United States
Department of
Agriculture

Sequoia
National
Forest

WILD AND SCENIC RIVER STUDY REPORT/DRAFT ENVIRONMENTAL IMPACT STATEMENT ON THE SOUTH FORK OF THE KERN RIVER

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WILD AND SCENIC RIVER STUDY REPORT
AND
DRAFT ENVIRONMENTAL IMPACT STATEMENT
ON THE
SOUTH FORK OF THE KERN RIVER

Kern County, California
Sequoia National Forest

Lead Agency:	USDA Forest Service
Responsible Official:	Clayton K. Yeutter Secretary of Agriculture (Responsible for recommendation to Congress)
	James A. Crates Sequoia National Forest Supervisor (Responsible for completion of suitability study)
Type of Environmental Impact Statement:	Legislative
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Abstract

This study report/draft Environmental Impact Statement (DEIS) documents the results of an analysis of four alternatives for future management of a one-mile section of the South Fork of the Kern River. The entire study area is located within the Sequoia National Forest in Kern County, California. This study report/DEIS discusses the suitability of this segment of the river for inclusion in the National Wild and Scenic Rivers System and identifies the environmental and socioeconomic effects of each alternative. The preferred alternative (Alternative 2) recommends designation of the entire one-mile section of the South Fork Kern River under a Wild classification. The other alternatives considered were non-designation/no action (Alternative 1), designation of the entire one-mile section of the South Fork Kern River under a Scenic classification (Alternative 3), and designation of the entire one-mile section of the South Fork Kern River under a Recreation classification (Alternative 4). The actions considered are consistent with the Sequoia National Forest Land and Resource Management Plan.

Reviewers should provide the Forest Service with their comments during the review period of the study report/DEIS. This will enable the Forest Service to analyze and respond to the comments in the final study report/FEIS and include reviewers' comments in the decision making process. Comments on the study report/DEIS should be specific and should address the adequacy of the statement or the merits of the alternatives discussed (40 CFR 1503.3).

Comments to be received by:_____

Comments can be sent to:

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SUMMARY

This Wild and Scenic River Study Report/Draft Environmental Impact Statement (DEIS) examines the suitability of designating one mile of the South Fork of the Kern River for inclusion into the National Wild and Scenic Rivers System, and evaluates the environmental consequences of such designation on the human environment. This portion of the South Fork Kern River, which is located in the Southern Sierra Nevada Mountains, is located entirely within the Sequoia National Forest in Kern County, California.

The Sequoia National Forest Land and Resource Management Plan (FLMP) evaluated this one mile section of the South Fork Kern River as part of segment 1 in its entirety, and declared it eligible for inclusion into the National Wild and Scenic Rivers System. However, a suitability determination for this one mile section was not included in the Sequoia FLMP given the interpretation of the 1984 California Wilderness Act and the 1987 Wild and Scenic Rivers Act. Further investigation determined that the Forest Service needed to complete a suitability assessment for this one mile section of the South Fork Kern River within the Sequoia National Forest boundary. This study report/DEIS briefly summarizes and incorporates by reference the findings of eligibility documented in appendix E of the Sequoia FLMP and focuses on the potential classification and suitability of the study area for inclusion into the National Wild and Scenic Rivers System and assesses the potential environmental impacts of the alternatives under consideration.

This Study Report/DEIS is tiered to the Sequoia National Forest Land and Resource Management Plan and the actions considered are consistent with direction contained in the FLMP. The USDA Forest Service is the lead agency in conducting the environmental analysis and preparing this study report/DEIS; however, the Secretary of Agriculture is the responsible official in this action. After completion of the review process the Study Seport/DEIS will be forwarded to the Secretary of Agriculture. If the river is found to be not suitable, the study will be discontinued from further review or action.

Based on the information and recommendations documented in the study report, the Secretary, as the responsible official, will transmit his recommendations to the Congress. The Study Report/FEIS will be distributed to the public when the Secretary's recommendations are sent to the Congress. Legislative action to designate this segment of the South Fork Kern River as a part of the National Wild and Scenic Rivers System is the responsibility of the Congress.

The study area, defined as one-quarter of a mile along the slope from the high watermark on each bank of the river, comprises approximately 320 acres, of which 240 acres are situated within the Dome Land Wilderness. The one mile study area is a transition zone between the steep-walled canyons upstream and the relatively flat, alluvial valley downstream. Road access into the area is extremely limited, with the two roads that lead into the study area being on private land and not open to public use. The road on the west side of the South Fork Kern River terminates prior to entering National Forest lands and the road on the east side of the river is not maintained within the National Forest boundary and generally only drivable by four-wheel drive vehicles. Use of this road by motorized equipment is prohibited except for periodic use by the Forest Service for resource management needs.

The study area is the site of an abandoned World War II rest and recuperation camp (Camp Burroughs) and also located within the study area are the remains of a cement diversion structure that channelled irrigation water into a flume and was transported to the Bloomfield Ranch downstream. The South Fork Kern River is not floatable and current use in the study area consists mostly of occasional backpackers and fisherman along the South Fork Kern River.

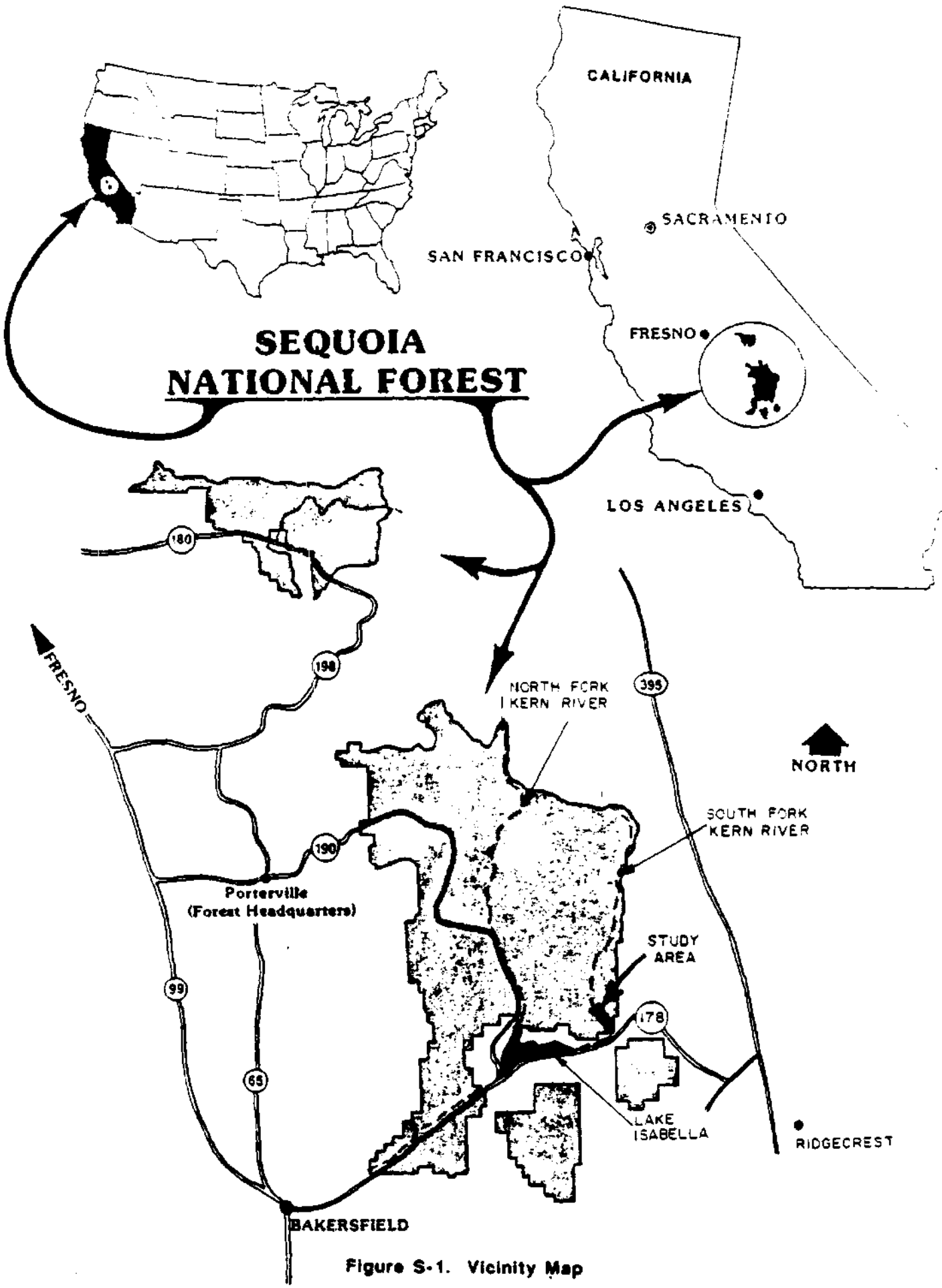

Figure S-1. Vicinity Map

The Federal Energy Regulatory Commission (FERC) is currently processing license application #4805, which was submitted to FERC in 1981 by Mr. Victor Page. The application proposes to construct, within the study area, a 6-foot-high dam, forming an impoundment of approximately one acre, and a 5 foot diameter pipeline to transport water to a powerhouse located on private land 2 miles downstream. The proposed hydroelectric project could produce an estimated 2.5 megawatts (MW) of power. **It should be emphasized that project-specific analysis of environmental and socioeconomic impacts of the proposed development is beyond the scope of this study report/DEIS, which considers only alternatives regarding the suitability of the study area for inclusion into the Wild and Scenic Rivers System.**

The river is free-flowing and the resource values of this one mile section are closely associated with vegetative, topographic, scenic and wilderness values of the Nationally designated Wild and Scenic River directly upstream (segment 2). In response to issues raised during the scoping process on this study report/DEIS four alternatives were developed for the future management of the study area. Principle issues of concern included the impact of alternatives on future hydroelectric development and on preserving and protecting the free-flowing nature of the river and the adjacent environmental and cultural resources.

Under Alternative 1, the no action alternative, the entire study area would be found unsuitable for designation. The Forest Service would continue to manage the study area under management prescriptions PS1 and WF4 as described in the Sequoia FLMP (see Appendix C for descriptions of management prescriptions). Future development within the study area would not be precluded, and the Forest Service would evaluate specific proposals for future development on a case-by-case basis. Other than the potential for hydroelectric development, the uses of the area would not change significantly from current uses. The level of dispersed recreation use would remain relatively constant. Assuming no hydroelectric development occurs, there would be no significant effects on soil, visual resources, historic and cultural resources, water resources, air quality, fire and fuels management, land uses, mining, vegetation, grazing, wildlife and fish. If hydroelectric development were to occur under this alternative, potential impacts include localized effects on soil, wildlife habitat and vegetation, and changes in water quality. These potential impacts are listed in a separate section under Alternative 1 in chapter 5.

Under Alternative 2, designation under a wild classification, the entire study area would be recommended for designation as a Wild and Scenic River with a wild classification. Selection of this alternative would afford the highest level of protection of water flows, vegetation, scenic, and other natural values of this area from the potential effects of developments that could occur under the no action alternative. The study area would be managed under management area prescriptions WSR and WF4 as described in the Sequoia FLMP. No development of hydroelectric power facilities would be permitted, including the proposed Bloomfield Hydroelectric Project. There would be no significant effects on soil, visual resources, historic and cultural resources, water resources, air quality and grazing. Adding the Wild and Scenic status to this segment of the South Fork would complete the designation from its headwaters to the Sequoia National Forest boundary.

Under Alternative 3, designation under a scenic classification, the entire study area would be recommended for designation as a Wild and Scenic River with a scenic classification. The study area would be managed under management area prescriptions WSR and WF4 as described in the Sequoia FLMP. No development of hydroelectric power facilities would be permitted, including the proposed Bloomfield Hydroelectric Project. New mining claims could be allowed as long as the activity was conducted in a manner that minimized disturbances. Extensive recreation developments could also be allowed if screened from the river. There would be no significant effects on soil, visual resources, historic and cultural resources, water resources, air quality and grazing. Adding the Wild and Scenic status to this segment of the South Fork would complete the designation from its headwaters to the Sequoia National Forest boundary.

Under Alternative 4, designation under a recreation classification, the entire study area would be recommended for designation as a Wild and Scenic River with a recreation classification. The study area would be managed under management area prescriptions WSR and WF4 as described in the Sequoia FLMP. No development of hydroelectric power facilities would be permitted, including the proposed Bloomfield Hydroelectric Project. The existing water diversion structure would be allowed to be restored for operations in the future. New mining claims could be allowed as long as the activity was conducted in a manner that minimized disturbances and extensive recreation developments could also be allowed. There would be no significant effects on soil, visual resources, historic and cultural resources, water resources, air quality and grazing. Adding the Wild and Scenic status to this segment of the South Fork would complete the designation from its headwaters to the Sequoia National Forest boundary. See Table 5-1 for a summary of environmental consequences.

Alternative 2 has been identified as the preferred alternative.

CHAPTER 1

PURPOSE AND NEED FOR ACTION

The Forest Service prepared this study report/draft environmental impact statement (DEIS) to examine the suitability of designating a one mile stretch of the South Fork of the Kern River in the Sequoia National Forest in Kern County, California under the Wild and Scenic Rivers System, and to evaluate the impact of such designation on the human environment. The purpose and authority for the study of wild and scenic rivers are contained within the Wild and Scenic Rivers Act of October 1, 1968, as amended (P.L. 90-542). The intent of the act is to preserve some of the Nation's free-flowing rivers for present and future generations.

The Nationwide River Inventory (NRI), of January, 1982, identified rivers that may be suitable for inclusion into the National Wild and Scenic Rivers (W&SR) System. The NRI is an inventory of those rivers and river segments which are relatively natural or undeveloped. Included in its inventory is the South Fork of the Kern River, which was designated for additional study as a result of the Sequoia National Forest Land and Resource Management Plan (FLMP). To be eligible for possible inclusion in the National Rivers System, a river must be free-flowing and, with its adjacent land area, must possess one or more outstandingly remarkable values. The potential values are: scenic, recreational, geologic, fish and wildlife, historic, cultural, or other values, including ecological values.

The Wild and Scenic Rivers Act provides for three classifications of rivers and river segments: wild, scenic, and recreational. Classification is based on the condition of the river and adjacent lands at the time of the study. (Eligibility criteria and classifications are discussed in more detail in chapter 3.)

On September 28, 1984, legislation pending in Congress, designating an addition to the Dome Land Wilderness, was enacted into law (PL 98-425) and excluded this one mile section of the South Fork of the Kern River because of proposed hydroelectric projects. Again on November 24, 1987, legislation pending in Congress, designating 72.5 continuous miles of the South Fork of the Kern River, from its headwaters south to the southern boundary of the Dome Land Wilderness, as Wild and Scenic, was enacted into law (P.L. 100-174) and excluded this section of the river for the same reason. When the Sequoia National Forest studied the area in preparation of the Land and Resource Management Plan/EIS (FLMP), approved in February 1988, it did not include a suitability determination for the National Forest portion of segment 1, given the interpretation that the 1984 California Wilderness Act and the 1987 Wild and Scenic Rivers Act, had released the area from further Wilderness and Wild and Scenic River consideration. Given further investigation of this matter, the Chief determined in 1988 that the Forest Service needed to complete a suitability assessment, which focuses on the potential classification and suitability determination of this one mile section of the South Fork Kern River.

Mr. Victor W. Page has proposed a hydroelectric project, application #4805, for this section of the South Fork of the Kern River. The Federal Energy Regulatory Commission (FERC) is currently processing license application #4805, which was submitted to FERC in 1981. The application proposes to construct, within the study area, in the NE 1/4 of the NW 1/4 of Section 14, T25S, R35E, a 6-foot-high dam, forming an impoundment of approximately one acre, and a 5 foot diameter pipeline to transport water to the powerhouse 2 miles downstream. The powerhouse would be constructed on the applicant's private property at the Bloomfield Ranch, near the center of Section 24, T25S, R35E. The proposed hydroelectric project could produce an estimated 2.5 megawatts (MW) of power.

Because this hydroelectric proposal represents a reasonably foreseeable use of the river corridor, Chapter 5 of this study report/DEIS discusses the potential consequences of this type of development scenario. **However, it should be emphasized that project-specific analysis of the environmental and socioeconomic impacts of the proposed development is beyond the scope of this study report/DEIS, which considers only alternatives regarding the suitability of the study area for inclusion into the Wild and Scenic Rivers System.**

Request for comment was solicited from Forest Service employees and from public agencies, Forest permittees, environmental organizations, private property owners, political representatives, and the public at large. Comments were requested by various methods including publishing a Notice of Intent to prepare a study report/DEIS in the Federal Register filed March 16, 1990, radio and newspaper releases, monthly newsletter mailings to interested parties, and informal public meetings conducted on January 23, and March 7, 1990. A field trip to the study area was also conducted for members of the public on February 27, 1990. A total of 105 people attended these functions.

This scoping process identified concerns that were taken into account during preparation of the study report/DEIS. Twenty-two written comments were received during the public scoping period (see Appendix B for listing of public concerns and opportunities). These comments were initially grouped by like resource areas and screened using the following evaluation (screening) criteria:

> Screening Criteria 1 - Is the South Fork W&SR study report/DEIS the proper place to address the concern or opportunity?
>
> Screening Criteria 2 - Does the Forest Service have the authority to address the concern or opportunity?
>
> Screening Criteria 3 - Is the concern or opportunity contrary to, or resolved by, an existing law, regulation, or Forest Service policy?

