example, frequency distributions can be plotted to give curves which bear some resemblance to those generated by Stankey (1973) and Vaske (1978). In measuring user norms, it is important to specify the experience in question so respondents know the general frame of reference.

Third, *norms vary depending on where encounters take place.* For example, respondents said they would tolerate more encounters on the river than they would in camps. This adds to other evidence already in the recreation literature (Stankey 1973; 1979, and many others).

Fourth, *norms for certain kinds of experiences may be quite similar, even in different areas.* This study shows remarkable agreement about appropriate encounter levels, in spite of different locations, different samples (user and non-user), and variation in currently offered experiences. Norms for specified kinds of river experiences, at least, may be widely shared. Other studies in wilderness-type settings show comparable findings. Lucas (1961) found that most canoeists in the Boundary Waters Canoe Area would tolerate two contacts per day with paddling canoes. In Stankey's (1973) study, users responded positively to 0–2 encounters with backpackers and 0–1 encounters with horse riders, and studies in the Desolation and Spanish Peaks Wildernesses (Stankey 1979) show similar preferences. In studies of Westwater Canyon on the Colorado River and Desolation and Gray Canyons on the Green River, Schreyer and Nielson (1978) asked floaters what they felt was an "acceptable number of groups to see on the total trip." In Westwater 55 percent said three or fewer, and in Desolation and Gray 45 percent said two or fewer. Taken together with the present study, these findings suggest some general agreement that the appropriate number of encounters for wilderness-type backcountry settings is low, somewhere on the order of 0–3 per day.

Fifth, *the amount of shared agreement (crystallization) probably varies from one experience to another.* Data presented here generally support this conclusion and suggest in addition that crystallization decreases for higher density experiences (the one exception is probably due to users' reluctance to define the Illinois in terms of higher density recreation). It appears that the specific number of other people is more critical for low density experiences than it is for those involving more interaction.

Finally, *there is a need to better describe and define recreation experiences.* There seems to be some common understanding about the term "wilderness experience," but many other experiences have no meaningful labels. The terms semi-wilderness and undeveloped recreation were "made up" for this study because it seemed they would make sense to users. Some researchers and managers (Brown *et al.* 1979) have developed a set of labels such as "primitive" and "semi-primitive motorized" which make sense in terms of their jargon. A third set of terms was suggested by one manager who said my three categories would not apply to his heavily used river because people came there for "boondoggle" and "splash and giggle" trips. The point is that it does not really matter what words

we use, as long as they have intuitive meaning which can be widely recognized. But we need to name alternatives and develop normative definitions of them.

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Preferences of Backpackers And River Runners for Allocation Techniques

Bo Shelby, Mark S. Danley, Kenneth C. Gibbs, and Margaret E. Petersen

ABSTRACT—In a questionnaire study, river runners and backpackers in Oregon reacted most favorably to pricing and reservation as means of allocating scarce recreation resources. Differences in reactions to three other alternatives (lottery, queuing, and merit) apparently reflected differences in the characteristics of the areas and types of recreation studied.

Allocation becomes an issue when the demand for recreation exceeds the supply defined by use limits or "carrying capacities." Capacities specify the number of people or groups that can use an area for a particular kind of recreation. Allocation distributes this limited number of opportunities among potential users; it means deciding who will get to go. There are several mechanisms for allocating use permits (Hardin 1969, Stankey and Baden 1977, Shelby and Danley 1980).

Pricing is used to distribute resources in a market system. In simplest terms, a market adjusts the quantity supplied, the price, or both, until supply equals demand. Supply is limited to the carrying capacity, and when the applications for use exceed this limit the recreation manager can set a fee that is enough to cause those less willing or able to pay to drop out of the market until an equilibrium is reached. Pricing encourages consumers to set priorities and eliminates artificially low (zero) prices that encourage those who place little value on a commodity to compete with those for whom the commodity is important. Pricing can also require users of a resource to pay their own way. Social efficiency may not be maximized, however, for pricing discriminates against those who are unable to pay as well as those who are unwilling. People may also resist paying for public recreation that has previously been available without direct charge.

Reservations set a premium on planning, so that people who reserve their place earliest are the "preferred customers." In reservation systems, many variables, including automation, centralization, method of making the reservation, and specific reservation policies, can all be manipulated to accomplish different goals. Some systems also allow for referrals that increase utilization. Drawbacks of reservations include costs of operating the system and the problem of "no-shows."

Lotteries have long been used to make social choices and allocate scarce resources; examples range from draft lotteries to sweepstakes drawings. In their pure form, lotteries allow each applicant an equal probability of selection. Many lotteries are not pure, however; because selection probabilities can be modified to serve specific equity or efficiency goals, lotteries offer considerable flexibility. Like other nonpricing mechanisms, lotteries may create problems regarding fees, permit transfers, and black market operations.

Queuing (waiting in line) is like pricing in that it allows individuals to assess the value of a resource in relation to their willingness to pay; but in this case, time rather than money is traded for the desired commodity. Although allocation by time may be fairest because time is evenly distributed, queuing discriminates against people who value their time more than those with fewer demands. Because most backcountry areas are remote, queues for permits can be inefficient, and queuing may require facilities and administration for the people waiting in line.

Merit systems distribute permits on the basis of some demonstrable skill, knowledge, or past behavior. They are relatively untried in recreation management, but qualifying examinations for government employees, safety courses for hunters, or tests for drivers are examples from other areas. Although the ability to eliminate the unqualified seems to be the primary purpose and advantage of a merit system, the time, effort, and money spent acquiring skills encourage users to assess the value of the commodity, thereby increasing social efficiency. However, requiring merit beyond minimum qualifications creates difficulties in deciding what makes a person "worthy."

Sometimes congestion or crowding can be reduced with less restrictive measures than the five just mentioned. Because most problems are caused by concentrations of use in time or space, mechanisms that distribute use more evenly will effectively increase supply of permits and alleviate the pinch created by high demand. Such mechanisms may increase utilization and be politically acceptable to users. But they require use limits, so capacities still have to be carefully considered. In addition, redistribution is only a temporary solution: if demand continues to increase, it is only a matter of time before the newly available supply of space will be filled.