After analyzing all public and Forest Service comments by the Interdisciplinary Team three key issues became evident. These key issues were used to guide the formulation of the range of alternatives. The three key issues are:

1. Should the area be preserved with special designation as a Wild and Scenic River?
2. How should the resources present in the study area, including archaeological, biological, scenic, and geological resources, be protected?
3. What impacts would special designation as a Wild and Scenic River have on future hydroelectric development?

This study report/DEIS has been prepared pursuant to the Wild and Scenic Rivers Act (P.L. 90-542), as amended; the Council on Environmental Quality's (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) (40 CFR 1500-1508); and the Final Revised Guidelines for Eligibility, Classification, and Management of River Areas (47 FR 34457, September 7, 1982). It complies with the Forest Service's NEPA implementing procedures as given in the Forest Service Environmental Policy and Procedures Manual, FSM No. 1950 (USDA 1985a); the Forest Service Environmental Policy and Procedures Handbook, FSH No. 1909.15 (USDA 1985b); and the Forest Service Land and Resource Management Planning Handbook, FSH 1909.12 (USDA July 1987), chapter 8.

This study report/DEIS is tiered to the Sequoia National Forest Land and Resource Management Plan Final EIS, and the actions are consistent with the direction contained in the Sequoia FLMP. The Sequoia FLMP applied management area prescriptions PS1 and WF4 to the study area. The PS1

prescription emphasizes general dispersed recreation and non-motorized travel. That portion of the study area situated within the Dome Land Wilderness has a WF4 prescription which emphasizes wilderness with the natural role of fire.

After completion of the review process, the study report/DEIS will be forwarded to the Secretary of Agriculture. If the river is found to be not suitable, the study will be discontinued from further review or action.

Based on the information and recommendations documented in the study report, the Secretary, as the responsible official, will transmit his recommendations to the Congress. The study report/FEIS will be distributed to the public when the Secretary's recommendations are sent to the Congress. Legislative action to designate this segment of the South Fork Kern River as a part of the National Wild and Scenic Rivers System is the responsibility of the Congress.

This study report/DEIS is organized to comply with the format specified in CEQ regulations (40 CFR 1502.10) and the Forest Service guidelines for preparing wild and scenic river study reports (FSH 1909.12, chapter 8). This chapter has described the need for and purpose of this study report/DEIS. Chapter 2 describes the environment that may be affected by a recommendation on designation. Chapter 3 summarizes the characteristics of the environment of the study area that make it eligible to study for inclusion in the Wild and Scenic Rivers System and summarizes the classification process. Chapter 4 describes the range of alternatives that were developed in response to the scoping process. Chapter 5 describes, evaluates, and compares the potential impacts of various alternatives on the human environment and social and economic conditions. Chapter 6 contains the distribution list for this study report/DEIS, and Chapter 7 contains the list of preparers. The references cited in the report follow in Chapter 8.

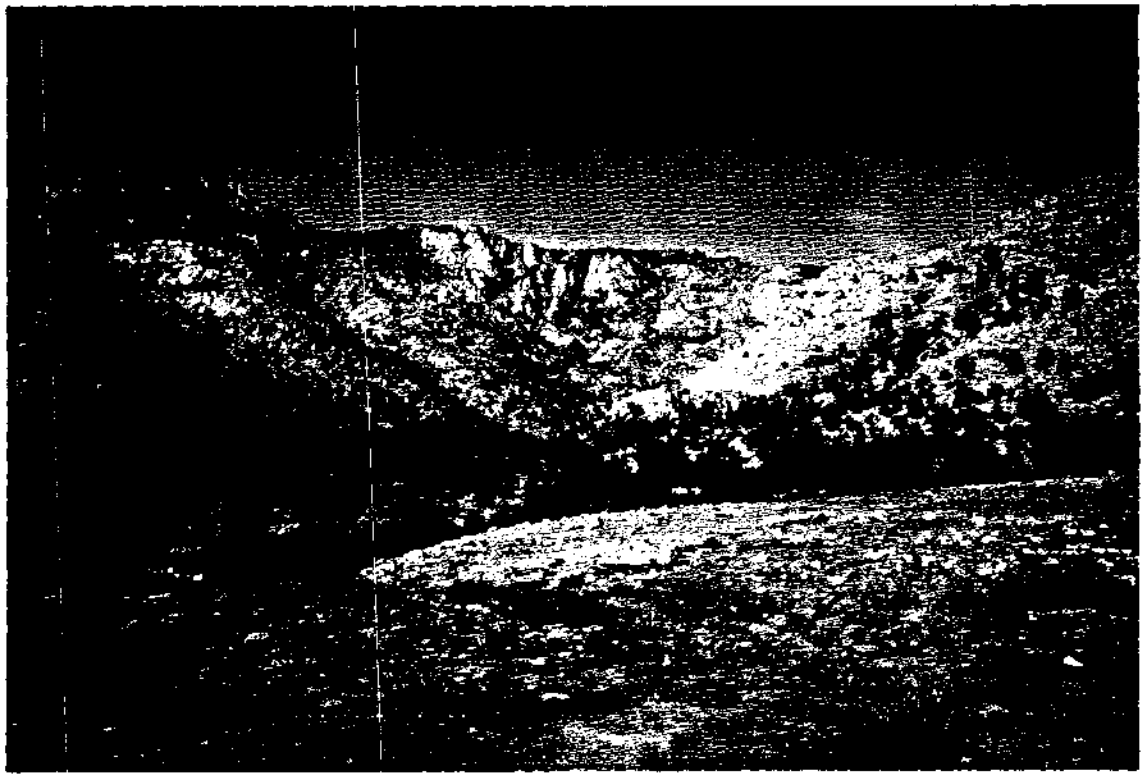

Photo 1-1. Overview of the Study Area.

Photo 1-2. South Fork Kern River within the Study Area.

CHAPTER 2

DESCRIPTION OF THE STUDY AREA

INTRODUCTION

This chapter describes the environment that would be affected by designation of the study area as part of the Wild and Scenic Rivers System. The affected environment includes the South Fork of the Kern River, as well as adjacent National Forest lands one-fourth of a mile along the slope from the high watermark on each river bank that may be restricted in their uses as a result of designation.

The affected environment may be described in terms of resource elements, which include soils and geology, visual resources, cultural resources, water resources, air quality, fire and fuels management, land use, vegetation, wildlife and fish species, and recreation uses. In addition, this chapter describes characteristics of the social and economic environment that may be affected, including population, employment, and economic output.

LOCATION

The South Fork Kern River is situated in the southeastern Sierra Nevada Mountains and drains a large portion of the southern Sierra Nevadas in Inyo and Tulare Counties, California, flows through Kern County, California to its confluence with the North Fork Kern River at Lake Isabella. It is totally free-flowing and descends through steep gorges with large granite outcroppings and domes interspersed with open pinyon-juniper-sagebrush meadows. The river flows through three wildernesses -- the Golden Trout, South Sierra, and Dome Land. Because of rugged terrain, the 15 miles of river below Rockhouse Basin are virtually inaccessible, except for cross country travel, until the river emerges from the Forest into the South Fork Valley above the town of Onyx.

The river segment addressed in this study is situated in a transition area between the steep granitic canyon directly upstream and the alluvial valley with extensive riparian forests downstream. It begins at the southern edge of the Dome Land Wilderness and extends one mile south to the Sequoia National Forest boundary. River bed elevations range from approximately 3100 feet above sea level at the north end of the study area to just below 3000 feet at the Forest boundary on the south end. The river corridor extends one quarter mile from each bank of the South Fork Kern River and consists of approximately 320 acres located entirely within the Sequoia National Forest, in Kern County, California.

Upstream from the study area, the South Fork Kern River is designated as a Wild and Scenic River, for its entire 72.5 miles. Downstream from the study area, the South Fork Kern River flows for a distance of 9.5 miles, to its confluence with the North Fork Kern River at Lake Isabella. Although the majority of this distance is under private ownership, approximately 10% of the distance is administered by the Bureau of Land Management and the U.S. Army, Corps of Engineers.

CLIMATE

The climate in this area of the southern Sierra Nevada is characterized by a Mediterranean climate with short, mild winters and long, dry summers. Summers are dominated by hot days, with maximum temperatures ranging from 90 to 110 degrees Fahrenheit, and occasional thunderstorms

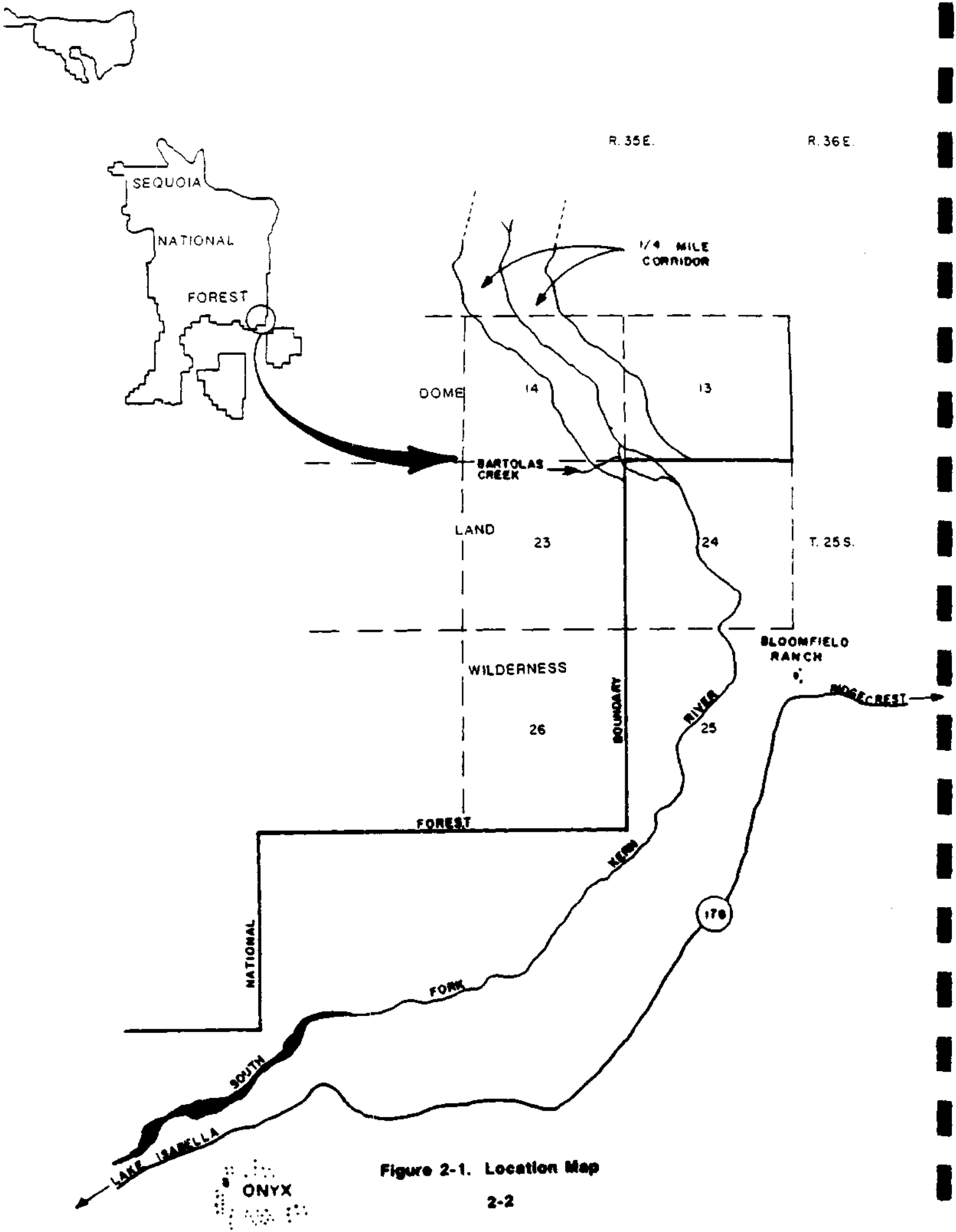

Figure 2-1. Location Map

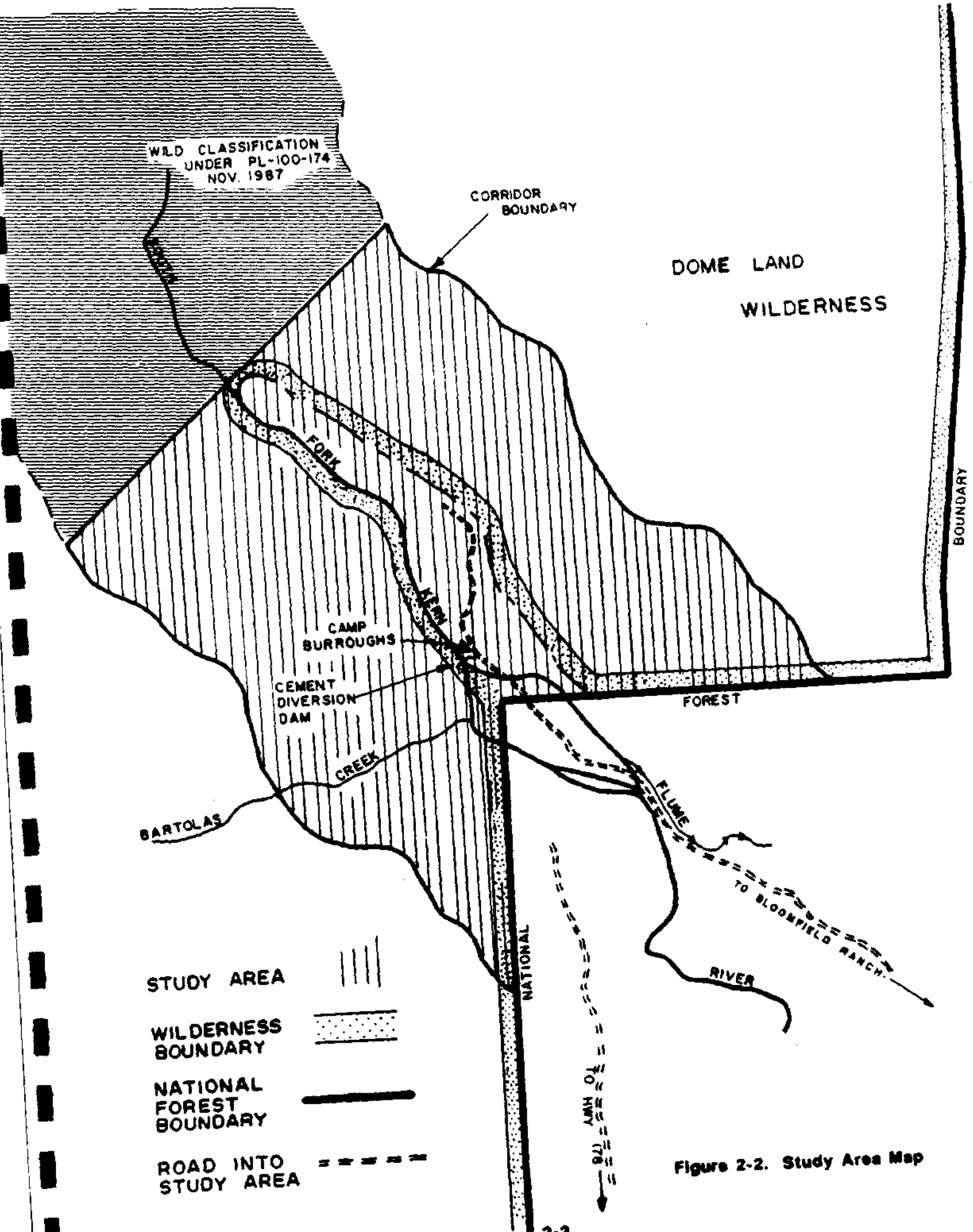

Figure 2-2. Study Area Map

along with scattered precipitation. Winters are comparatively mild with low temperatures averaging 30 degrees Fahrenheit and minimum low temperatures dropping to 10 degrees Fahrenheit. Because of a north-south alignment, both the North and South Forks of the Kern River are more protected from incoming westerly and northwesterly storm fronts than other Sierran rivers, thus receiving less rainfall. The majority of precipitation occurs during the winter, averages 11 inches annually, and comes in the form of rainfall with an occasional snowfall.

SOILS/GEOLOGY

The study area is predominately an alluvial floodplain having slopes of 0 to 15 percent. The surrounding mountains are composed of granitic rocks of Mesozoic Age and are part of the Sierra Nevada Batholith. Isolated limestone pendants cap granitic ridges and are remnants of sedimentary beds that at one time covered the region.

The soils are deep, gravelly, cobbly, and stony sands and sandy loams and are derived from material washed in from upstream or adjacent land forms. The soils are coarse-grained, have a low water holding capacity, and tend to be low in nutrients. They generally do not support rapid or abundant vegetative growth. Near the river the water table is at or near the surface and deposition and removal of sediment is common during annual flooding. No prime agricultural soils occur within the study area.