This article reports research in which we explored reactions to these five allocation alternatives. Our data are from questionnaire responses by backpackers and river runners in three recreation areas in Oregon. Backpacking and river running are similar in that permit distribution has become an important issue; most backcountry areas and whitewater rivers are in remote locations, many in national forests and parks in the West; and popularity of both activities has increased rapidly, resulting in overuse problems. We would, however, expect user reaction to allocation systems to vary with situation-specific factors such as remoteness of the resource from its clientele, need for advanced trip planning, availability of substitutes if access is denied, relative scarcity of permits, previous user experiences with similar systems, perceived need for rationing, and perceived chances of success in obtaining a permit. In the areas studied these factors varied, allowing some comparisons.

Study Areas and Data Collection

Study areas.—The river runner data come from Hells Canyon on the Snake River, located on the border between Idaho and Oregon. The 5-mile stretch of river is managed by the USDA Forest Service as part of the

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National Wild and Scenic Rivers System. Float parties normally run the 35 miles in five days, although shorter trips are becoming popular. Hells Canyon is isolated from major population centers, and users travel an average of 300 miles to reach it. River trips are planned an average of 19 weeks in advance. Because the Snake is the only large whitewater river in the area, no substitutes are immediately available if users are denied access after reaching it. When data were collected (1977), there was a daily launch limit, but permits could usually be had for either the first- or second-choice launch date. Because launch limitations are in effect on many popular rivers, river runners seem used to the idea of limited availability of permits and of sometimes participating in lottery or reservation systems to obtain them.

Backpacker data come from two wilderness areas in Oregon. The Eagle Cap Wilderness is just west of Hells Canyon in the Wallowa Mountains, in a remote area whose summer-use season is short. The 293,735-acre wilderness is accessible by numerous trails but, like Hells Canyon, is far from major metropolitan centers; users travel an average of 175 miles to reach it. The average trip is four days and is planned eight weeks in advance. Although Eagle Cap is the best wilderness in the area, other backcountry is available in the surrounding national forests, and several other wildernesses exist within a two-hour drive. Permits are issued to all who request them, with no limitations on use; this arrangement is typical of national forest wilderness areas, where users seldom have to compete for permits. Because backpacking in national parks is often more restricted, some users may be familiar with queuing or reservation systems in those areas.

In contrast to Hells Canyon and Eagle Cap, the 100,208-acre Mount Jefferson Wilderness is accessible to the major population centers of Oregon's Willamette Valley. Because users travel an average of 100 miles to reach the area, day trips are more common than in the other two areas. Trips are planned an average of four weeks in advance, and numerous comparable wilderness resources are available within one-half to two hours' drive. As at Eagle Cap, permits are issued to all recreationists requesting them; again, some users may have had experience with allocation systems for backpacking in other areas.

Data collection.—The sample of river runners included all those leaving the Heller Bar take-out point during the study period (August 4–22, 1978). The samples of backpackers included people leaving the wilderness areas via trailheads that we selected at random in both high- and low-use areas. The Mount Jefferson study was made during July and the second week in September 1979; the Eagle Cap study took place during August and the first week in September of the same year. Response rates were 87 percent for Hells Canyon, 84 percent for Eagle Cap, and 73 percent for Mount Jefferson.

As they left each area, users were given a questionnaire to be returned by mail. They were asked to consider each allocation alternative, and to assume that all users, including themselves, would be required to obtain a permit for that area by that system. Permit systems were then described essentially as follows.

Purchase permits. All individual users would be required to purchase permits from the Forest Service during the summer season. A nominal fee would be charged for permits during low-use days (such as mid-week). For the high-use days (weekends and holidays), the permit would cost more. This would mean: (1) Individuals could purchase permits for as many dates as they wished. (2) Permits could be transferred to individuals other than the original purchaser. (3) Individuals could choose between the low-use permit and the high-use permit. (4) Permits could be purchased at any time prior to the trip, including the day of the trip, until all trips for the day were taken.

Advance reservations. All permits for trips during the summer season would be reserved before the desired trip date. Priority would be given to those persons who reserved a particular date the earliest. This would mean: (1) Persons planning the furthest in advance would have the best chance at receiving a particular date. (2) Once a date was "filled" no more permits would be issued for that day. (3) Persons would be allowed to reserve more than one launch date per season. (4) Priority would be given to those whose reservations were made the earliest.

Lottery. In this variation of a reservation system, users would apply for a trip date of their choice, and applicants would be selected at random for those days when applications exceeded the limit. This would mean: (1) A user's chance of obtaining a permit on any given day would depend on how many other persons applied for that particular day. (2) Users would have to apply for a date four to eight weeks in advance; successful and unsuccessful applicants would be notified at least four weeks in advance. (3) Persons would be allowed to apply for more than one date per season. (4) Applicants for a given date would be allowed alternate choices in the event they did not obtain their first-choice date. (5) Dates not filled by the lottery would be available by telephone reservation or on a first-come, first-served basis.

First come, first served (queuing). Permits would be issued until the daily capacity was reached. This would mean: (1) Priority would be given to those who arrived the earliest. (2) Users could not reserve permits in advance. (3) Users arriving after the daily permit quota was filled would not receive a permit.

Merit. Preference would be given to users who demonstrate outdoor skills, knowledge of environmental practices, and safety. This would be similar to requiring a safety test for hunters or a "rules of the road" test for drivers. On days when applications for permits exceeded capacity, those users who demonstrated merit would be given priority. This would mean: (1) Persons who did not meet the "merit" criteria might not be able to go on more popular days such as weekends or holidays. (2) Persons wishing to receive merit priority would have to take some kind of Forest Service test. (3) Merit criteria would be subject to interpretation and evaluation by the Forest Service.

Following each description, users were asked (1) how they thought that system would affect their chances of getting a permit, (2) whether they thought it was a fair method for distributing permits, (3) whether the system was acceptable to them, and (4) whether they would try to obtain a permit by that method. Subjects answered by checking one of the responses that followed each question.

THE AUTHORS—Bo Shelby is assistant professor and Kathryn C. Gibbs is associate professor, Department of Resource Recreation Management, School of Forestry, Oregon State University, Corvallis. Mark S. Danley is recreation planner, Bureau of Land Management, Winnemucca, Nevada. Margaret E. Petersen is research forester, Intermountain Forest and Range Experiment Station, Missoula, Montana. This publication is [illegible] Forest Research Laboratory, Oregon State University.

Users' Preferences

Chances of obtaining permits.—All three groups felt that reservations and pricing would have the least effect on their ability to obtain permits (*table 1*). Most backpackers (66 percent) felt that the merit option would have little effect on them, but only 37 percent of the river runners agreed. All groups believed that lotteries and queuing would have a greater impact than other systems on obtaining a permit, although river runners saw lotteries more favorably and queuing less favorably than did backpackers.

Fairness.—When asked if systems were fair, users responded most favorably to pricing and reservations (*table 1*), although river runners favored reservations more than backpackers. Lottery, queuing, and merit were seen as fair by fewer than 40 percent of the users in each area. River runners regarded lotteries more positively and queuing more negatively than did backpackers.

Acceptability.—Reservations were acceptable to about 73 percent of all backpackers and 95 percent of river runners, whereas pricing was approved by 55–66 percent of all users (*table 1*). Lotteries were acceptable to 50 percent of river runners but only 28–30 percent of backpackers, whereas queuing was acceptable to about 50 percent of backpackers but only 25 percent of river runners. Merit did not receive majority support from any group.

Willingness to try the system.—Most users (62–84 percent) were willing to try pricing and reservations (*table 1*). About half the river runners were willing to try a lottery, but backpackers were considerably less interested. Although the majority (53–60 percent) of backpackers were willing to try queuing and merit, river runners were much less willing to do so.

In summary, users from all three areas reacted most favorably to pricing and reservations. These systems were seen as least detrimental to permit availability, fairest, most acceptable, and the largest percentages of users were willing to try them. River runners were the strongest supporters of reservations, probably because they plan further in advance than hikers do and because this was the existing system on the Snake and, therefore, the most familiar. In a study of river runners on the Middle Fork of the Salmon River in Idaho, Utter et al. (1981) found similarly strong support for reservation systems (pricing was not considered in that study).

Reactions to the other three systems were more varied. Results showed that the views of backpackers from both wilderness areas were similar but collectively differed from those of river runners. River runners were more likely to rate lotteries as fair or acceptable and more willing to try them, probably because lotteries for permits have been used on other rivers and because river runners are less likely than hikers to think this system would impair their ability to get permits. Results from the Utter et al. (1981) study also indicate river runner support for lotteries. River runners were less likely than backpackers to rate queuing as fair or acceptable and less willing to try it, probably because this option was felt to limit advance planning, to add risk to a long trip to the launch site with no substitutes if access were denied, and to diminish chances of getting permits.

Reactions to merit also showed a different pattern. Although users tended to agree on fairness and acceptability ratings, river runners were less willing than backpackers to try this option. This is probably because many were passengers on commercial trips and had no experience of their own; as a result, merit was seen as hurting their chances of getting permits. Utter et al. (1981) found majority support among river runners for a merit option, but the questionnaire item was sufficiently vague that commercial passengers may have thought it referred to their guide's experience rather than their own.

Table 1. Percentages of users agreeing with four assessments of allocation alternatives.

Allocation alternative	River runners Hells Canyon (N = 295)	Backpackers Eagle Cap (N = 118)	Backpackers Mt. Jefferson (N = 261)	Chi square[1] (d.f. = 2)
		Percent		
		Little or No Effect on Chances of Obtaining Permits		
Pricing	48	70	64	13.12[2]
Reservation	64	56	45	35.07[2]
Lottery	31	20	19	11.41[2]
Queuing	14	41	38	47.27[2]
Merit	37	66	66	46.69[2]
		System Is Fair		
Pricing	45	49	43	1.51
Reservation	78	50	48	53.14[2]
Lottery	39	19	21	26.16[2]
Queuing	12	34	29	36.09[2]
Merit	23	24	34	7.45
		System Is Acceptable		
Pricing	66	55	55	5.85
Reservation	95	73	74	46.19[2]
Lottery	50	28	30	23.97[2]
Queuing	25	50	51	40.40[2]
Merit	37	42	49	5.91
		Willing to Try System		
Pricing	62	68	64	1.16
Reservation	84	71	64	32.32[2]
Lottery	51	35	37	11.98[2]
Queuing	16	53	55	96.35[2]
Merit	36	56	60	32.97[2]

[1] *Chi squares are based on 3 × 2 tables comparing responses across the three user groups.*
[2] $p<0.005$.

Inferences

In a more general sense, do users support the *idea* of limiting use to reduce crowding or protect resources? The present study is of little help here because respondents were asked to assume that a permit system would be instituted. But survey data from other areas provide some evidence. Comparing the heavily used Desolation Wilderness and the more lightly used Spanish Peaks Wilderness, Stankey (1980) asked visitors to respond to the statement, "It would be better to be able to go to the wilderness whenever you want to, even if it was being used beyond capacity, than to have any kind of regulations on use." In the Desolation, 33 percent disagreed, as did 74 percent in the Spanish Peaks. In addition, 92 percent of Desolation visitors and 76 percent of Spanish Peaks visitors agreed that "If a wilderness becomes overcrowded, restrictions on the number of people allowed to visit it should be enforced."

These sentiments have been expressed in other areas as well. Schreyer and Nielson (1978, p. 45) asked river runners in Westwater and Desolation canyons to rank four management objectives. Almost all favored "no restriction" policies and most opposed any efforts to avoid crowding and ensure a wilderness experience. In addition, 70 percent favored a permit system to limit maximum use, and 44 percent favored a limit on the

number of parties launching each day. In a study on Oregon's Illinois River (Shelby and Colvin 1981), 79 percent of river runners said they would be willing to have less chance of getting a permit on a weekend day, knowing that when they did get a permit there would be fewer people on the river.

These are, of course, hypothetical questions. Do people still support regulations when it means losing their opportunity to participate? In a study of backpackers in Rocky Mountain National Park, an on-site survey of visitors who had just been denied permits found that 67 percent still felt the permit system was necessary (Fazio and Gilbert 1974). In a similar study of California's San Gorgonio Wilderness, 81 percent of the unsuccessful applicants supported the permit system. People giving reasons for their support were evenly split between protecting the resource and protecting the experience (Stankey 1979).