VISUAL RESOURCES

The study area falls into the Desert/Desert Mountain character type with a "Common" Variety Class (B). This variety class is described as "areas with landforms, water features, vegetative patterns, or rock formations that create a landscape of a common nature to other Desert/Desert Mountain landscapes.

The landscape character is essentially natural with minor exceptions. The red color from fire retardant that was dropped nearby on a wildfire that occurred in 1972 temporarily remains on a rocky ridge. Also, the remnants of Camp Burroughs and the associated unimproved road, and the remnants of the flume intake for the Bloomfield Ranch are visible within the corridor. From certain locations within the study area, when looking towards the south, one or more of several roads are visible in the middleground view zone.

The study area is not easily viewed from the adjacent areas; however, it is partly visible from nearby State Highway 178. Although it is readily viewed from the adjoining Dome Land Wilderness, use in this area is extremely light due to the lack of access and steep, rugged terrain.

The vegetation is diverse with flowering cactus, live oak, digger pine, willow, sage, and cottonwood with grasses and miscellaneous ground cover. Boulders are everywhere. The stream offers views of cascading water over small falls, swirling white water and pools of clear water as the stream flows through the rocky stream channel.

The Visual Quality Objective for this area as identified in the FLMP is Partial Retention.

CULTURAL RESOURCES

The South Fork Kern River Wild and Scenic River Study Area is rich in prehistoric and historic archaeological sites both within the National Forest and on adjacent private lands. The area was

readily accessible from the Kern River Valley to the west and Owens Valley via Walker Pass to the east. It represents a traditional use area for the Tubatulabal according to their own recollections and current presence in the area. At the present time, the study area has been completely inventoried for cultural resources. A total of 320 acres was examined using on-the-ground walking survey by Forest Service archaeologists. Additional background information was gathered with the help of private citizens, published materials, and United States Navy personnel. These searches have led to the discovery and documentation of four archaeological sites, one historic site, and numerous isolated artifacts within the study area.

The plant communities are Digger pine-oak woodland; due to the arid nature of the area, the aquatic and terrestrial plant and animal resources found here appear to have been important in determining settlement decisions of the early inhabitants.

The soils are subject to alteration by erosion, deposition and stream overflow. Seasonal flooding, changes in the stream channel and surface deposits of boulders indicate an area subject to relatively rapid changes. The only areas that have the potential to contain subsurface deposits are above the river high water line and away from other seasonal drainages. Additionally, post-depositional processes can displace artifacts both horizontally and vertically from their original point of deposit.

Ethnographic Environment

The study area is within the area traditionally used by Tubatulabal. This area consisted of the Kern River and its tributaries and ranged in elevation from 2000 feet in the Kern River valley to 14,600 feet at the eastern escarpment of the Sierra Nevada. Within this territory the Tubatulabal lived in three basic types of settlements: the individual family camp, the multi- family camp, and the hamlet. During the gathering season, a highly mobile subsistence strategy was needed, calling for the individual family camp settlement type. Multifamily camps were predominant near pinyon groves and fishing areas, and after gathering activities ended during the winter months, families returned to hamlets. Some of these hamlets were located on the floor of the South Fork of the Kern River Valley. Trading activities were conducted with other groups in California and Nevada including the coastal Chumash, the Yokuts, the North Fork Mono, the Kawaiisu, the Owens Valley Paiute and the Panamint Shoshone.

Descendants of the early inhabitants remain in the area, living on the 160 acres known as the "White Blanket Allotment" located 1.5 miles south of the study area and in the South Fork Valley in general.

Prehistoric Environment

The four prehistoric sites found in the study area represent food processing activities, lithic technology activity, leather processing, and probably ceremonial and sacred activities. Additional sites on National Forest land (outside the study area but still on the South Fork or Bartolas Creek) represent habitation sites, either open camps or rockshelters. A faint path is located near one of the sites in the study area and leads to one of these habitation sites.

Located strictly on adjacent private land is an ethnographically recorded village (or hamlet) called "Weasel's Lookout" where, mythologically, Weasel, a Tubatulabal Indian, kept a lookout for soldiers approaching from the west. It is highly likely that this site is associated with the sites in the study area, which are located adjacent to or within one-fourth mile of the river.

Historic Environment

The primary historic use of the area has been for homesteading, grazing and recreation. The Bloomfield Ranch was homesteaded originally by James Pruitt in 1872 and has been in operation by various parties ever since. A flume was built by Jeff Gillman in 1890 for Jim Powers to bring water from

the South Fork to the Powers Ranch. Neither the flume nor the ranch are on National Forest lands; the existing concrete diversion dam and accompanying drainage ditch located in the study area, however, serve as the intake for this flume.

The historic site within the study area, Camp Burroughs, is an abandoned United States Navy World War II era Rest and Recuperation camp. Its use for a brief period to muster out veterans was ended by a series of floods in 1946, 1966 and 1969. Other recreation activities include fishing, hiking, and horseback riding provided access were granted by the adjacent private landowners.

WATER RESOURCES

The South Fork Kern River has a drainage area of approximately 530 square miles to the Sequoia National Forest boundary at the southern edge of the study area. The watershed of the South Fork encompasses large portions of Inyo, Tulare, and Kern Counties. Most of the watershed is undeveloped, including three designated wilderness areas, and large portions are managed by the Inyo and Sequoia National Forests.

The first irrigation diversion on the South Fork is on the Bloomfield Ranch, immediately downstream from the study area, and outside the National Forest. Water is diverted from the river at three locations by virtue of their riparian water rights.

Flow rates in the river are highly variable and depend upon the amount of precipitation over the watershed and the amount of snowmelt from the upper elevations. A water resources report (USGS 1987) indicates average discharge, over a 62 year period, is 129 cubic feet per second (cfs), or 93,469 acre-feet per year. Minimum stream flows occur from September through early April, when the South Fork may flow at 10 cfs or less and the six main tributaries upstream of this segment (Kingfisher Stringer, Soda Creek, Monache Creek, Snake Creek, Trout Creek, and Fish Creek) may be flowing less than one cfs. During the spring runoff season, the South Fork will normally exceed 600 cfs for two weeks, with substantially higher peak flows occasionally exceeding 1,000 cfs; the above-mentioned tributaries will often exceed 25 cfs for a few days.

This portion of the river is located about one mile above an area determined to be in a 100-year floodplain. The floodplain study was only completed on the private land below the Forest boundary, therefore the status of the River segment being discussed in this EIS has not been determined.

Since the majority of the area upstream is wilderness, there are no pollutant discharge points upstream of the study area. Although no complete records exist on water quality in this area it should meet State standards because of the sparse population and minimal development in the contributing watershed.

Wild and Scenic Rivers in the Region

Presently, within the Sequoia National Forest three rivers have been designated Wild and Scenic. The North Fork Kern River is designated from the headwaters in Sequoia/Kings Canyon National Park to

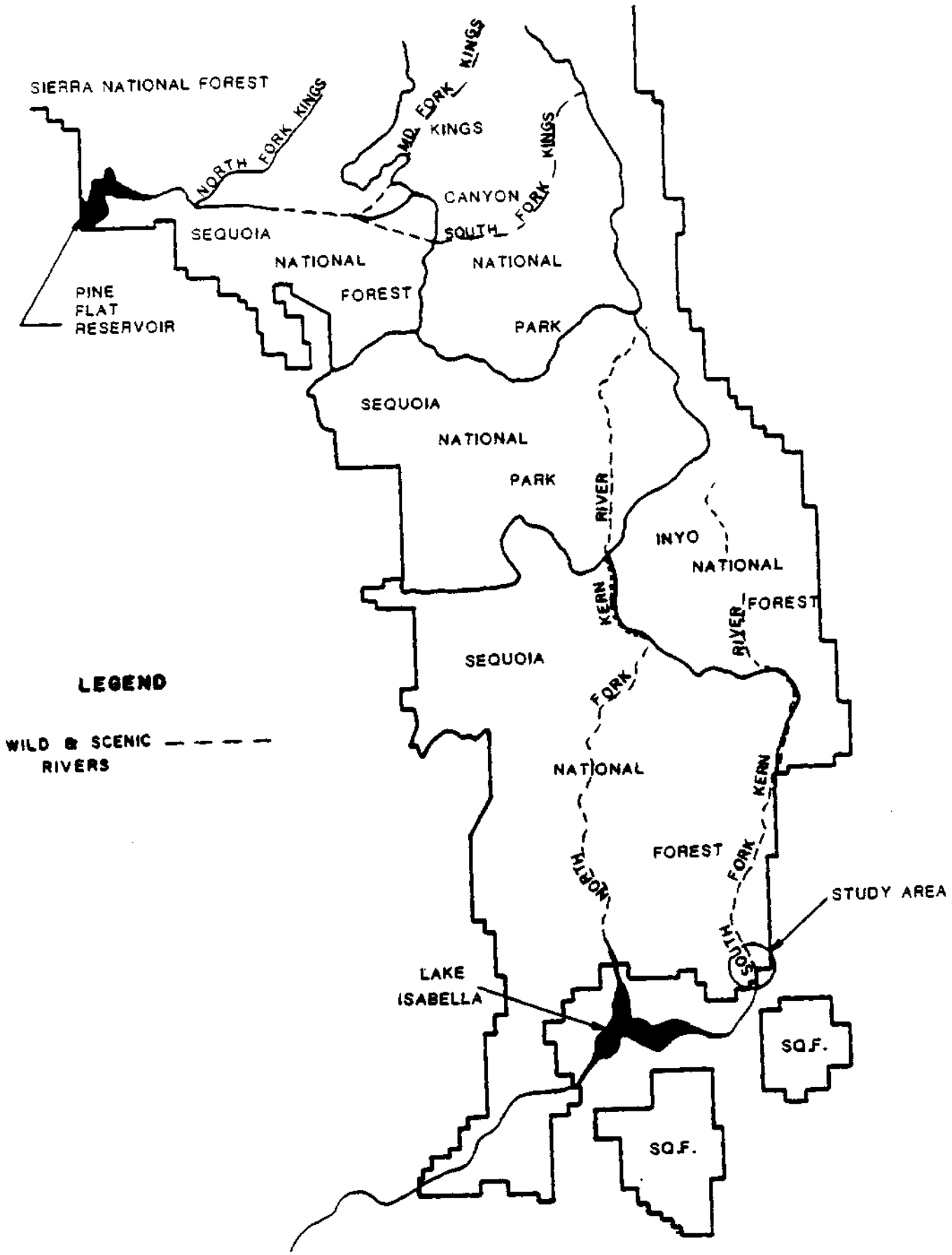

Figure 2-3. Wild and Scenic Rivers in the Area

the point where the river crosses the Tulare County line a total distance of 78.5 miles. The South Fork Kern is designated from the headwaters in the Golden Trout Wilderness to the southern boundary of the Dome Land Wilderness a total distance of 72.5 miles. The Main Stem of the Kings River forms the boundary between the Sierra and Sequoia National Forests and is designated from the confluence of the Middle and South Forks to the elevation 1,595 near Garlic Spur a total distance of six miles. Additionally, the Middle Fork Kings River is designated from the headwaters near Muir Pass in Kings Canyon National Park, through the Monarch Wilderness (Sierra National Forest), to the confluence of the Kings River a total distance of 35 miles. The South Fork Kings River is designated from the headwaters in Kings Canyon National Park, through a portion of the Sequoia National Forest, to the confluence of the Middle Fork and Kings River, a total distance of 40.5 miles.

Directly above the study area is Segment 2 of the South Fork Kern Wild and Scenic River, which is designated Wild and is entirely within the Dome Land Wilderness. Outstandingly Remarkable Values for Segment 2 include geologic formations, cultural resources, scenic views and recreation opportunities.

The study area was part of Segment 1 of the South Fork Kern River in the original eligibility study. The majority of this segment (9.5 miles) is privately owned and is not being considered for Wild and Scenic designation.

AIR QUALITY

The South Fork Kern River lies on the southeastern edge of the San Joaquin Valley Air Basin. The air quality in the South Fork Kern River is primarily influenced by the San Joaquin Valley air basin, which, due to its topography and meteorology, provides a tremendous basin for entrapment of air pollutants and offers little venting ability. Both the Great Basin Valley and Southeast Desert Air Basins are suspected of being a lesser influence.

In addition to pollutants produced locally, the drainage, as well as the southern San Joaquin Valley, is subject to an accumulation of pollutants originating as far north as the San Francisco Bay area and transported southeast by prevailing winds. Transport into the Forest is accomplished, primarily in the warm summer months, by strong diurnal upcanyon winds that occur from late morning through the afternoon in response to solar heating of the airshed slopes. This type of transport mechanism is most likely exposing the drainage with the highest concentration of airborne pollutants.

The study area is within the enforcement jurisdiction of the Kern County Air Pollution Control District. Kern County, as a whole, is judged to be exceeding the National Ambient Air Quality Standards (NAAQ) for PM10 (particulate matter less than 10 microns) and ozone (03).

The Clean Air Act of 1977 and its amendments established a classification system for preventing significant deterioration of air quality in areas that are currently cleaner than the NAAQ Standard. The Dome Land Wilderness is a designated Class I area in which only small increases in air pollution are allowed. The remainder of the Forest, including the portion of the study area outside the Dome Land Wilderness, is designated Class II, which permits greater deterioration of air quality before it is considered to be significant.

The Forest Service has an affirmative responsibility to protect the Class I Dome Land Wilderness from air pollution influences that will deteriorate air quality related values. The Kern River from Bakersfield to Lake Isabella and the South Fork into the Dome Lands forms the primary transport avenue into the Class I wilderness. As a result, this area will be the primary focus of monitoring and resource assessment as the Forest air resource program develops.

FIRE AND FUELS MANAGEMENT

The fire season for the study area runs from May to mid November. Vegetative cover and fuel types of the study area consists of riparian vegetative cover running along the river, grass and sage with scattered Digger pine and scrub oak east of the riparian area, and west of the riparian area, heavier concentrations of brush and scrub oak. Slopes in the study area are generally less than 20 percent and increase to over 50 percent along the edges of the corridor.

Fire history and behavior in the area consists primarily of lightning caused fires outside of the river corridor. There has been one lightning caused 410 acre fire (1958), and two man caused fires, 1760 acres (1971) and 1200 acres (1972), in or immediately adjacent to the study area. In addition, there was one lightning caused 30 acre fire in 1988, within 1/4 mile west of the river corridor. Due to the steep slopes of the area, fires have a tendency to have high rates of spread. The rugged nature of the area and fuel types indicate extreme fire behavior potential.

Suppression efforts for fires in this area are normally initiated by helicopter crews as the first responding units followed by ground crews driving as reinforcements. These efforts may be enhanced by rain accompanying lightning storms and by quick detection. Road access is poor, but the existing roads accessing the area from the south could be improved in the event of a fire. No prescribed burns are presently planned for this area.

LANDOWNERSHIP AND USE

The entire study area is publicly owned and under Forest Service management; there are no permitted special uses. The Forest Service has riparian rights under California law with respect to this parcel of National Forest land.

The remains of an old concrete diversion structure and an accompanying drainage ditch, located on the east side of the river less than 1/4 mile north of the National Forest boundary, lead to a wooden flume, which is situated off National Forest land, that once diverted water to the Bloomfield Ranch for irrigation purposes. These structures have not been used for several years and are in a state of total disrepair with vegetation obscuring them. The Bloomfield Ranch currently removes water for irrigation purposes from the South Fork Kern River outside the National Forest boundary.

A preliminary permit from the Federal Energy Regulatory Commission (FERC) was issued December 22, 1981, for Victor Page to study the potential for constructing a run-of-the-river hydroelectric power facility. According to the Bloomfield Ranch Hydropower Project #4805 license application, this project would divert South Fork of the Kern River flows, from a point in the NE 1/4 of the NW 1/4 of Section 14, T25S, R35E, through a partially buried pipeline paralleling the river on the east, to a powerplant downstream on private land, near the center of Section 24, T25S, R35E. The flow then returns back to the river about 10,000 feet downstream from the diversion. Total installed capacity of the plant is 2.5 MW operating at 170 cfs through a head of 246 feet. It is estimated by the proponent that estimated average annual power generated will be 12,894,000 kilowatt hours. A plant of this size would serve approximately 2500 homes.

Project-related structures on National Forest land would include:

- A diversion structure consisting of a concrete grouted rockfill dike approximately 130 feet long with maximum height above streambed not exceeding six feet. The dike, with a crest elevation of 3,158 feet, would form an impoundment of approximately one acre and have storage capacity of four acre feet. Flows exceeding the capacity of the diversion and by pass structure would overpour the rockfill.

- A diversion pipeline, either reinforced concrete or mortar lined and coated steel, 60 inches in diameter and approximately 10,100 feet long. In those locations where burying the pipeline is not feasible, the pipeline would be installed above ground on concrete cradles.

- A road, paralleling the pipeline where possible, to the proposed diversion structure site.

This proposed project provides for a minimum fish streamflow requirement of 10 cfs (or the entire river flow if less than 10 cfs) to bypass the diversion structure. Mr. Page has applied to the State Water Resources Control board for the rights to divert water for his proposed hydroelectric project.