These studies indicate that users generally support management policies designed to protect the quality of backcountry experiences. When managers decide to limit use, however, allocation becomes an issue. The present study suggests that characteristics of different areas or activities affect user assessments of allocation systems. The presumption is that systems should be tailored to the expected clientele. ■

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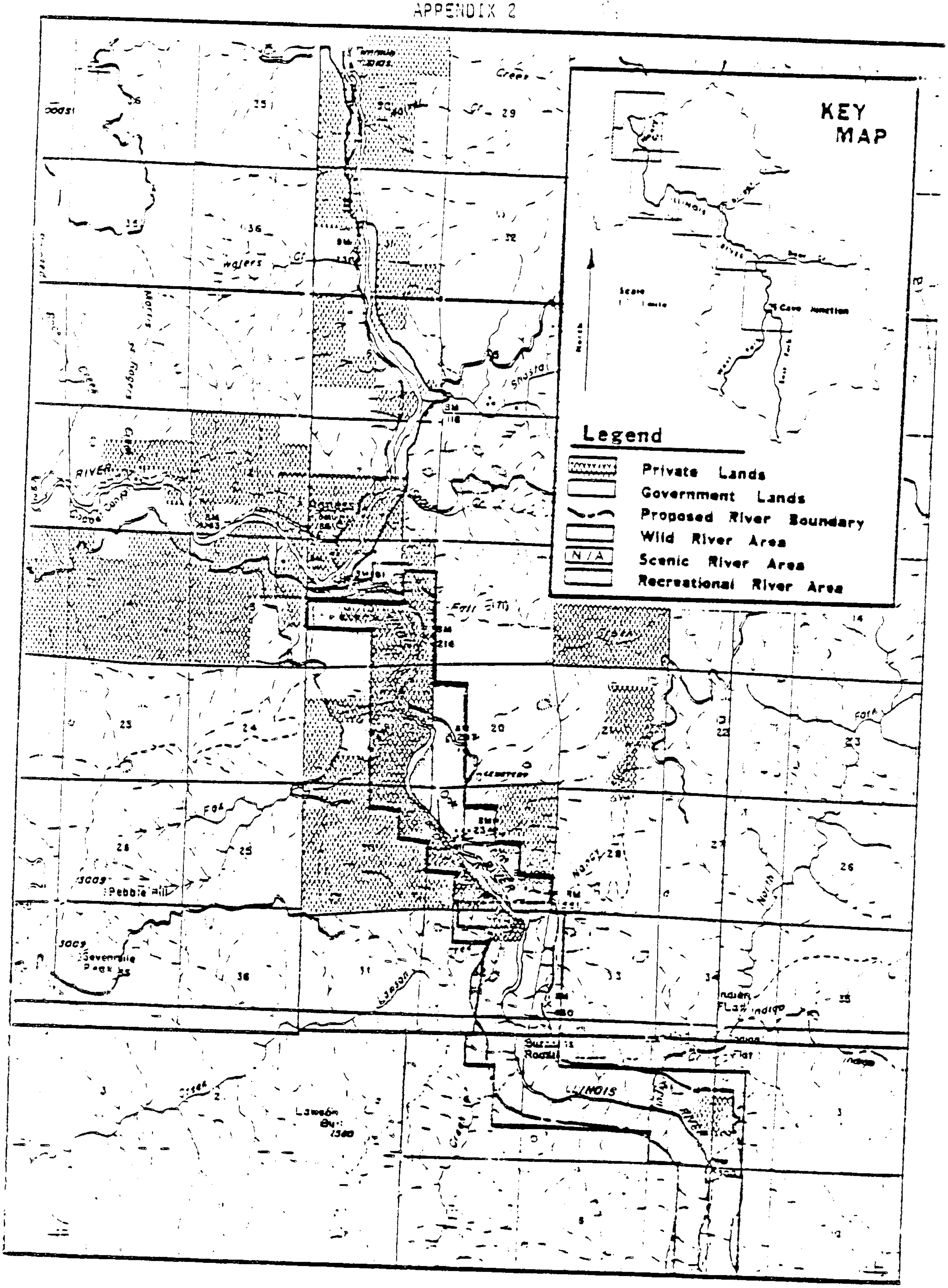
APPENDIX 2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Government Lands
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Scenic River Area
Recreational River Area
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RIVER
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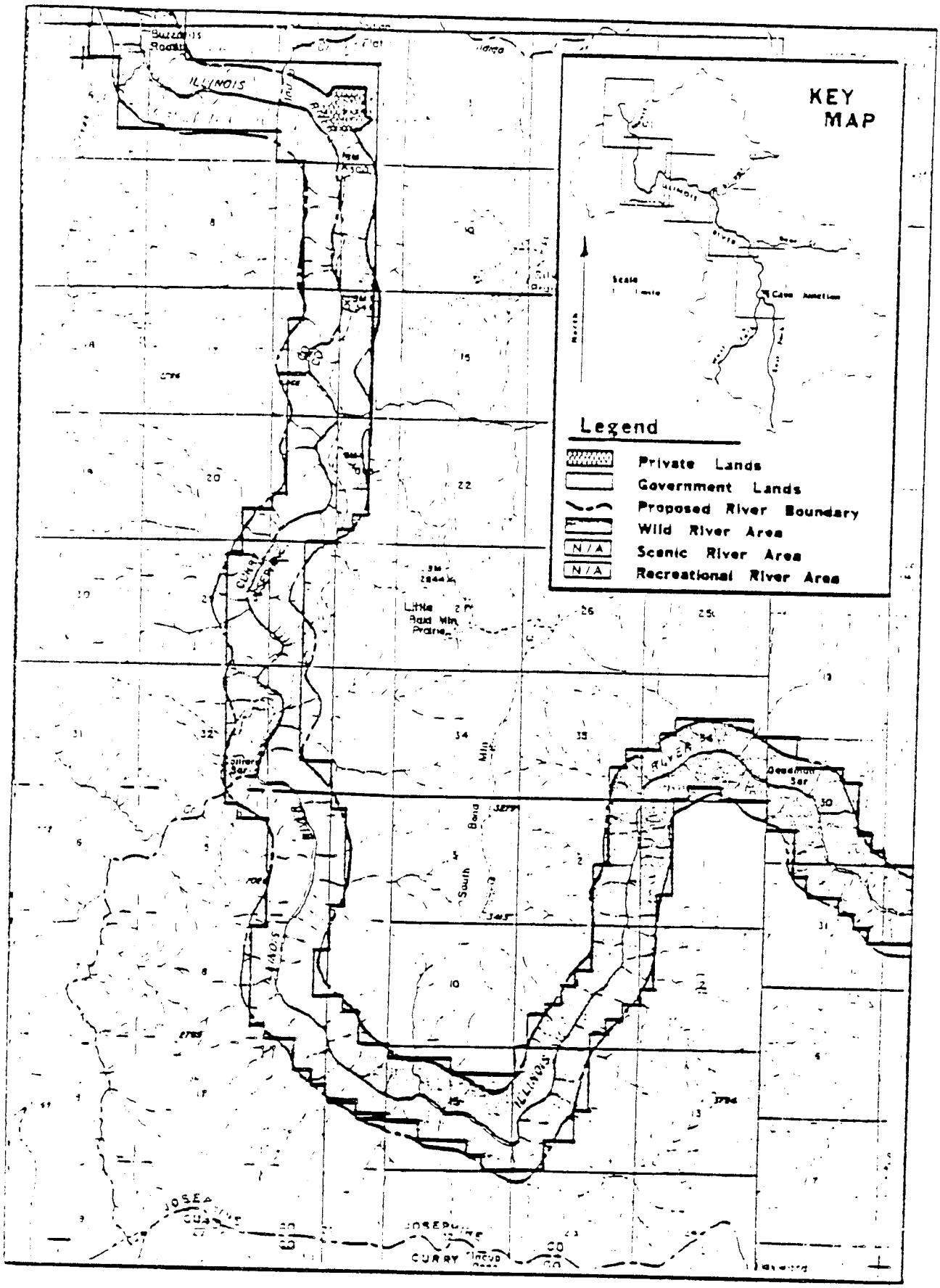
Sevenmile Peaks
Lawson Butte
ILLINOIS
Indian Flat
Indigo
Shasta
Cave Junction
North