Mr. Page's studies have been completed and submitted to FERC with an application for License. FERC is currently processing this application. The Forest Service has requested that FERC delay issuance of a License until the Wild and Scenic River suitability study is complete.

Minerals

There are currently no mining claims in the study area.

There has not been an extensive leasable or locatable minerals inventory of this area; it is assumed, however, that minerals found on the Kern Plateau (e.g., gold, silver, tungsten, and barite) are also likely to exist in this area, but quantities are unknown. The most abundant forms of mineral material for construction (salable mineral resources) are rock aggregate and decomposed granite. Some hard rock granite is available for making aggregate but the quality is not high.

Administration

Current management direction within the study area is provided by the Sequoia FLMP. The Sequoia FLMP applies management area prescriptions PS1 and WF4 to the 320 acre study area. The PS1 prescription emphasizes general dispersed recreation and non-motorized travel while in the Dome Land Wilderness portion of the study area the WF4 prescription emphasizes wilderness with the natural role of fire.

The study area is surrounded by management area prescriptions WF4, within the Dome Land Wilderness, and WSR which emphasizes the management of wild, scenic, and recreation rivers in the river corridor upstream.

The study area is blocked by private land to the south and by very steep terrain to the north that extremely limits access into the area. Very few management activities currently occur within the study area due to this limited access.

VEGETATION

The South Fork Kern River drainage is within the California Floristic Province and is in close proximity to two very different floristic provinces, the Great Basin and Mojave Desert. The mixture of these with the already diverse and endemic-rich flora of the California Province, gives the drainage a unique blend of floristic elements from widely differing regions. The South Fork Kern River, in its entirety, is unique among southern Sierran rivers because of the Great Basin influence on the vegetative communities it travels through. The river alternately passes from perpendicular-walled gorges to flat pinyon-juniper-sagebrush meadows. It traverses Monache Meadows, the largest meadow complex in the southern Sierra Nevada. The vegetative diversity in plant communities and their composition found on the South Fork Kern River are not found along any other Sierran river. The study area is floristically associated with the plant communities upstream.

The study area is in the Digger pine-oak woodland cover type, which is a common climax cover type throughout California as the transition zone between grassland/chaparral and conifer forest. In the study area Digger pine and interior live oak occur in association with buckbrush, rabbitbrush, sage, and pea vetch, as well as species from the Mojave Desert (e.g., beavertail cactus and Parry Nolina). These populations of Parry Nolina, a yucca-like plant, are part of the northern and western extension of it range; extensive populations of this species occur just below the Kern/Tulare county line (north of the study area). This area of the South Fork Kern River has very large concentrations of a localized plant, Limestone Live-forever, which is relatively rare.

Streambank plants are conspicuous anywhere; in the arid study area they are especially so. The common and conspicuous trees that grow along the South Fork Kern River are Fremont cottonwood, red willow, and white alder; herbaceous perennials and annuals include rushes, grasses, horsetail, nettles, mule fat, and other broadleaf forbs and shrubs. This riparian vegetation occurs in a narrow band along the riverbanks and extends about 20 feet from the water's edge.

Portions of the ten mile stretch of the South Fork Kern River below the study area in the South Fork Valley contain extensive riparian forest communities comprised of cottonwoods, willows, and Oregon ash. The lower reaches of this stretch encompasses a portion of the largest contiguous remnant of the willow/cottonwood riparian forest in the State.

The study area is very similar in vegetative composition to the North Fork Kern River above Kernville; this part of the North Fork is highly accessible to the public, and therefore, public impact is heavy. In contrast, the study area is inaccessible and has had very little human use or impacts. The value of the study area is that it could serve as a future control research area in conjunction or comparison to the similarly vegetated North Fork.

A biological evaluation of the study area to determine the existence of threatened, endangered, and sensitive plant or animal species was completed (Appendix A). No threatened, endangered, or sensitive plant species were located in the study area, nor was suitable habitat found for these species in the study area.

Grazing

The study area supports an arid shrub association and has low livestock forage production. It currently is not included in any grazing allotment due to access, size, and low forage production. The area does show evidence of past occasional use by livestock grazing, which drift from adjacent private lands.

WILDLIFE & FISH

The study area supports a high wildlife diversity which is a result of the influence of four major wildlife regions. Other Sierran rivers are typically influenced by two regions, the Sierran and Great Valley; in addition, the study area is also influenced by the Mohave Desert and Great Basin regions.

The study area includes two habitat types: riparian areas and the Digger pine-oak woodland. Riparian habitat is the moist fringe of trees and plants along both sides of the South Fork Kern River and Bartolas Creek, characterized by shade, cooler air, and high humidity. Within the study area, the riparian vegetation occurs within 20 feet of the water's edge. Cottonwood, alder, and willow trees make up the shading canopy with grasses, rushes, broadleaf forbs, and shrubs filling in below. The Digger pine-oak woodland is common in the foothills throughout California as the transition zone between grassland/ chaparral and conifer forest. In the study area Digger pine and interior live oak

occur outside the riparian areas and are associated with buckbrush, rabbitbrush, and other desert-adapted plants.

Many wildlife species will use both the riparian and Digger pine-oak woodlands habitats especially because the river is the only water source in the area. Wildlife species that favor the Digger pine-oak woodland include various species of mice, both cottontail and jack rabbits, coyotes, bobcats, black bear, hawks, scrub jay, woodpeckers, and California quail to name a few. The riparian habitat is an important resource complex especially in the otherwise arid study area. Some of the wildlife that favor the riparian habitat include rainbow trout, Sacramento suckerfish, frogs, salamanders, toads, shrews and moles, chipmunks, mice, raccoons, mule deer, woodpeckers, dippers, killdeer, and robin. The study area lies within both the Kern River and Monache deer herd ranges, but is probably used primarily by resident herds.

The South Fork Kern River is perennial in the study area and supports a fishery that includes Sacramento suckerfish, brown and rainbow trout. The area around Kennedy Meadows, upstream from the study area, receives planted trout supplied by the California Department of Fish and Game to supplement the native populations; these fish may eventually move through the study area. Also, the suckerfish and trout make extensive spawining migrations each spring from Lake Isabella upstream into the study area. Natural barriers limit fish movement during low water. The South Fork Kern golden trout are found upstream from the study area, but due to predation and interbreeding a pure strain of these fish would not be expected in the study area.

Because of the undisturbed nature of the study area, it provides excellent habitat for several wildlife species that are endangered, sensitive, or of special concern. A biological evaluation of the study area to determine the existence of threatened, endangered, and sensitive plant or animal species was completed (Appendix A). The table below lists the species that may inhabit or range into the study area.

Table 2-1 - Federal and State Listed Wildlife Species in the South Fork Kern River Wild & Scenic Study Area

Listed by Federal or State as Endangered (E), Fully Protected Under California State Fish and Game Code (CP), California Department of Fish and Game Species of Special Concern (CSC), or Forest Service Sensitive (S).

Species Common Name	Federal	State	Forest Service
Yellow-billed Cuckoo	Candidate	(E)	
Willow Flycatcher	Candidate	(CSC)	(S)
Bald Eagle	(E)	(E,CP)	
Golden Eagle		(CP,CSC)	
Prairie Falcon		(CSC)	
Sharp-shinned Hawk		(CSC)	
Coopers Hawk		(CSC)	
American Peregrine Falcon	(E)	(E,CP)	

The Yellow-billed Cuckoo utilizes cottonwood riparian forests, associated with willow vegetation, for nesting and foraging. The riparian forest downstream from the study area is being used by this species. The study area has potentially suitable, but not optimum, habitat in which use has not been established. The Willow Flycatcher requires the presence of willow thickets. The study area provides suitable habitat, but use has not been established.

The raptors listed range widely over several square miles and have the potential to range into the study area. Bald Eagles have been sighted at Lake Isabella and roosting along the North Fork Kern River below Kernville, but there are no known sightings in the South Fork Valley near the study area. Golden Eagle, Prairie Falcon, and Sharp-shinned Hawk have been sighted on the Bloomfield Ranch within one mile of the study area (per conversation with Ron Tiller, Nature Conservancy, Weldon); these species may also range into the study area, but there are no known sightings. There is potential habitat for Coopers Hawk to nest in the study area. Although there are no known sightings in the area, there is potential foraging habitat for Peregrine Falcon in the study area, and possible nesting habitat in the adjacent Dome Land Wilderness.

RECREATION

The study area is managed for dispersed recreation use only and maintains a wilderness character with no recreation improvements. The Recreation Opportunity Spectrum class for this area is Semi-Primitive Non-Motorized, which provides for recreation in areas with only subtle modifications to an otherwise natural setting. Recreation use on this segment of the South Fork is virtually non-existent due to the extremely limited access into this area. If it were more readily accessible, the area would offer the recreation opportunities of, primitive camping, hunting, water play, fishing, and rock climbing.

Access

Access into the study area is extremely limited. The two unimproved roads that access the area are on private land and not open to public use. The road accessing the west side of the river travels through the White Blanket reservation allotment and private land then terminates near the Forest boundary. On the east side of the river, an access road for the Bloomfield Ranch extends into the study area past the site of Camp Burroughs and terminates near the South Fork Kern River near the middle of the study area; this road is not maintained and generally only drivable by four-wheel drive vehicles. The semi-primitive non-motorized designation of the study area, however, prohibits use of this road by motorized equipment except for periodic use by the Forest Service for resource management needs.

There are no maintained trails into the study area. Cross-country travel to access the study area from the Dome Land Wilderness is possible, but extremely difficult due to the steep and rugged terrain.

Wilderness

A portion of the study area is in the Dome Land Wilderness area, and the remainder is surrounded by the Dome Land Wilderness. This boundary was established in the California Wilderness Act of 1984 when an addition was added to the existing Dome Land Wilderness. This addition excluded the study area from wilderness, due to two competing requests for FERC licenses (Projects 4805 and 6441) for the development of hydroelectric projects. The wilderness boundary was established with the intent to preclude any overlap between the wilderness and the area required for construction, operation, and maintenance of these proposed hydroelectric projects.

SOCIOECONOMIC

The economy of Kern County is based primarily on agriculture, mineral extraction, manufacturing, and tourism. The study area's local community of Onyx is largely agricultural oriented; whereas the communities of Kernville, Lake Isabella, and others are largely tourist and recreation oriented. The Bloomfield Ranch, immediately downstream from the study area, is a family run cattle ranch. The

study area and the adjacent private parcels are being considered for the development of a small hydroelectric project. The estimated hydroelectric power generation from this proposed project would produce annual revenues of approximately $1,000,000. No activity in the study area generates employment at this time.

The population of Kern County was 403,089 in 1980 and was estimated to be 526,636 in 1989 (Kern County Department of Planning and Development Services, 1989). Preliminary population projections estimate Kern County population will be 662,700 in the year 2000; This indicates growth rate of 64 percent from 1980 to 2000. Approximately 3.7 percent of the Kern County population live in the Kern River Valley and surrounding mountain areas. Population estimates indicate an increase from 14,476 in 1980 to 19,258 in 1989, or a growth rate of 33 percent; at this growth rate the population of the Kern River Valley areas would be 25,613 in the year 2000. These agency estimates, while not based on the most recent (1990) census, are the most reliable available at this time.

CHAPTER 3

FINDINGS OF ELIGIBILITY AND CLASSIFICATION

The Wild and Scenic Rivers Act and the Final Revised Interagency Guidelines for Eligibility, Classification, and Management of River Areas (47 Federal Register 39454, September 7, 1982) provide direction for determining the eligibility and classification of study rivers.

ELIGIBILITY

To be considered eligible for inclusion under the Wild and Scenic Rivers Act, a river must meet several criteria. It must be free-flowing and, with its adjacent land area, must possess one or more of the following outstandingly remarkable values: (1) scenic, (2) recreational, (3) geological, (4) fish and wildlife, (5) historic or cultural, (6) other values, including biological or ecological.

The Sequoia National Forest Land and Resource Management Plan/EIS Appendix E documents the evaluation of the entire segment 1 of the South Fork Kern River. Segment 1 as presented in the EIS extended from Lake Isabella to the Dome Land Wilderness Boundary (10.5 miles). Segment 1, in its entirety, met the eligibility requirement of being free-flowing and possessed outstandingly remarkable values of wildlife, vegetation, and historic/cultural. However, only one mile of segment 1 lies within the Sequoia National Forest boundary. Since the eligibility determination originally combined the attributes of the remainder of the river outside of the National Forest boundary, the eligibility analysis for just the one mile segment taken by itself was inaccurate. Although it is also free-flowing, the previously designated outstandingly remarkable values do not extend into this 1 mile section.

The one mile long study area lies between the southern boundary of the Sequoia National Forest and the southern end of the portion of the South Fork of the Kern River designated as Wild and Scenic in P.L. 100-174 in November 1987 (segment 2 boundary). Study of this one-mile section shows that standing alone, this portion of the South Fork Kern River more closely relates to those portions of the river upstream within the National Forest (segment 2) than it does with the downstream portion outside the National Forest (segment 1). The value most closely associated is vegetative character; the climax cover type associations of digger pine-oak woodland with varied brush species and varying associations of riparian communities extend into this river segment from upstream. Topographically, this one-mile segment is a transition from the steep-walled canyons of the Dome Land Wilderness to the relatively flat, alluvial valley downstream. The study area is associated with the scenic values of segment 2 since it affords a scenic view of the entrance to the rugged canyon within the Nationally designated Wild and Scenic River and the Dome Land Wilderness directly upstream. Additionally, the wilderness values of segment 2 continue into the study area as it remains the southern end of the largest stream in the southern Sierra Nevada that remains in an essentially primitive state. Therefore, it is appropriate to make a suitability determination on this one-mile segment based on its association with the resource values common to the previously designated Wild and Scenic River directly upstream (segment 2).

CLASSIFICATION

There are three classifications of rivers or river segments in the National Wild and Scenic Rivers System--wild, scenic, and recreational. Classification is based on the condition of the river and the adjacent lands at the time of the study. The act defines these classifications as follows:

Wild River: Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and water unpolluted. These represent vestiges of primitive America.

Scenic River: Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

Recreational River: Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

The Sequoia National Forest Land and Resource Management Plan/EIS Appendix E documents the evaluation of the entire segment 1 of the South Fork Kern River. This document determined that the entire segment was eligible for a Recreation River classification, because of the intrusions associated with the private land. A later classification determination, specifically addressing this 1 mile section, was prepared December 12, 1988 (see Appendix D for evaluation letter), and differs from that shown in the Sequoia National Forest Land and Resource Management Plan/EIS Appendix E. This later document determined that the 1 mile section was eligible for a Wild River classification. This determination was based on the inaccessibility of the area and its essentially primitive (unchanged) character.

Based on the above described classification criteria, further review of this segment substantiates that it is eligible for classification as Wild. This segment is free of impoundments and is generally inaccessible, except by trail. (Note: An unimproved road, not available for public use, leads into this segment from the south end and extends approximately one third of a mile into the segment. It is well away from the river bank itself. This road is not maintained within the National Forest boundary and generally only drivable by four-wheel-drive vehicles.)

The shorelines of this segment are essentially primitive. Located alongside the unimproved road are the remains of Camp Burroughs, a rest & recuperation camp for Navy pilots during World War II. Also situated in this segment, near the south end, is a small concrete diversion dam. This dam was used to divert water into an earthen ditch and wooden flume used to irrigate the Bloomfield Ranch downstream, until about 1966. This segment is not part of a grazing allotment, has no commercial timber, and no past logging activity. Although no records exist on water quality of this segment, water quality is expected to meet State of California and Environmental Protection Agency (EPA) standards for fish and aquatic life because of the lack of area use.

CHAPTER 4

ALTERNATIVES

This chapter describes the alternatives for a one mile segment of the South Fork of the Kern River. Two alternatives regarding the suitability or unsuitability of including the segment in the National Wild and Scenic Rivers System have been developed and analyzed. Alternative 1 (No Action) proposes that the segment not be recommended for designation. Alternative 2 proposes the segment would be recommended for designation under a wild classification.

In developing alternatives, the Forest Service has considered all relevant issues that the public raised during scoping. The alternatives considered in detail reflect pertinent issues, conditions, and needs, and provide for a full range of reasonable uses for the study area as required by NEPA and the Forest Service Land and Resource Management Planning Handbook (chapter 8).

The Wild and Scenic Rivers Act [section 4 (a)] requires the consideration of a number of factors in evaluating the suitability of a river for inclusion in the National Wild and Scenic Rivers System. These factors help to define the scope of the study report/DEIS and include: (1) the current status of landownership, including the amount of private land within and adjacent to the study area; (2) the reasonably foreseeable uses of the land and water that would be enhanced, foreclosed, or curtailed if the area were included in the National Wild and Scenic Rivers System; (3) the values that may be foreclosed or diminished if the area is not protected as part of the System; (4) public, State, and local interest in the designation; (5) the cost of the area's acquisition and administration if it is added to the System; and (6) other issues and concerns identified during planning.

To respond to these issues regarding recommendations of suitability, the Forest Service Guidelines (FSH 1909.12) suggest consideration of the following types of alternatives: (1) national designation of all eligible segments; (2) protection of eligible segments by some means other than national designation (such as State designation); (3) nondesignation of all or portions of the eligible segments; (4) designation of segments with alternative classifications; and (5) continuing current management (or no action).

These types of alternatives were evaluated after consideration of the scoping comments. Some alternatives, such as nondesignation of portions of the eligible segment and designation of portions of the eligible segment with alternative classifications, were not considered further because of the small size of the study area. The river has not been designated by the State of California as a wild and scenic river and the State is not currently considering State designation for the river; therefore a State-designation alternative is not considered in this report.

ALTERNATIVE 1 (NO ACTION) - UNSUITABLE FOR DESIGNATION

This alternative declares the entire study area unsuitable for designation. This finding of unsuitability precludes the resource protection opportunities, as well as any additional restrictions on land use or management of National Forest lands, afforded by designation into the National Wild and Scenic Rivers System. Development and use of the area, however, will be managed by the Forest Service in conformance with the Sequoia FLMP.

This alternative manages the study area under the PS1 and WF4 Management Area Prescriptions, as described in the FLMP. The PS1 management area emphasizes general dispersed recreation and non-motorized travel and the WF4 management area emphasizes wilderness with the natural role of

fire. The emphasis on non-motorized travel (SPNM) in FLMP direction prohibits future use of the existing road into the study area by motorized equipment, with the exception of periodic administrative use for resource management needs. In the PS1 management area the Forest Service still has the opportunity to permit mining activities, livestock grazing, construction of transportation or utility corridors, power-related licenses and approvals, watershed improvement projects and wildlife habitat improvement projects and consider on a case-by-case basis proposals for future development, which could include hydroelectric and water supply projects, recreational opportunities, and road and trail improvements. Potential projects involving hydroelectric power development would be subject to FERC licensing and environmental analysis process. The WF4 management area is a designated wilderness (Dome Land); therefore the management restrictions of the Wilderness Act will continue to apply under this alternative.

No improvements or increases in management costs are projected to be needed within the study area under this alternative, although future developments may increase administrative costs above current levels. Potential cost increases could be associated with administrative review of non-Federal development proposals or the increased need for road improvements, recreational opportunities, or law enforcement as a result of future development in the study area.

ALTERNATIVE 2 - DESIGNATION UNDER A WILD CLASSIFICATION

This alternative finds the entire one mile segment suitable for designation under a wild classification and recommends such designation. This classification represents the highest classification level for which the segment is eligible and provides the highest degree of protection for the segment.

This alternative manages the study area under the WSR and WF4 Management Area Prescriptions, as described in the Sequoia FLMP. The WSR management area prescription for rivers with a wild classification favors the protection of natural values while providing river-related outdoor recreation opportunities in a primitive setting that is generally inaccessible except by trail. The portion of the study area within the Dome Land Wilderness is managed under the WF4 management area prescription and will apply the most restrictive management requirements of the Wilderness Act or the Wild and Scenic River Act. To the extent of Forest Service authority, no development of hydroelectric power facilities is permitted under the wild classification. Water supply dams, flood control projects, major diversions and new mining claims and mineral leases are not permitted anywhere in the study area. In order to preserve the character of the river setting restoration of the existing water diversion structure is not permitted, nor will new roads or provisions for motorized travel be permitted.

No improvements or significant increases in management costs are projected to be needed within the study area under this alternative, although minimal costs would be incurred when appropriately signing the study area and to amend the Kern Wild and Scenic River EIS/Implementation Plan which is currently being prepared.

ALTERNATIVE 3 - DESIGNATION UNDER A SCENIC CLASSIFICATION

This alternative finds the entire one mile segment suitable for designation under a scenic classification and recommends such designation. This alternative manages the study area under the WSR and WF4 Management Area Prescriptions, as described in the Sequoia FLMP. The WSR management area prescription for rivers with a scenic classification favors the protection of natural values although some shoreline development may be permissible. River related outdoor recreation opportunities are provided in a basically primitive setting which is accessible by roads that are not obtrusive. The portion of the study area within the Dome Land Wilderness is managed under the WF4 management area prescription and will apply the most restrictive management requirements of the Wilderness Act

or the Wild and Scenic River Act. To the extent of Forest Service authority, no development of hydroelectric power facilities is permitted under the scenic classification. Water supply dams, flood control projects, and major diversions are not permitted anywhere in the study area. New mining claims and mineral leases could be allowed. In order to preserve the character of the river setting, restoration of the existing water diversion structure is not permitted.

No improvements or significant increases in management costs are projected to be needed within the study area under this alternative, although minimal costs would be incurred when appropriately signing the study area and to amend the Kern Wild and Scenic River EIS/Implementation Plan which is currently being prepared.

ALTERNATIVE 4 - DESIGNATION UNDER A RECREATION CLASSIFICATION

This alternative finds the entire one mile segment suitable for designation under a recreation classification and recommends such designation. This alternative manages the study area under the WSR and WF4 Management Area Prescriptions, as described in the Sequoia FLMP. The WSR management area prescription for rivers with a recreation classification provides opportunities for engaging in activities that are enhanced by the river in a setting that allows extensive shoreline development and is readily accessible by road. The portion of the study area within the Dome Land Wilderness is managed under the WF4 management area prescription and will apply the most restrictive management requirements of the Wilderness Act or the Wild and Scenic River Act. Under the recreation classification and to the extent of Forest Service authority, hydroelectric power facilities are not permitted anywhere in the study area. New mining claims and mineral leases could be allowed and the existing water diversion structure could also be allowed to be restored for operation in the future.

No improvements or significant increases in management costs are projected to be needed within the study area under this alternative, although minimal costs would be incurred when appropriately signing the study area and to amend the Kern Wild and Scenic River EIS/Implementation Plan which is currently being prepared.

IDENTIFICATION OF THE PREFERRED ALTERNATIVE

The Forest Service preferred alternative is Alternative 2.

CHAPTER 5

ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

This chapter describes the environmental and socioeconomic impacts of the four alternatives considered in this study report/DEIS. The specific resource elements that were considered include soils and geology; visual resources; cultural resources; water resources; air quality; fire and fuels management; land uses; vegetation; wildlife and fish species; recreation uses; and socioeconomic factors.

The analysis also addressed principal issues of concern identified during scoping. These issues include the impact of alternatives on future hydroelectric development and on preserving and protecting the free-flowing nature of the River and the adjacent environmental and cultural resources.

The final recommendation will specifically relate to the suitability of the study area for inclusion in the National Wild and Scenic Rivers System, not to the approval or disapproval of specific projects proposed for the area. However, if the study area is not recommended for designation (Alternative 1), the potential exists for future developments within the study area. Therefore, this chapter also examines the general effects of the proposed hydroelectric project within the study area, but it does not represent site-specific analyses of impacts of the proposal.

ALTERNATIVE 1 (NO ACTION)

Under this alternative, the entire study area would be found unsuitable for designation. The study area would continue to be managed under management area prescriptions PS1 and WF4 as described in the Sequoia FLMP. The PS1 prescription emphasizes general dispersed recreation and non-motorized travel. That portion of the study area situated within the Dome Land Wilderness has a WF4 prescription which emphasizes wilderness with the natural role of fire.

The uses of the study area under Alternative 1 would not change from current uses. Rugged terrain, adjacent to the study area, and limited public access would continue to limit the number of visitors to the area, as well as limit resource use.

Non-designation of Wild and Scenic status would have no foreseeable direct impacts to other Wild and Scenic Rivers in the region. It also has no foreseeable impact on the 72.5 miles of the South Fork Kern River, designated as Wild and Scenic, upstream from the study area or on the 9.5 miles of the South Fork Kern River under private ownership, downstream from the study area. Selection of this alternative, however, would not complete Wild and Scenic designation of the South Fork Kern River from its headwaters to the National Forest boundary and would also allow for future impoundments of a naturally free-flowing river.

Another direct effect would be that the vegetation, wildlife and fish habitat in the non-wilderness portion of the study area would not be offered the statutory protection provided by Wild and Scenic River designation. Further direct effects of non-designation are that it would preserve the opportunity for future developments such as extensive recreation developments to enhance dispersed recreational opportunities, flood control projects, water supply dams, and hydroelectric power projects. Additionally, the existing water diversion structure could be restored and its use permitted.

Under the no action alternative the following elements would not be directly affected: soils and geology; visual quality; cultural resources; hydrological conditions and water quality; air quality; fire and fuels management; minerals; grazing; recreation; access; and socioeconomic.

Selection of Alternative 1 would not preclude development of the study area for hydroelectric power or water supply. Development of this type within the study area could contribute to the cumulative elimination of riparian habitat and free-flowing rivers in the State of California. Cumulative impacts associated with site-specific development projects would be evaluated before projects are permitted.

Potential Impacts From Future Projects

Potential development that would not be precluded under Alternative 1 includes extensive recreation developments, and construction of a dam and power-generating facility. Of these, only dam/power-generating facility (hydroelectric project) construction seem likely to be pursued in the absence of designation. Under Forest Service guidelines, if the hydroelectric project were to be developed, the South Fork Kern River would not be free-flowing and therefore could no longer be considered a potential Wild and Scenic River. Since the Sequoia FLMP classifies this area as Semi-Primitive Non-Motorized, future development of a hydroelectric project would require an amendment to the Sequoia FLMP changing the classification to a more appropriate category (i.e., Semi-Primitive Motorized or Roaded Natural).

Future construction of any permitted or licensed land and/or water use projects in the area would cause at least a temporary disturbance of soil and geological conditions and could cause a disturbance of hydrological conditions. Short term effects on water quality would also be expected during dam construction. The proposed hydroelectric project, if licensed, would have to provide for a minimum instream flow over the entire distance between the point of diversion and the point where diverted water is returned to the stream. Such flow would be ten cubic feet per second, or the natural streamflow, whichever is less to meet minimum fish flow requirements. Because of this potential modification in the streamflow there could be changes in the hydrological condition of the stream influence zone and the associated riparian communities downstream between the point of diversion and the point where the diverted water is returned to the stream. The outstandingly remarkable value of segment 1, the riparian forest, would not be adversely impacted by the proposed hydroelectric project, since water would be returned to the river above this resource feature which is located below the study area.

Construction of the proposed hydroelectric project would result in the loss of vegetation that is removed for road, dam, and pipeline construction or inundated by the one acre reservoir. Construction could also eliminate habitat for several fish and wildlife species currently inhabiting the study area. However, this habitat loss may be offset by increased habitat that would occur with a reservoir. Wildlife species may also experience short-term impacts from the presence and activity of humans and the noise from construction. Hydroelectric development is not expected to affect critical habitat for threatened and endangered wildlife species; however, disturbance in the ripairian areas could limit foraging habitat for the Yellow-Billed Cuckoo and the Willow Flycatcher.

Any proposed future development may also alter the visual condition as viewed both from within the corridor and from the adjacent Wilderness. Although there would be no foreseeable long term direct impacts to the Wilderness, development activities could be heard from within it.

Future developments could improve public access and recreation use of the study area and the adjacent Dome Land Wilderness. The proposed hydroelectric project will be required to develop a

hiking trail and right-of-way through private land with a trailhead parking area if developed. Improved access into the study area would also increase the public's use of the area. This increased use could have direct and indirect adverse effects on numerous resources.

Increased public access and recreation use could increase vandalism and inadvertent damage to the prehistoric and historic cultural sites in the study area. It could have an adverse effect on the vegetation and on some wildlife species that require minimal disturbance from man. These adverse effects may include general degradation of habitat, the trampling of herbaceous plants, soil compaction, breaking of woody branches associated with user access to the river, vegetation removal for trail construction, a reduction in dead and green wood collected for firewood, increased disturbance to wildlife, reduced reproductive success of birds nesting along the river, a possible degradation of the quality of riparian communities, and an increased potential for person-caused wildfires. Improved access, however, would improve wildfire suppression capabilities.

Construction of the hydroelectric plant itself would obtain most of the construction activity from existing local businessmen, and therefore, any in-migration created by the project would have minimal effects, for a limited time, on the area's government facilities and services, such as police, fire, health, and education facilities and programs. The potential fiscal effect of constructing a power plant would include a minor increase in government revenues through sales tax on all material purchases, payroll and income taxes, and property tax on the completed project. The increase in recreation use would have a minimal effect on the local economy.

ALTERNATIVE 2 (DESIGNATION UNDER A WILD CLASSIFICATION)

Under this alternative, the entire study area would be recommended for designation as a Wild and Scenic River with a Wild classification. Selection of this alternative would afford the highest level of protection of cultural resources, water flows, vegetation, scenic, and other natural values of this area from the potential effects of developments that could occur under the no action alternative. The study area would be managed under management area prescriptions WSR and WF4 as described in the Sequoia FLMP. The WSR prescription emphasizes the management of wild, scenic, and recreation rivers. That portion of the study area situated within the Dome Land Wilderness has a WF4 prescription which emphasizes wilderness with the natural role of fire. The study area would be managed with the designated wild segment (segment 2) of the Wild and Scenic River directly upstream. Designation would allow for consistent management of the entire South Fork Kern River from its headwaters to the Sequoia National Forest boundary. This would facilitate the administration of the entire southeast corner of the Sequoia National Forest including the study area.

Under Alternative 2 the following elements would not be affected: soil and geologic conditions; visual quality; hydrological conditions and water quality; air quality; and grazing. No foreseeable adverse impacts to other Wild and Scenic Rivers in the region would occur. Adding Wild and Scenic status to this segment of the South Fork would complete the designation from its headwaters to the Sequoia National Forest boundary.

Inclusion of the area into the Wild and Scenic River System would limit access to fire suppression forces by vehicle. Access into the area by aircraft is not affected for fire suppression. Restriction of suppression equipment could result in development of larger fires that would spread into the Dome Land Wilderness and possibly into commercial timberland on the west side of the Kern Plateau. Fuels management activities would consist mainly of fire managed under prescribed conditions. This would incorporate fire as a tool in maintaining vegetation or improving wildlife habitat and would be allowed in the study area.

All water supply dams and major diversions would be prohibited. No new flood control dams, levees, or other works would be allowed in the channel or river corridor. No development of hydroelectric power facilities would be permitted, including the proposed Bloomfield Hydroelectric Project, which would result in the potential loss of an estimated maximum average annual power generation of 12,894,000 kilowatt hours, or service to approximately 2,500 homes. Additionally, the existing water diversion structure would not be allowed to be restored for operation in the future. New structures would not be allowed except in rare instances to achieve management objectives (i.e., structures and activities associated with fisheries enhancement programs could be allowed). Furthermore, new mining claims and mineral leases would be prohibited.

Direct effects upon vegetation and wildlife within the study area would be minimal because there would be no significant change in habitat. Vegetation and wildlife trends, therefore, would likely continue as they are. No significant direct or indirect effects to rare, threatened, endangered, or sensitive plant, animal or game species are anticipated for this or the other alternatives.

Classification of this segment as Wild would have beneficial effects on vegetation and wildlife by providing protective measures (statutory protection against development and additional comprehensive management) which would serve to maintain or enhance the existing habitat. Designation would also preclude development of potential hydroelectric projects that could impact vegetation and wildlife in the study area. Overall, the net effects of this alternative are expected to be positive in relation to the protection of vegetation, wildlife and fishery habitats.

Adding Wild and Scenic status to the area could increase recreation interest in the study area; however, without improved access or additional facility construction, it is unlikely that recreational visitors to the study area would increase. Simple comfort and convenience facilities, such as fireplaces or shelters would be allowed as necessary within the river area, as long as they were in harmony with the surroundings.

Designation of Wild and Scenic status to this portion of the South Fork would have no foreseeable effect on access to the area. Additionally, Wild and Scenic designation would have no adverse impacts to the surrounding Dome Land Wilderness as the classification level of Wild would add further protection to the area. Designation would require development of a management plan for this segment of the South Fork Kern River. This could be done with modifications to the draft environmental impact statement and draft implementation plan currently being prepared for the North and South Forks of the Kern Wild and Scenic Rivers.

Administration costs would be insignificant and absorbed into the administrative costs of the adjoining 72.5 miles of the South Fork Kern River. There would be no direct effects to the economic outputs for agriculture, grazing, or recreation use. Current activities would continue. This alternative would, however, preclude any significant water resource projects (including the Bloomfield Hydroelectric Project), which would mean a potential minor loss of revenue to the state and county from sales tax, payroll and income taxes, and property tax on the completed project.

Selection of Alternative 2 would result in cumulative land management effects from permanently designating an additional one mile of the South Fork Kern River under the Wild and Scenic Rivers Act. From the study area north to its headwaters, the entire 72.5 miles of the South Fork Kern River are designated as Wild and Scenic. Additionally, 78.5 miles of the North Fork Kern River has been designated under the Act. Also, within and adjacent to the Sequoia National Forest, 81.5 miles of the Kings River (Main Stem, Middle Fork and South Fork) have been designated as Wild and Scenic.

ALTERNATIVE 3 (DESIGNATION UNDER A SCENIC CLASSIFICATION)

Under this alternative, the entire study area would be recommended for designation as a Wild and Scenic River with a Scenic classification. Selection of this alternative would afford protection of water flows, vegetation, scenic, and other natural values of this area from the potential effects of developments that could occur under alternative 1. The study area would be managed under management area prescriptions WSR and WF4 as outlined in Alternative 2.