Scale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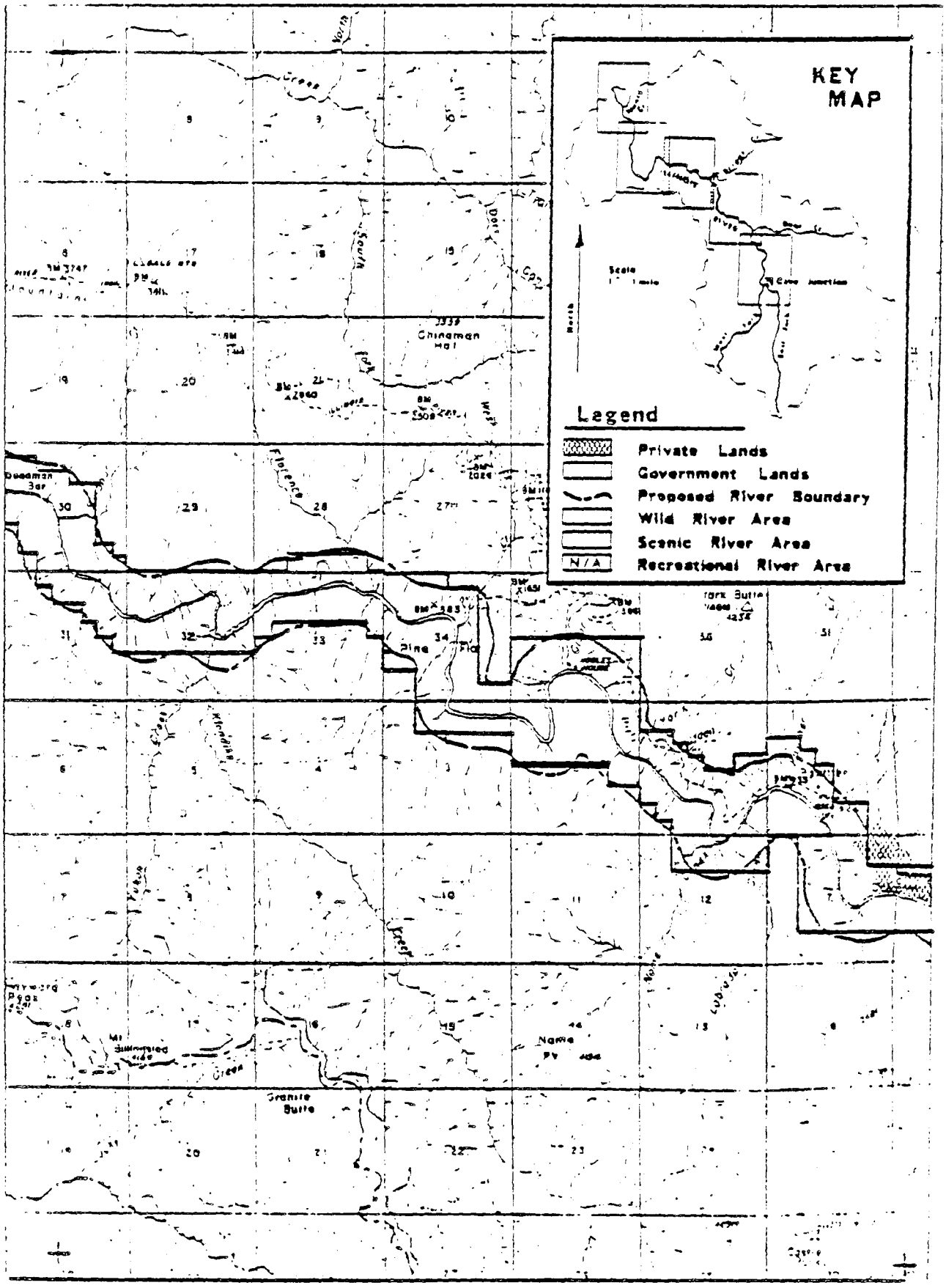
ILLINOIS
RIVER
JOSEPHINE
CURRY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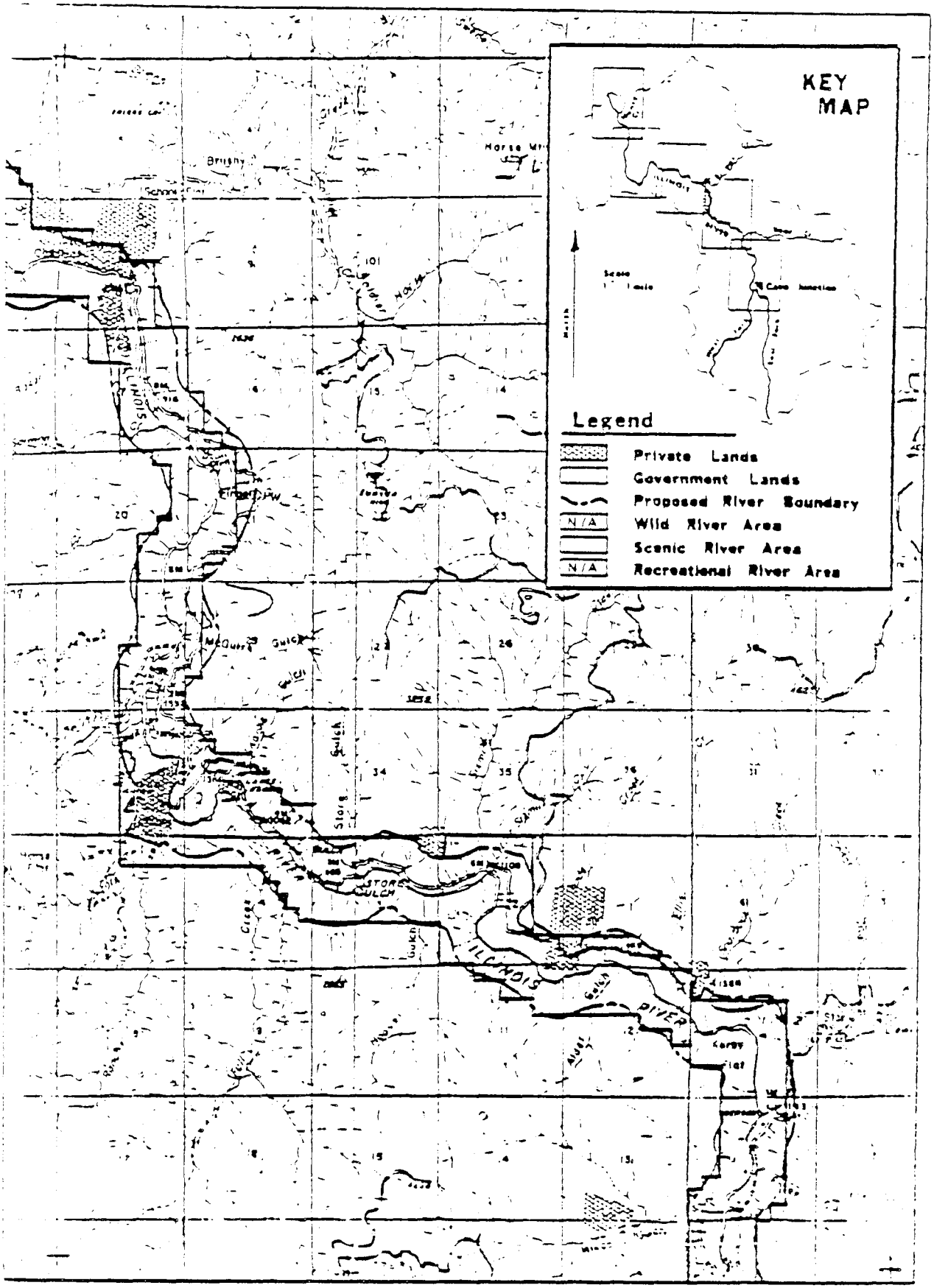
Name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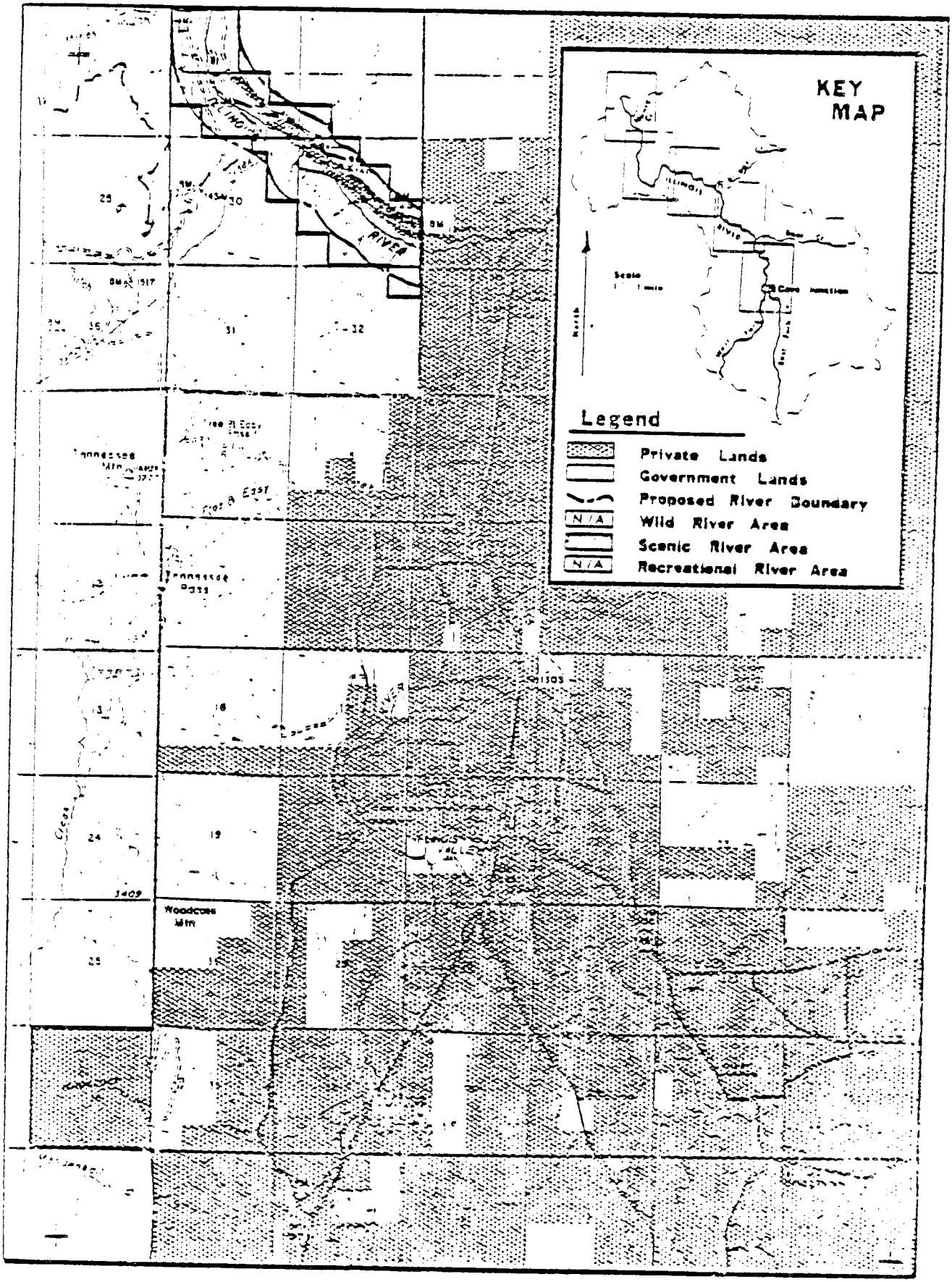
KEY MAP
Legend
Private Lands
Government Lands
Proposed River Boundary
N/A
Wild River Area
Scenic River Area
N/A
Recreational River Area
Woodcox Mtn
Tennessee Pass