Under Alternative 3 the following elements would not be affected: soil and geologic conditions; visual quality; cultural resources; hydrological conditions and water quality; air quality; and grazing. No foreseeable adverse impacts to other Wild and Scenic Rivers in the region would occur. Adding Wild and Scenic status to this segment of the South Fork would complete the designation from its headwaters to the Sequoia National Forest boundary.

All water supply dams and major diversions would be prohibited. No new flood control dams, levees, or other works would be allowed in the channel or river corridor. No development of hydroelectric power facilities would be permitted, including the proposed Bloomfield Hydroelectric Project, which would result in the potential loss of an estimated maximum average annual power generation of 12,894,000 kilowatt hours, or service to approximately 2,500 homes. Additionally, the existing water diversion structure would not be allowed to be restored for operation in the future. New structures would not be allowed except in rare instances to achieve management objectives (i.e., structures and activities associated with fisheries enhancement programs could be allowed). New mining claims and mineral leases would be allowed provided the mining activity is conducted in a manner that minimizes surface disturbance, sedimentation, pollution, and visual impairment.

Direct effects upon vegetation, wildlife and fire management activities within the study area would be the same as described in Alternative 2.

Adding Wild and Scenic status to the area could increase recreation interest in the study area, however, without improved access or additional facility construction, it is unlikely that recreational visitors to the study area would increase. Simple comfort and convenience facilities, such as fireplaces, shelters, toilets, and refuse containers would be allowed as necessary within the river area. Extensive recreation developments such as campgrounds and public information centers could be allowed, if such structures are screened from the river.

Designation of Wild and Scenic status to this portion of the South Fork would have no foreseeable effect on access to the area. Additionally, Wild and Scenic designation would have no adverse impacts to the surrounding Dome Land Wilderness as the classification level of Scenic would be compatible. Designation would require development of a management plan for this segment of the South Fork Kern River. This could be done with modification to the draft implementation plan currently being prepared for the North and South Forks of the Kern Wild and Scenic River.

Administration costs would be insignificant and absorbed into administration costs of the adjoining 72.5 miles of the South Fork Kern River. There would be no direct effects to the economic outputs for agriculture, grazing, or recreation use. Current activities would continue. This alternative would, however, preclude any significant water resource projects (including the Bloomfield Hydroelectric Project), which would mean a potential minor loss of revenue to the state and county from sales tax, payroll and income taxes, and property tax on the completed project.

Selection of Alternative 3 would result in cumulative land management effects from permanently designating an additional one mile of the South Fork Kern River under the Wild and Scenic Rivers

Act. From the study area north to its headwaters, the entire 72.5 miles of the South Fork Kern River are designated as Wild and Scenic. Additionally, 78.5 miles of the North Fork Kern River have been designated under the Act. Also within and adjacent to the Sequoia National Forest, 81.5 miles of the Kings River (Main Stem, Middle Fork, and South Fork) have been designated as Wild and Scenic.

ALTERNATIVE 4 (DESIGNATION UNDER A RECREATION CLASSIFICATION)

Under this alternative, the entire study area would be recommended for designation as a Wild and Scenic River with a Recreation classification. Selection of this alternative would afford protection of water flows, vegetation, scenic, and other natural values of this area from the potential effects of developments that could occur under alternative 1. The study area would be managed under management area prescriptions WSR and WF4 as outlined in Alternative 2.

Under Alternative 4 the following elements would not be affected: soil and geologic conditions; visual quality; cultural resources; hydrological conditions and water quality; air quality; and grazing. No foreseeable adverse impacts to other Wild and Scenic Rivers in the region would occur. Adding Wild and Scenic status to this segment of the South Fork would complete the designation from its headwaters to the Sequoia National Forest boundary.

New flood control dams, levees, water supply dams, or major diversion structures would not be allowed to be constructed in the channel or river corridor, except in rare instances to achieve management objectives (i.e., structures and activities associated with fisheries enhancement programs could be allowed). No development of hydroelectric power facilities would be permitted, including the proposed Bloomfield Hydroelectric Project, which would result in the potential loss of an estimated maximum average annual power generation of 12,894,000 kilowatt hours, or service to approximately 2,500 homes. The existing water diversion structure would be allowed to be restored for operation in the future. New mining claims and mineral leases would be allowed provided the mining activity is conducted in a manner that minimizes surface disturbance, sedimentation, pollution, and visual impairment.

Direct effects upon vegetation, wildlife and fire management activities within the study area would be the same as described in Alternative 2.

Adding Wild and Scenic status to the area could increase recreation interest in the study area, however, without improved access or additional facility construction, it is unlikely that recreational visitors to the study area would increase. Simple comfort and convenience facilities, such as fireplaces, shelters, toilets, and refuse containers would be allowed as necessary within the river area. Extensive recreation developments such as campgrounds and public information centers could be developed.

Designation of Wild and Scenic status to this portion of the South Fork would have no foreseeable effect on access to the area. Additionally, Wild and Scenic designation would have no adverse impacts to the surrounding Dome Land Wilderness as the classification level of Recreation would be compatible. Designation would require development of a management plan for this segment of the South Fork Kern River. This could be done with modification to the draft implementation plan currently being prepared for the North and South Forks of the Kern Wild and Scenic River.

Administration costs would be insignificant and absorbed into administration costs of the adjoining 72.5 miles of the South Fork Kern River. There would be no direct effects to the economic outputs for agriculture, grazing, or recreation use. Current activities would continue. This alternative would,

however, preclude any significant water resource projects (including the Bloomfield Hydroelectric Project), which would mean a potentially minor loss of revenue to the state and county from sales tax, payroll and income taxes, and property tax on the completed project.

Selection of Alternative 4 would result in cumulative land management effects from permanently designating an additional one mile of the South Fork Kern River under the Wild and Scenic Rivers Act. From the study area north to its headwaters, the entire 72.5 miles of the South Fork Kern River are designated as Wild and Scenic. Additionally, 78.5 miles of the North Fork Kern River have been designated under the Act. Also within and adjacent to the Sequoia National Forest, 81.5 miles of the Kings River (Main Stem, Middle Fork, and South Fork) have been designated as Wild and Scenic.

Other Environmental Effects

None of the alternatives should have any significant, unavoidable and unmitigable adverse environmental effects nor involve an irretrievable or irreversible commitment of resources. While Alternatives 2, 3 and 4 permanently foreclose some uses of the land and water within the study area, this does not represent a permanent expenditure of resources. Under Alternative 1, irreversible commitments of resources would be identified on a site-specific basis before approval of the project.

TABLE 5-1

SUMMARY OF ENVIRONMENTAL CONSEQUENCES

Resources and Land Use Considerations	Alternative 1 (No Action, Unsuitable for Designation)	Alternative 2 (Designation under a Wild Classification)
Soils/Geology	No direct effects. If hydropower project is developed potential exists for land disturbing activities.	No change from current environment as no land disturbing activities are planned.
Visuals	No direct effects. Possible future developments could create visual impacts, however the area is not easily viewed.	No change from current environment as no land disturbing activities are planned.
Cultural Resources	No change from current environment as cultural resources are protected by the National Historic Preservation Act of 1966.	No change from current environment as cultural resources are protected by the National Historic Preservation Act of 1966.
Water Resources	No direct effects. If hydropower project is developed there is potential for modification in hydrological condition of the stream influence zone because of lowering of water level.	No change from current environment as no land disturbing activities are planned.
Wild & Scenic Rivers in the Region	Would not complete designation of the South Fork of the Kern River. Potential exists for future impoundments.	Would complete designation of the South Fork of the Kern River to the National Forest boundary. This would maintain free-flowing status from the headwaters to the National Forest boundary.
Air Quality	No change from current environment as no land disturbing activities are planned.	No change from current environment as no land disturbing activities are planned.
Fire/Fuels	No direct effects. If hydropower project is developed, an increase in access could result in the potential for more ignitions. Access would also improve fire suppression capabilities for equipment.	No change from current environment. Access will remain limited and prescribed fire will be permissible. Use of motorized equipment (i.e. chainsaws, aircraft) for wildfire suppression will be allowed.
Land Ownership and Uses	No direct effects. Existing water diversion structure could be restored and use permitted. Hydropower project could be licensed and access along diversion pipeline would be constructed. Other uses, improvements, or structures could be permitted if not a conflict with existing resources.	No hydropower projects, water supply dams, major diversions, flood control dams or levees would be permitted. No new structures would be permitted except to achieve management objectives. Restoration of the existing water diversion structure would not be permitted.
Minerals	No change from current environment.	No new mining claims would be permitted.
Administration	No change from current management. If hydropower project is developed, there is potential for increased management requirements in administering hydroelectric development and reducing conflicts with surrounding Dome Land Wilderness and Wild & Scenic River corridor.	Would allow for consistent management of the entire South Fork Kern River from its headwaters to the Sequoia National Forest boundary which would facilitate the overall administration of the area.

TABLE 5-1

SUMMARY OF ENVIRONMENTAL CONSEQUENCES (continued)

Resources and Land Use Considerations	Alternative 1 (No Action, Unsuitable for Designation)	Alternative 2 (Designation under a Wild Classification)
Vegetation	No direct effects. If hydropower project is developed potential exists for vegetation disturbing activities. No impact on threatened and endangered species as they are protected under the 1973 Endangered Species Act. Potential habitat disturbance is expected due to increased public use if access is improved by a hiking trail.	No change from current environment. Assures preservation of basic integrity of biological communities.
Grazing	No change from current management.	No change from current management.
Wildlife/Fish	No direct effects. If hydropower project is developed there is potential for wildlife habitat disturbing activities. No impact on threatened and endangered species as they are protected under Endangered Species Act.	No change from current environment. Guarantees preservation of basic integrity of biological communities.
Recreation	No direct effects. If hydropower project is developed, an increase in use would be expected due to hiking trail access. Potential would exist for recreational developments.	An increase in interest would be expected with Wild & Scenic River designation but without access little increase in use should result.
Access	No direct effects. If hydropower project is developed, access to the study area would be improved by the hiking trail that would be constructed.	No change from current management.
Wilderness	No direct effects. If future development, activities could be seen and/or heard from the adjoining Dome Land Wilderness.	No change from current environment. Would compliment adjoining wilderness environment.
Socioeconomic	No direct effects. If hydropower project is developed potential exists to slightly increase revenue to state and county governments through taxes.	No direct effects. Precludes development of hydropower project which results in a slight potential tax revenue loss to state and county governments.

TABLE 5-1 (Continued)

SUMMARY OF ENVIRONMENTAL CONSEQUENCES

Resources and Land Use Considerations	Alternative 3 (Designation under a Scenic Classification)	Alternative 4 (Designation under a Recreation Classification)
Soils/Geology	No change from current environment, as no land disturbing activities are planned.	No change from current environment, as no land disturbing activities are planned.
Visuals	No change from current environment, as no land disturbing activities are planned.	No change from current environment, as no land disturbing activities are planned.
Cultural Resources	No change from current environment, as cultural resources are protected by the National Historic Preservation Act of 1966.	No change from current environment, as cultural resources are protected by the National Historic Preservation Act of 1966.
Water Resources	No change from current environment, as no land disturbing activities are planned.	No change from current environment, as no land disturbing activities are planned.
Wild & Scenic Rivers in the Region	Would complete designation of the South Fork of the Kern River to the National Forest boundary. This would maintain free-flowing status from the headwaters to the National Forest boundary.	Would complete designation of the South Fork of the Kern River to the National Forest boundary. This would maintain free-flowing status from the headwaters to the National Forest boundary.
Air Quality	No change from current environment, as no land disturbing activities are planned.	No change from current environment, as no land disturbing activities are planned.
Fire/Fuels	No change from current environment. Access will remain limited and prescribed fire will be permissible. Use of motorized equipment (i.e. chainsaws, aircraft) for wildfire suppression will be allowed.	No change from current environment. Access will remain limited and prescribed fire will be permissible. Use of motorized equipment (i.e. chainsaws, aircraft) for wildfire suppression will be allowed.
Land Ownership and Uses	No hydropower projects, water supply dams, major diversions, flood control dams or levees would be permitted. No new structures would be permitted, except to achieve management objectives. Restoration of the existing water diversion structure would not be permitted.	No hydropower projects would be permitted. No new water supply dams, diversion dams, flood control dams or levees would be permitted, except to achieve management objectives. Restoration of the existing water diversion structure would be permitted.
Minerals	New mining claims could be allowed. Activity must be conducted in a manner that minimizes disturbances.	New mining claims could be allowed. Activity must be conducted in a manner that minimizes disturbances.
Administration	Would allow for compatible, although not consistent management of the entire South Fork Kern River from its headwaters to the Sequoia National Forest boundry.	Would allow for compatible, although not consistent management of the entire South Fork Kern River from its headwaters to the Sequoia National Forest boundary.
Vegetation	No change from current environment, as no land disturbing activities are planned.	No change from current environment, as no land disturbing activities are planned.
Grazing	No change from current management.	No change from current management.

TABLE 5-1 (Continued)

SUMMARY OF ENVIRONMENTAL CONSEQUENCES (continued)

Resources and Land Use Considerations	Alternative 3 (Designation under a Scenic Classification)	Alternative 4 (Designation under a Recreation Classification)
Wildlife/Fish	No change from current environment, as no land disturbing activities are planned.	No change from current environment, as no land disturbing activities are planned.
Recreation	An increase in interest would be expected with Wild & Scenic River designation, but without access little increase in use should result. Extensive recreation developments could be allowed, if screened from the river.	An increase in interest would be expected with Wild & Scenic River designation, but without access little increase in use should result. Extensive recreation developments could be allowed.
Access	No change from current management, although motorized travel could be permitted.	No change from current management, although motorized travel could be permitted.
Wilderness	No change from current environment. Would be compatible with adjoining wilderness environment.	No change from current environment. Would be compatible with adjoining wilderness environment.
Socioeconomic	No direct effects. Precludes development of hydropower project which results in a slight potential for tax revenue loss to state and county governments.	No direct effects. Precludes development of hydropower project which results in a slight potential for tax revenue loss to state and county governments.

CHAPTER 6

DISTRIBUTION LIST

Copies of the Draft Environmental Impact Statement and Study Report were distributed to elected officials, agencies, organizations and individuals listed on the following pages.

Elected Officials

U.S. Congress
- Senator Alan Cranston
- Senator Pete Wilson
- Congressman Bill Thomas

State of California
- State Senator Don Rogers
- Assemblyman Phillip Wyman

County
- Supervisor Roy Ashburn
- Kern County Board of Supervisors
- Tulare Co. Board of Supervisors

Federal Agencies

- Advisory Council on Historic Preservation
- Bureau of Land Management - Bakersfield District
- Bureau of Land Management - Caliente Resource Area
- DOC NOAA National Marine Fisheries Service
- DOD Army Corps of Engineers
- DOD Deputy Assistant Secretary
- DOD U.S. Air Force
- DOD U.S. Navy
- Environmental Protection Agency - Region IX
- EPA Office of Environmental Review
- Federal Energy Regulatory Commission
- General Services Administration
- Inyo National Forest
- Office of Economic Opportunity
- U.S. Department of Energy
- U.S. Department of Transportation
- U.S. Dept. of Health & Human Services
- USDA Animal & Plant Health Inspection Service
- USDA Forest Service - Pacific Southwest Region
- USDA Forest Service - Washington Office
- USDA Office of Equal Opportunity
- USDA Rural Electrification Administration
- USDA Soil Conservation Service
- USDI Director, Environmental Project Review

California State Agencies

CA Dept. of Fish & Game - Region IV
CA Dept. of Fish & Game
CA Reg. Water Quality Commission

Local Agencies

Kern Co. Parks & Recreation Dept.
Kern County Planning Dept.
Kern County Library
North Kern Water Storage District
Tulare County Library
Tulare County Planning Commission

Organizations

Federation of Fly Fishers
American Rivers Inc.
Backcountry Horsemen of CA
Ernest J. Barnes
CA Association of 4WD Clubs
CORVA
Friends of the River
High Desert Multiple-Use Coalition
Kern River Preserve
Kern River Wildlife Sanctuary
Kern Valley Indian Council
Kernville Chamber of Commerce
Lake Isabella Chamber of Commerce
National Organ. for River Sports
Nature Reserve System
Oasis Garden Club
Outdoor Adventures
Phantom Duck Club
Chuck Richards' Whitewater
Sierra Club - Kern-Kaweah Chapter
Sierra Club - Eastern Sierra Nevada Committee
Sierra South
Society of American Foresters
Southern California Edison
Whitewater Voyages
Wilderness Society

Media

Bakersfield Californian
Daily Independent
Kern Valley Sun
KKRV Radio
KVLI Radio
Miller Magazines Inc.

Individuals

Carl G. Allen
Connie Allen
Adolph B. Amster
Richard Andrews
Edward Black
Bob Barnes
Bob & Pat Brown-Berry
Bud Buell
Jim Campbell
Sharon Carver
Lorna Charlton
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Don Jackson
Pam Jackson
Don James & Family
Ruby Jenkins
Bill & Roberta Joughin
Kern River Tours
Frank F. Kerns
Leo L. Keilman
Marie L. Koonce
Earl L. Kriens
Robert Lane
Ann Lange
Stephen Laymon
Charlene Little
Ted & Robin Little
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Wayne Messick
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CHAPTER 7

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Bob Barnes - Member, National Audubon Society.