LEGAL DESCRIPTION

Illinois Wild and Scenic River Corridor

		Acres
T. 35 S., R. 11 W.		
Sec. 18:	Lots 5, 6, 7, 8, and 12; SE¼NE¼; NE¼ SW¼	254.00
Sec. 19:	Lots 1, 2, 3, 4, 5, and 6; W½SE¼	232.41
Sec. 20:	Lots 1 and 2; SW¼NW¼	104.90
Sec. 29:	Lots 1, 2, 3, 4, 5, 9, 10, 11, and 12: SE¼NW¼; NW¼SE¼; SE¼SE¼	276.55
Sec. 30:	Lots 1 and 2, NW¼NE¼	96.76
Sec. 32:	Lots 1, 2, 3, 4, 5, 6, 7, and 8; NE¼NW¼; SW¼NE¼	321.66
Sec. 33:	Lots 1, 2, 3, and 4	114.19
T. 36 S., R. 10 W.		
Sec. 28:	S½SE¼SW¼; S½SW¼SE¼; SW¼SE¼SE¼	60.00
Sec. 30:	Lot 1, 2, and 3; SE¼SW¼NE¼; W½SW¼NE¼; SE¼NW¼; E½SW¼; W½SE¼; W½SE¼SE¼; SE¼SE¼SE¼	365.04
Sec. 31:	E½NE¼; NW¼NE¼; NE¼SW¼NE¼; E½NE¼NW¼; NW¼NE¼NW¼; NE¼NE¼SE¼	170.00
Sec. 32:	N½; N½N½S½	400.00
Sec. 33:	Portion of H.E.S. No. 131; Lot 1; NW¼NE¼; N½NW¼; N½SW¼NW¼; SW¼SW¼NW¼; N½SE¼NW¼; N½SW¼NE¼; N½SE¼NE¼; SE¼SE¼NE¼	260.00
Sec. 34:	Portion of H.E.S. No. 131; H.E.S. No. 174; Lots 1, 2, 3, 4, 5, 6, 9, 10, 11, and 12; S½NW¼NE¼; SE¼SW¼; S½SE¼SE¼	447.97
Sec. 35	S½	320.00
T. 36 S., R. 11 W.		
Sec. 4:	H.E.S. No. 118; Lots 5, 6, 7, and 8; SW¼NW¼; NW¼SW¼; S½SW¼; SW¼SE¼	360.00
Sec. 5:	Lot 4; S½N½; N½S½	365.31
Sec. 6:	Lots 1 and 2; SW¼NE¼; NE¼SE¼	168.79
Sec. 9:	H.E.S. No. 206; Lots 1, 2, 3, and 4; SE¼SW¼; W½E½	320.00

T. 36 S., R. 11 W. (Continued)		Acres
Sec. 16:	H.E.S. No. 215; Lots 1, 2, and 3; NW¼NE¼; NE¼NW¼; S½SW¼NW¼; E½NW¼SW¼; E½SW¼SW¼; SE¼SW¼; W½SE¼	382.54
Sec. 20:	SE¼SE¼	40.00
Sec. 21:	W½NE¼; E½NW¼; E½NW¼NW¼; E½SW¼NW¼; NE¼SW¼; E½NW¼SW¼; S½SW¼; NW¼SE¼; NW¼SW¼SE¼	390.00
Sec. 28:	W½W½	160.00
Sec. 29:	E½NE¼; SE¼NW¼NE¼; E½SW¼NE¼; E½SE¼; E½W½SE¼	230.00
Sec. 32:	E½E½; E½W½E½	240.00
Sec. 33:	W½NW¼; W½SW¼; SE¼SW¼	200.00
Sec. 35:	SE¼SE¼; SE¼NE¼SE¼	50.00
Sec. 36:	SW¼SE¼NE¼; S½SW¼NE¼; S½SE¼NW¼; NE¼SW¼; NE¼NW¼SW¼; S½NW¼SW¼; SW¼SW¼; N½SE¼SW¼; SW¼SE¼SW¼; N½SE¼; N½SW¼SE¼; SE¼SW¼SE¼; SE¼SE¼	340.00
T. 37 S., R. 9 W.		
Sec. 6:	Lots 5, 6, and 7, SW¼SE¼NW¼; E½SW¼; SW¼SE¼	223.57
Sec. 7:	Portion of H.E.S. No. 120; Lots 2 and 5; SW¼NE¼; E½NW¼; NE¼SW¼; N½SE¼	323.63
Sec. 8:	H.E.S. No. 201; Portion of H.E.S. No. 120; Portion of H.E.S. No. 175; Lots 5, 7, 8, 9, 10, and 11	253.75
Sec. 16:	SW¼NW¼SW¼; W½SW¼SW¼; SE¼SW¼SW¼	40.00
Sec. 17:	Portion of H.E.S. No. 175; Lots 1 and 2; E½NE¼; SW¼NE¼; SE¼	360.00
Sec. 20:	N½NE¼NE¼; SE¼NE¼NE¼; E½SE¼NE¼; E½SE¼; SE¼NW¼SE¼; E½SW¼SE¼	160.00
Sec. 21:	W½NE¼NW¼; W½NW¼; W½SE¼NW¼; W½NE¼SW¼; NW¼SW¼; N½SW¼SW¼; SW¼SW¼SW¼	210.00
Sec. 28:	W½W½NW¼; W½NW¼SW¼	60.00
Sec. 29:	E½NE¼; E½W½NE¼; SE¼	280.00
Sec. 32:	Portion of H.E.S. No. 47; Lots 1, 2, 3, 4, 5, and 6; N½NE¼	320.00
Sec. 33:	SW¼NW¼NW¼; SW¼NW¼; S½SE¼NW¼; SW¼; NW¼NW¼SE¼; S½NW¼SE¼; S½SE¼	340.00

		Acres
T. 37 S., R. 10 W.		
Sec. 1:	S½SE¼NE¼; SW¼NW¼; W½SE¼NW¼; SE¼SE¼NW¼; N½SW¼; NE¼SW¼SW¼; SE¼SW¼; SE¼	380.00
Sec. 2:	Lots 1, 2, 3, and 4; S½NE¼; S½NW¼; N½NE¼SE¼	390.68
Sec. 3:	Lots 1, 2, and 3	156.38
T. 37 S., R. 11 W.		
Sec. 1:	Lot 4; SW¼NW¼; NW¼SW¼; W½SW¼SW¼	140.61
Sec. 2:	Lot 1; SE¼NE¼; E½SE¼; E½W½SE¼	200.72
Sec. 4:	SW¼NW¼NE¼; W½SW¼NE¼; W½; W½NW¼SE¼; NW¼SW¼SE¼	380.00
Sec. 5:	NE¼NE¼; NE¼NW¼NE¼	50.00
Sec. 8:	E½E½NE¼; E½NE¼SE¼; NE¼SE¼SE¼	70.00
Sec. 9:	N½NW¼; SW¼NW¼; W½SE¼NW¼; NW¼NE¼SW¼; S½NE¼SW¼; W½SW¼; SE¼SW¼; SW¼NW¼SE¼; SW¼SE¼	340.00
Sec. 11:	E½NE¼; E½W½NE¼; SW¼SW¼NE¼; NE¼NE¼SW¼; S½NE¼SW¼; E½SW¼SW¼; SE¼SW¼; N½NE¼SE¼; SW¼NE¼SE¼; NW¼SE¼; N½SW¼SE¼; SW¼SW¼SE¼	320.00
Sec 12:	W½W½NW¼	40.00
Sec. 14:	W½W½NE¼; NW¼; N½SW¼; SW¼SW¼	320.00
Sec. 15:	S½NE¼; S½N½NW¼; S½NW¼; N½NW¼SW¼; NE¼SW¼; N½SE¼; NE¼SW¼SE¼; SE¼SE¼	390.00
Sec. 16:	NE¼; NE¼NW¼; NE¼SE¼NW¼; N½NE¼SE¼	230.00
T. 38 S., R. 8 W.		
Sec. 7:	SW¼NE¼; S½NW¼; N½SW¼; SE¼SW¼; W½SE¼	320.00
Sec. 18:	W½NE¼; E½NW¼; E½SW¼; SE¼NW¼SW¼; SW¼SW¼; NW¼SE¼; N½SW¼SE¼; SW¼SW¼SE¼	360.00
Sec. 19:	Portion of M.S. No. 334; Lots 1, 3, 4, 5, and 6; N½NW¼; SW¼NW¼; NW¼SW¼; SE¼SW¼	400.00
Sec. 20:	Lot 4; Portion of M.S. No. 334	40.00
Sec. 29:	Portion of M.S. No. 334; Lots 2, 3, 4, 5, 6, 7, 8, 10, 11, and 12; N½SW¼; SE¼SW¼; SW¼SE¼	469.20
Sec. 30:	Lot 1, NE¼NW¼NE¼; SE¼NE¼	34.68
Sec. 32:	Lot 1	34.46

T. 38 S., R. 9 W.		Acres
Sec. 1:	Portion of H.E.S. No. 121; Lot 9; SE¼SW¼; S½SW¼SE¼	100.00
Sec. 2:	Portion of H.E.S. No. 121; Lots 2, 3, 4, and 7; SW¼NE¼; S½NW¼; N½SW¼; SW¼SW¼; SE¼SW¼; W½SE¼	526.54
Sec. 3:	Lots 1, 2, 3, and 4; S½N½; N½N½S½	395.47
Sec. 4:	Lots 1, 2, 3, and 4; NE¼SW¼NE¼; SE¼NE¼; NE¼NE¼SE¼	234.40
Sec. 5:	Portion of H.E.S. No. 47; Lots 1 and 2	91.47
Sec. 11:	Portion of H.E.S. No. 121; Lot 1, NW¼NE¼; N½NE¼NW¼; N½SE¼NE¼	120.00
Sec. 12:	Portion of H.E.S. No. 121; Lots 1 and 2; NW¼NE¼; NE¼NW¼; N½S½NW¼; N½SW¼NE¼; SE¼SW¼NE¼; SE¼NE¼; NE¼NE¼SE¼	279.98
	TOTAL	16,095.66

DEPARTMENT OF AGRICULTURE
Forest Service

DRAFT ILLINOIS WILD AND SCENIC RIVER MANAGEMENT PLAN

Siskiyou National Forest
Josephine and Curry Counties, Oregon

The Department of Agriculture, Forest Service, has prepared a draft Illinois Wild and Scenic River Management Plan. As a result of comments received, some modifications were made in a preliminary draft. A new and formal draft Plan is available for public review and comment. Copies are available at the: Forest Headquarters, 200 NE Greenfield Road, (P.O. Box 440), Grants Pass, Oregon 97526; Gold Beach Ranger Station, 1225 So. Ellensburg - Box 7, Gold Beach, Oregon 97444; and the Illinois Valley Ranger Station, 26568 Redwood Highway, Cave Junction, Oregon 97523. Written comments and suggestions concerning the Plan will be received during the next 30 days by Siskiyou National Forest Supervisor Ronald J. McCormick, 200 NE Greenfield Road, (P.O. Box 440), Grants Pass, Oregon 97526. A final management plan will then be prepared and available to the public.

DEPARTMENT OF AGRICULTURE
Forest Service

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