James G. Boukidis - Cannell Meadow Ranger District, Supervisory Forestry Technician, U.S. Forest Service.

Norm Carpenter - Sequoia National Forest, Landscape Architect, U.S. Forest Service

Susan Carter - Greenhorn Ranger District, Botanist, U.S. Forest Service.

Dave Consoli - Wildlife Biologist, California Department of Fish and Game.

David M. Freeland - Cannell Meadow Ranger District, Planner, U.S. Forest Service.

Jerry Gelock - Sequoia National Forest, Recreation Officer, U.S. Forest Service.

Maryanne Hackett - Sequoia National Forest, Civil Engineer Technician, U.S. Forest Service.

Olga Hammer - Secretary and Director, Tubatulabal Museum and Institute, Kern River Wildlife Sanctuary.

Leslie Hickerson - Cannell Meadow Ranger District, Archaeologist, U.S. Forest Service.

Ron Jurek - Associate Wildlife Biologist, California Department of Fish and Game.

Terry Kaplan-Henry - Sequoia National Forest, Hydrologist, U.S. Forest Service.

Stephen Laymon - Wildlife Biologist, The Nature Conservancy.

Wayne Nelson - Cannell Meadow Ranger District, Range Conservationist, U.S. Forest Service.

Victor W. Page - proponent, Bloomfield Ranch Hydropower Project #4805.

Trent Procter - Pacific Southwest Region, Regional Air Quality Specialist, U.S. Forest Service.

Teresa Ritter - Cannell Meadow Ranger District, Wildlife Biologist, U.S. Forest Service.

James R. Shevock - Pacific Southwest Region, Regional Botanist, U.S. Forest Service.

Theresa Simpson - Greenhorn Ranger District, Wildlife Biologist, U.S. Forest Service.

Ron Tiller - Kern River Preserve Manager, The Nature Conservancy.

CHAPTER 8

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APPENDIX A

Biological Assessment of Wildlife and Vegetation

WILD AND SCENIC RIVER STUDY REPORT/DRAFT ENVIRONMENTAL IMPACT STATEMENT ON THE SOUTH FORK OF THE KERN RIVER

BIOLOGICAL EVALUATION

Prepared by: Susan Porter — 8/31/90
SUSAN PORTER, Planning Forester — Date

Reviewed by: — 11/26/90
STEVEN W. ANDERSON, Wildlife Biologist — Date

Reviewed by: Marjorie F. Clack — 8/31/90
MARJORIE F. CLACK, Acting District Ranger — Date

INTRODUCTION

This biological evaluation was prepared to analyze and report the effects of Threatened, Endangered, and Sensitive (TES) species regarding potential designation or non-designation of a one-mile section of the South Fork Kern River. Objectives are to ensure compliance with Forest Service Policy to ensure full consideration be given TES species.

The results of an analysis of the suitability of designating one mile of the South Fork Kern River for inclusion into the Wild and Scenic Rivers System are being documented in a wild and scenic river study report/draft environmental impact statement (DEIS). This analysis and study report/DEIS considers only alternatives regarding the suitablity of the study area for inclusion into the Wild and Scenic Rivers System; analysis of any proposed development is beyond the scope of this study report/DEIS and biological evaluation, which is a part of that analysis.

The study area lies in the southeast corner of the Cannell Meadow Ranger District between the Dome Land Wilderness and the Forest Boundary in Sections 13, 14, and 23, T25S, R35E, MDB&M. It is defined as one-quarter of a mile along the slope from the high watermark on each bank of the river, comprises approximately 320 acres, of which 240 acres are situated within the Dome Land Wilderness. The one mile study area is a transition zone between the steep-walled canyons upstream and the relatively flat, alluvial valley downstream. Road access into the area is extremely limited, with two dirt roads that lead into the study area being on private land and not open to public use. The road on the west side of the South Fork Kern River terminates prior to entering National Forest land and the road on the east side of the river is not maintained within the National Forest boundary and generally only accessible by four-wheel drive vehicles. Use of this road by motorized equipment is prohibited except for periodic use by the Forest Service for resource management needs.

The alternatives for proposed management are:

Alternative 1 - No Action:

The entire study area would be found unsuitable for designation. The Forest Service would continue to manage the study area under the Sequoia Forest Land and Resource Management Plan (FLMP) management prescriptions PS1 and WF4 as described in Chapter 4, pages 4-48 and 4-64. Future development within the study area would not be precluded, and the Forest Service would evaluate specific proposals for future development on a case-by-case basis.

Alternative 2 - Designation under a Wild Classification:

The entire study area would be recommended for designation as a Wild and Scenic River with a wild classification. Selection of this alternative would afford the highest level of protection of water flows, vegetation, scenic, and other natural values of this area from the potential effects of developments that could occur under the no action alternative. The study area would be managed under the management area prescriptions WSR and WF4 as described in the FLMP (Chapter 4, pages 4-64 and 4-91).

SPECIES EVALUATION

Field reviews of the study area were conducted to identify potentially suitable habitat for sensitive species that the FLMP and the List of State and Federal Endangered and Threatened Plants and Animals of California indicated have the potential to inhabit or range into the study area. A cursory field review on February 22, 1990, was conducted as a general overview of the habitat types in the

area and to identify potentially suitable habitat for species. A second cursory review was conducted on May 4, 1990, to identify species inhabiting the study area. Information on habitat requirements, previous sightings, and possible species inhabiting the study area were gathered from the Sequoia FLMP (Chapter 3, pages 3-23 and 3-31), *A Flora of Kern County California*, and *California Wildlife and Their Habitats: Western Sierra Nevada*, as well as conversations with James Shevock, Region 5 Botanist; Ron Tiller, The Nature Conservancy; Bob Barnes, National Audubon Society; and Ron Jurek, California Department of Fish & Game. Public comments also indicated there may be rare or endangered species in the study area.

Based on the soils, aspect, elevation, and the above listed sources, it was determined that the following threatened, endangered, or sensitive species had the potential to occur in the study area:

Species Common Name	Federal	State	Forest Service	Calif. Native Plant Society
Alkali Mariposa	Candidate			(1B)
Needles Buckwheat			(S)	
Kernville Poppy			(S)	
Yellow-billed Cuckoo	Candidate	(E)		
Willow Flycatcher	Candidate	(CSC)	(S)	
Bald Eagle	(E)	(E,CP)		
Golden Eagle		(CP,CSC)		
Prairie Falcon		(CSC)		
Sharp-shinned Hawk		(CSC)		
Coopers Hawk		(CSC)		
American Peregrine Falcon	(E)	(E,CP)		

(E) Listed by Federal or State as Endangered
(CP) Fully Protected Under California State Fish and Game Code
(CSC) California Department of Fish and Game Species of Special Concern
(S) Sensitive
(1B) Plants Rare or Endangered in California and elsewhere

The US Fish and Wildlife Service was consulted to assure this was a complete listing of threatened, endangered, and proposed species in the project area (October 1, 1990).

Vegetation

Through public input, a report was received that Bakersfield cactus, *Opuntia treleasei*, a category 1 species with the US Fish and Wildlife Service, may occur in the area. Field observations found only Beaver-tail cactus, *Opuntia basilaris*, in the study area; this cactus is widespread throughout the deserts of the western United States, whereas *O. treleasei* is restricted to lower elevations in the San Joaquin Valley near Bakersfield.

At this time, there are no plants on the Sequoia National Forest, that are federally listed as threatened or endangered. All other candidate plant species recorded for the Sequoia have been determined that suitable habitat is not within the study area. In addition, those candidate species known to occur on Bureau of Land Management lands in the general area were considered; these species also lack suitable habitat in the project area.

None of the Forest sensitive plant species listed in the FLMP occur in the study area. A former Forest sensitive species, Alkali mariposa, *Calochortus striatus*, occurs in the South Fork Valley downstream from the study area in The Nature Conservancy Preserve. This plant was delisted because its habitat does not occur on the Forest, although it is relatively rare in its range.

In review of the *California Native Plant Society Inventory of Rare and Endangered Vascular Plants of California, Fourth Edition, September 1988*, records two species of limited distribution. These are:

Alkali Mariposa	*Calochortus striatus*, (1B) located downstream from the study area in the Nature Conservancy Kern River Preserve.
Piute Cypress	*Cupresses nevadensis*, (1B) a small grove was recently discovered (August 1990) west of the study of the study area in the SW 1/4 of Section 22, T25S, R35E, MDB&M.

The Inventory also includes "List 4" plants, which have limited distribution. Plants in or near the study area that are included on this list are:

Kern Suncups	*Camissonia kernensis*, not found in the study area; generally found in association with the Joshua tree woodlands.
Limestone Live-forever	*Dudleya calcicola*, plants are occasional throughout the study area; found in rocky environment scattered throughout the North and South Forks Kern River watersheds east to the Sierran crest.
Kern River Larkspur	*Delphinium purpusii*, suspected in study area; plants are known to occur in the Dome Land Wilderness along Long Valley north of the study area. Endemic to the South Fork Kern River drainage.

Occurrences of these plants are on file with the California Natural Diversity Data Base, either in computer or manual files. The California Native Plant Society also tracks these plants through their inventory, which lists rarity, distribution, and habitat requirements.

Wildlife

The Yellow-billed Cuckoo, *Coccyzus americanus occidentalis*, utilizes mature riparian forests of cottonwood and willow at least 300 feet in width with an average canopy cover of 65%. Nests have been mainly found in willows 37 feet tall and 14 inches diameter at breast height; cottonwoods, however, are important for foraging. A study conducted in The Nature Conservancy Kern River Preserve in 1989, found six breeding pairs with nests in the riparian forest from Lake Isabella to the Onyx Ranch. The riparian vegetation in the study area consists mainly along the riverbank (about 20 feet in width) and appears to be an early seral stage perhaps due to flood events. This riparian vegetation, although composed of preferred species, does not provide optimal habitat either for nesting or foraging. Conversations with Ron Tiller and Stephen Laymon of The Nature Conservancy indicate previous surveys of the Bloomfield Ranch, immediately downstream from the study area, did not locate any Yellow-billed Cuckoo.

The Willow Flycatcher, *Empidonax traillii*, requires the presence of willow thickets with a deciduous shrub canopy cover of 50 to 70%; they apparently prefer tall clumps of bushes separated by open areas to dense continuous thickets. The study area provides suitable habitat, but surveys conducted by The Nature Conservancy and Audubon Society did not locate any of these birds.

The raptors listed range widely over several square miles and have the potential to range into the study area. Bald Eagles, *Haliaeetus leucocephalus*, have been sighted at Lake Isabella and roosting along the North Fork Kern River below Kernville, but there are no known sightings in the South Fork Valley near the study area. Golden Eagle (*Aquila chrysaetos*), Prairie Falcon (*Falco mexicanus*), and Sharp-shinned Hawk (*Accipiter striatus*) have been sighted on the Bloomfield Ranch within one mile of the study area (per conversation with Ron Tiller, The Nature Conservancy, Weldon); these species may also range into the study area, but there are no known sightings. There is potential habitat for Coopers Hawk, *Accipiter cooperi*, to nest in the study area. Although there are no known sightings in the area, there is potential foraging habitat for American Peregrine Falcon, *Falco peregrinus anatum*, in the study area, and possible nesting habitat in the adjacent Dome Land Wilderness.

CONCLUSIONS

There would be no adverse direct effects to these wildlife species, or their habitat, by designation or non-designation of this segment of the South Fork Kern River. Non-designation of this segment would preserve the opportunity for future developments (including the Bloomfield Hydroelectric Project). The Forest Service would evaluate any specific proposals for future development on a case-by-case basis and prepare a separate environmental document and biological evaluation. If the Bloomfield Hydroelectric Project were built as proposed the plans require a trail to be built for public access, which would probably increase recreation use. Increased public access and recreation use could have an adverse effect on wildlife and vegetation.

REFERENCES:

List of State and Federal Endangered and Threatened Animals of California.
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APPENDIX B

Listing of Public Concerns and Opportunities

WILD AND SCENIC RIVER STUDY REPORT/DRAFT ENVIRONMENTAL IMPACT STATEMENT ON THE SOUTH FORK OF THE KERN RIVER

LISTING OF PUBLIC CONCERNS AND OPPORTUNITIES

Request for comment was solicited from Forest Service employees and from public agencies, Forest permittees, environmental organizations, private property owners, political representatives, and the public at large. Comments were requested by various methods including publishing a Notice of Intent to prepare a study report/DEIS in the Federal Register filed March 16, 1990, radio and newspaper releases, monthly newsletter mailings to interested parties, and informal public meetings.

This scoping process identified concerns that were taken into account during the study report/DEIS. Twenty-two written comments were received during the public scoping period. For future reference purposes, each letter was assigned a number, corresponding with the order in which it was received, and each concern or opportunity extracted from the letter was assigned an alphabetical character corresponding with its location within the letter. For example, the first concern quoted below, 11C, equates to the third concern extracted from the eleventh letter received. These concerns were then grouped by like resource areas and screened using the following evaluation (screening) criteria (Note: Comments were extracted from letters as direct quotes unless indicated otherwise.):

Screening Criteria 1 - Is the South Fork W&SR study report/DEIS the proper place to address the concern or opportunity?

Screening Criteria 2 - Does the Forest Service have the authority to address the concern or opportunity?

Screening Criteria 3 - Is the concern or opportunity contrary to, or resolved by, an existing law, regulation, or Forest Service policy?

VISUAL RESOURCES

11C "The visual beauty of the area should not be violated."

Visual quality will be discussed in Chapters 2 (Description of the Study Area) and 5 (Environmental Consequences) of the Study Report/DEIS.

CULTURAL RESOURCES

3M "We request that the Environmental Impact Statement (Study Report/DEIS) being prepared for this project include discussion on the following items:
...cultural resources;..."

Cultural resources within the study area will be inventoried and discussed in Chapters 2 and 5 of the Study Report/DEIS.

5E "...historic remains are of substantial archaeological and scientific importance and must not be compromised by permitting private development in this area for any purpose."

Cultural resources within the study area will be inventoried and discussed in Chapters 2 and 5 of the Study Report/DEIS. Cultural resources are protected under the National Historic Preservation Act of October 15, 1966.

(Sreening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. The effects of development in this area are not within the scope of this Study Report/DEIS.

6D "The riparian area surrounding this segment contains many house rings, pits, ground mortars, campsites and significant remains of Tubatulabal Indians who lived there, all of great archaeological and scientific importance,..."

Cultural resources within the study area will be inventoried and discussed in Chapters 2 and 5 of the Study Report/DEIS.

7B "...conflicting resources [hydroelectric plants] should be compared to the outstandingly remarkable wildlife, vegetation, and cultural/historical values of this segment..."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. The effects of development in this area are not within the scope of this Study Report/DEIS.

11F "The many important archaeological sites along and bordering [this] Segment...must be saved from degradation,..."

Cultural resources within the study area will be inventoried and discussed in Chapters 2 and 5 of the Study Report/DEIS. Cultural resources are protected under the National Historic Preservation Act of October 15, 1966.

21B "the EIS should fully evaluate the outstanding remarkable resources in the area including fisheries, wildlife, vegetation, water quality, cultural resources; and economically quantify these resources where possible."

Cultural resources within the study area will be inventoried and discussed in Chapters 2 and 5 of the Study Report/DEIS. The economic quantification of this resource is not essential to make a reasoned choice among the alternatives. Therefore, this resource will not be economically quantified.

WATER RESOURCES

2A "The portion of the river south of the Forest Boundary is included in the designated floodway. The designated floodway prevents alterations in the river channel that would impair flows or deflect water significantly."

This will be discussed in Chapters 2 and 5 of the Study Report/DEIS.

3A,C "We request that the Environmental Impact Statement (EIS) being prepared for this project include discussion on the following items:
...water quality,...

Water quality will be discussed in Chapters 2 and 5 of the Study Report/DEIS.

...hydrological conditions, particularly the ability for control of high volume runoff,..."

Hydrological conditions, in general, and the effects of each alternative on these conditions, will be discussed in Chapters 2 and 5 of the Study Report/DEIS.

15B "...need for baseline data on the river flow in this segment."

General river flow data will be discussed in Chapter 2 of the Study Report/DEIS.

21B "the EIS should fully evaluate the outstanding remarkable resources in the area including fisheries, wildlife, vegetation, water quality, cultural resources; and economically quantify these resources where possible."

There will be a general discussion on water quality in the Study Report/DEIS. The economic quantification of this resource is not essential to make a reasoned choice among the alternatives. Therefore, this resource will not be economically quantified.

22D "...the document should discuss the proposed designation's effect on compliance with state water quality management plans and the Central Valley Basin Plan, including EPA-approved water quality standards and designated beneficial uses."

Water quality will be discussed in Chapters 2 and 5 of the Study Report/DEIS.

22E "The DEIS should discuss if any protective measures in the NPS program would apply to the designation study area and if the NPS program would help to meet the goals of the Wild and Scenic River program."

Water quality will be discussed in Chapters 2 and 5 of the Study Report/DEIS.

22F "The DEIS should discuss whether water quality in the study area exceeds levels necessary to support fish, wildlife, and recreation....Discuss how USFS activities will support this goal."

Water quality will be discussed in Chapters 2 and 5 of the Study Report/DEIS.

22G "Discuss how other activities will be designed in order to ensure compliance with the Antidegradation Policy."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. The effects of development in this area are not within the scope of this Study Report/DEIS.

22H "Discuss any monitoring programs to be implemented in order to ensure the maintenance and protection of high quality waters."

Water quality will be discussed in Chapters 2 and 5 of the Study Report/DEIS.

22I "The DEIS should discuss the proposed designation's potential to have adverse or beneficial impact the local hydrologic regime which may affect sensitive resources, especially existing beneficial uses."

Impacts of each alternative on the local hydrologic regime will be discussed in Chapter 5 of the Study Report/DEIS.

22L "Assess the potential for the designation of this segment of the South Fork Kern as part of the Wild and Scenic River system to perhaps restore water quality degraded by past development."

Water quality will be discussed in Chapters 2 and 5 of the Study Report/DEIS.

Wild and Scenic Rivers in the Region

1E "The "sliver" reach of the river is obviously "Wild" and should be preserved,..."

The level of classification will be covered in Chapter 3 (Eligibility and Classification) of the Study Report/DEIS.

5A "...should be included in the National Wild and Scenic River System,..."

Possible inclusion of this portion of the South Fork into the Wild and Scenic River System will be discussed in Chapter 3 of the Study Report/DEIS.

5B "...be designated "Wild"..."

The level of classification will be covered in Chapter 3 of the Study Report/DEIS.

5C "...be added to present River Segment 2 on the south,..."

(Screening Criteria 2) Changes to existing designated Wild and Scenic River's are not within the authority of the Forest Service.

6B "...be included in the Wild and Scenic River System, designated "Wild"..."

Possible inclusion of this portion of the South Fork into the Wild and Scenic River System will be discussed in Chapter 3 of the Study Report/DEIS. The level of classification will also be covered in Chapter 3 of the Study Report/DEIS.

6C "...be added to Segment 2 of the South Fork,..."

(Screening Criteria 2) Changes to existing designated Wild and Scenic Rivers are not within the authority of the Forest Service.

7A "...the Forest Service should reevaluate the classification designation of this segment."

The level of classification will be covered in Chapter 3 of the Study Report/DEIS.

8A "As this particular area contains varied natural attributes of National interest. With such areas unique and often fragile resources worthy of inclusion in our Nation's System of Wild and Scenic Rivers."

Possible inclusion of this portion of the South Fork into the Wild and Scenic River System will be discussed in Chapter 3 of the Study Report/DEIS.

10B "We are concerned with the balance of our natural resources in terms of the multiple use concept for public lands."

(Screening Criteria 3) National Forest lands are mandated by law to be managed for multiple use by the Multiple-Use Sustained-Yield Act of 1960)

11D "[This] segment...of the South Fork is obviously "Wild" - fully as "Wild" as Segment 2 immediately upstream which has previously and appropriately been so classified."

The level of classification will be covered in Chapter 3 of the Study Report/DEIS.

11E "We are very much concerned that it be protected and so preserved for future generations."

Possible inclusion of this portion of the South Fork into the Wild and Scenic System will be discussed in Chapter 3 of the Study Report/DEIS.

12A "...believe that the approximately one-mile long section of the South Fork Kern River...should be included in the Federal Wild and Scenic River System at the highest level of protection possible."

Possible inclusion of this portion of the South Fork into the Wild and Scenic System will be discussed in Chapter 3 of the Study Report/DEIS.

13A "We believe that given the undeveloped nature of the area's shoreline, a "scenic" or "wild" classification may be more appropriate [than a "recreation" classification]."

The level of classification will be covered in Chapter 3 of the Study Report/DEIS.

13B "...to identify the values on the SF Kern River that the public and the managing agencies would like to see preserved, and weigh them against the desirability of conflicting visions of the river's future."

The purpose of this Study Report/DEIS is to weigh the consequences of designation or non-designation of this portion of the South Fork into the Wild and Scenic Rivers system. This will be discussed throughout the Study Report/DEIS.

14B "...feel that Congress has excluded project 4805 from the Wild and Scenic Rivers Act as well as the wilderness bill and that there is no requirement or reason for the Forest Service to assess the eligibility [suitability] of the project for inclusion in the Wild and Scenic Rivers Act."

The background and need for this suitability study will be discussed in Chapter 1 of the Study Report/DEIS.

15A "...still meets all the criteria of suitability for "Wild"."

The level of classification will be covered in Chapter 3 of the Study Report/DEIS.

18A "This section of the river meets all the criteria of suitability for "Wild"."

The level of classification will be covered in Chapter 3 of the Study Report/DEIS.

21A "...due to the outstanding nature of the natural resources and the lack of development in the area, we believe that full consideration should be given to classifying the South Fork Kern River as a "wild" river."

The level of classification will be covered in Chapter 3 of the Study Report/DEIS.

LAND OWNERSHIP AND USES

1A "Is the Page project financially viable?"

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. Though the affects of each alternative on the proposed power project will be discussed in this document, discussions of the financial viability of the power project are not within the scope of this Study Report/DEIS.

(Screening Criteria 2) An environmental document has been prepared by the hydroelectric proponent and reviewed and commented on by the Forest Service in their 4(e) Report. This EA and 4(e) Report have been sent to FERC who will make the final decision on the environmental acceptability, and feasibility, of the proposed power project.

1B "Is the Page project environmentally acceptable?"

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. Though the affects of each alternative on the proposed power project will be discussed in this document, discussions of the environmental acceptability of the power project are not within the scope of this Study Report/DEIS.

(Screening Criteria 2) An environmental document has been prepared by the hydroelectric proponent and reviewed and commented on by the Forest Service in their 4(e) Report. This EA and 4(e) Report have been sent to FERC who will make the final decision on the environmental acceptability, and feasibility, of the proposed power project.

1C "Does the amount of power the Page project proposes to generate - 12,894,000 kilowatthours (KWh) per year - warrant the dewatering of the river for 10,100 feet?"

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. Though the affects of each alternative on the proposed power project will be discussed in this document, discussions of the feasibility of the power project are not within the scope of this Study Report/DEIS.

(Screening Criteria 2) An environmental document has been prepared by the hydro-electric proponent and reviewed and commented on by the Forest Service in their 4(e) Report. This EA and 4(e) Report have been sent to FERC who will make the final decision on the environmental acceptability, and feasibility, of the proposed power project.

1D "Should the Federal Energy Regulatory Commission ("FERC") be persuaded to dismiss Page's Project, allowing the South Fork "Wild" Segment 2 to run to the SQF boundary?"

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. Though the affects of each alternative on the proposed power project will be discussed in this document, discussions of the feasibility of the power project are not within the scope of this Study Report/DEIS.

(Screening Criteria 2) An environmental document has been prepared by the hydro-electric proponent and reviewed and commented on by the Forest Service in their 4(e) Report. This EA and 4(e) Report have been sent to FERC who will make the final decision on the environmental acceptability, and feasibility, of the proposed power project. FERC is aware of the Wild and Scenic River potential of this segment and will consider it in the review of the proponents license application.

3B "We request that the Environmental Impact Statement (Study Report/DEIS) being prepared for this project include discussion on the following items:
...riparian rights,..."

Riparian rights will be discussed in Chapter 2 of the Study Report/DEIS.

3L "We request that the Environmental Impact Statement (Study Report/DEIS) being prepared for this project include discussion on the following items:
...impacts to existing or proposed energy projects along the South Fork,.."

Impacts to existing or proposed energy projects will be discussed in the Study Report/ DEIS.

5D "...is [it] in the public interest for an economically unneeded, environmentally disastrous, and financially doomed hydroelectric project..."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. Though the affects of each alternative on the proposed power project will be discussed in this document, discussions of the feasibility of the power project are not within the scope of this Study Report/DEIS.

(Screening Criteria 2) An environmental document has been prepared by the hydroelectric proponent and reviewed and commented on by the Forest Service in their 4(e) Report. This EA and 4(e) Report have been sent to FERC who will make the final decision on the environmental acceptability, and feasibility, of the proposed power project.

7C "In evaluating hydroelectric projects, the Forest Service should consult with the California Energy Commission. Given the current glut of energy in California and recently announced efforts by the industry to promote energy conservation, any new power plant must clearly demonstrate a compelling public need."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. Though the affects of each alternative on the proposed power project will be discussed in this document, discussions of the feasibility of the power project are not within the scope of this Study Report/DEIS.

(Screening Criteria 2) An environmental document has been prepared by the hydroelectric proponent and reviewed and commented on by the Forest Service in their 4(e) Report. This EA and 4(e) Report have been sent to FERC who will make the final decision on the environmental acceptability, and feasibility, of the proposed power project.

10A "...FERC research and statistics show that a project this size is not feasible in terms of reducing U.S. dependence on foreign oil or producing a significant decline in fossil fuel displacement/useage."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. Though the affects of each alternative on the proposed power project will be discussed in this document, discussions of the feasibility of the power project are not within the scope of this Study Report/DEIS.

(Screening Criteria 2) FERC, after review of the proponent's application and environmental document, and the Forest Service's 4(e) Report, makes the final decision on the impact and feasibility of the project.

13C "...believes that an important part of that decision must be the investigation of the impact and feasibility of potential river degrading developments on this reach of the SF Kern, since projects that are unlikely to be feasible should command less priority over the clear and present reality of the value of the SF Kern as a free-flowing river."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. Though the affects of each alternative on the proposed power project will be discussed in this document, discussions of the impact and feasibility of the power project are not within the scope of this Study Report/DEIS.

(Screening Criteria 2) An environmental document has been prepared by the hydro-electric proponent and reviewed and commented on by the Forest Service in their 4(e) Report. This EA and 4(e) Report have been sent to FERC who will make the final decision on the environmental acceptability, and feasibility, of the proposed power project. FERC is aware of the Wild and Scenic River potential of this segment and will consider it in the review of the proponents license application.

14A "A part of the project area is now under consideration as to eligibility and suitability for inclusion in the said river system...Obviously, the entire hydroelectric power project is at stake."

The affects of each alternative on the proposed power project will be discussed in Chapter 5 of the Study Report/DEIS.

16A "...DEIS summary which identifies energy production as one of the primary concerns."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. Though the affects of each alternative on the proposed power project will be discussed in this document, discussions of the need for energy production are not within the scope of this Study Report/DEIS.

16B "...[proposed power] project would have minimum impact on the wilderness area or on the environment"

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. Though the affects of each alternative on the proposed power project will be discussed in this document, discussions of the feasibility of the power project are not within the scope of this Study Report/DEIS.

(Screening Criteria 2) An environmental document has been prepared by the hydro-electric proponent and reviewed and commented on by the Forest Service in their 4(e) Report. This EA and 4(e) Report have been sent to FERC who will make the final decision on the environmental acceptability, and feasibility, of the proposed power project.

16D "...the study area, on balance, is best utilized by his power project which makes it not suitable for inclusion in the Wild and Scenic Rivers System."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. Though the affects of each alternative on the proposed power project will be discussed in this document, discussions of the feasibility of the power project are not within the scope of this Study Report/DEIS.

20B "Energy developed by a hydroelectric plant on this site would be so miniscule it should not even be considered as a project for the public's benefit."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. Though the affects of each alternative on the proposed power project will be discussed in this document, discussions of the feasibility of the power project are not within the scope of this Study Report/DEIS.

(Screening Criteria 2) An environmental document has been prepared by the hydroelectric proponent and reviewed and commented on by the Forest Service in their 4(e) Report. This EA and 4(e) Report have been sent to FERC who will make the final decision on the environmental acceptability, and feasibility, of the proposed power project.

21C "...the Study Report/DEIS should determine what major resource conflicts, such as proposed hydroelectric projects, might arise and evaluate to what degree they serve the public interest."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. Though the outcome of the Decision based on this Study Report/DEIS will effect the project, discussions of the impact and feasibility of the hydroelectric project are not within the scope of this Study Report/DEIS.

22C "Assess any potential future hydro development below the 1-mile segment under study to determine potential effects."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. Though the outcome of the Decision based on this Study Report/DEIS will effect the project, discussions of the impact and feasibility of the hydroelectric project are not within the scope of this Study Report/DEIS.

Minerals

3D "We request that the Environmental Impact Statement (Study Report/DEIS) being prepared for this project include discussion on the following items:
...mine for resources, such as mineral, construction materials,..."

The effects of the different alternatives on mineral resources will be discussed in Chapter 5 of the Study Report/DEIS.

VEGETATION

3E "We request that the Environmental Impact Statement (Study Report/DEIS) being prepared for this project include discussion on the following items:
...timber,...

(Screening Criteria 1) The study area does not support commercial timber, and, therefore, designation will not affect this resource and it will not be discussed in the Study Report/DEIS.

3F ...examine plant...species in the project area as well as those species that might be affected by designation both upstream and downstream from the site,..."

An evaluation of the vegetation will be included in Chapters 2 and 5 and Appendix A of the Study Report/DEIS.

7B "...conflicting resources [hydroelectric plants] should be compared to the outstandingly remarkable...vegetation,...of this segment..."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. The effects of development in this area are not within the scope of this Study Report/DEIS.

21B "...the Study Report/DEIS should fully evaluate the outstanding remarkable resources in the area including fisheries, wildlife, vegetation, water quality, cultural resources; and economically quantify these resources where possible."

There will be a discussion on vegetation in Chapters 2 and 5 and Appendix A of the Study Report/DEIS. The economic quantification of this resource is not essential to make a reasoned choice among the alternatives. Therefore, this resource will not be economically quantified.

22B "Discuss whether the diversity of species associated with late forest successional stages or with roadless areas would be affected by the proposed designation."

(Screening Criteria 1 & 3) Although the Digger pine-oak woodland is a climax cover type, it does not meet the characteristics of the late forest successional stage with respect to vegetation, canopy closure, and species diversity. The study area was excluded from wilderness and released from roadless area status in the 1984 Wilderness Bill. Therefore, these will not be discussed in the Study Report/DEIS.

Grazing

3H "We request that the Environmental Impact Statement (Study Report/DEIS) being prepared for this project include discussion on the following items:
...grazing,..."

An evaluation of grazing activities will be included in Chapters 2 and 5 of the Study Report/DEIS.

FISH AND WILDLIFE

3F "We request that the Environmental Impact Statement (Study Report/DEIS) being prepared for this project include discussion on the following items:
...examine...wildlife species in the project area as well as those species that might be affected by designation both upstream and downstream from the site,..."

An evaluation of the wildlife species and wildlife habitat in the study area will be included in Chapters 2 and 5 and Appendix A of the Study Report/DEIS.

5F "This South Fork segment area is important scientifically, ecologically and for the use of wildlife ... and so should be administered under the Wilderness and Wild and Scenic River Acts."

An evaluation of the ecology and wildlife will be included in Chapters 2 and 5 and Appendix A of the Study Report/DEIS.

7B "...conflicting resources [hydroelectric plants] should be compared to the outstandingly remarkable wildlife,...of this segment..."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. The effects of development in this area are not within the scope of this Study Report/DEIS.

21B "...the Study Report/DEIS should fully evaluate the outstanding remarkable resources in the area including fisheries, wildlife, vegetation, water quality, cultural resources; and economically quantify these resources where possible."

Fisheries and wildlife will be discussed in Chapters 2 and 5 and Appendix A of the Study Report/DEIS. The economic quantification of this resource is not essential to make a reasoned choice among the alternatives. Therefore, this resource will not be economically quantified.

RECREATION

3G "We request that the Environmental Impact Statement (Study Report/DEIS) being prepared for this project include discussion on the following items:
...provide for or deny public recreational resources,..."

Effects on recreation opportunities will be discussed in Chapter 5 of the Study Report/DEIS.

Access

15E "It should remain difficult to get to, should have no maintained trails or improvements."

Access into the study area will be discussed in Chapters 2 and 5 of the Study Report/DEIS.

Wilderness

4A "We urge the area in questioned be entirely included in the Dome Land Wilderness."

(Screening Criteria 2) Wilderness designation would require action by the Congress.

6A "...should be added to the Dome Land Wilderness,..."

(Screening Criteria 2) Wilderness designation would require action by the Congress.

11A "...concerned that the inevitable noise, traffic and general intrusion of a hydroelectric project, or any other active human development there or in {this} Segment...will ruin the present unique wilderness of the area."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. The effects of development in this area are not within the scope of this Study Report/DEIS.

15D "This corridor or sausage meets the criteria for Wilderness--..."

(Screening Criteria 2) Wilderness designation would require action by the Congress.

16C "The area is obviously not pristene, pure or untouched by man. It is a part of a natural power site."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. The suitability for power development in the area is not within the scope of this Study Report/DEIS.

20C "I think you should petition Congress to include that area into the Dome Land Wilderness at a later date."

(Screening Criteria 1) Petitioning Congress for new wilderness is not within the scope of this Study Report/DEIS.

(Screening Criteria 2) Wilderness designation would require action by the Congress.

22B "The DEIS should explain how USFS activities on lands adjacent to the South Fork of the Kern River and its tributaries will impact the segment of the river proposed for Wild and Scenic designation."

All relevant activities which might potentially impact the study area will be discussed in Chapters 2 and 5 of the Study Report/DEIS.

SOCIOECONOMICS

3I,J,K "We request that the Environmental Impact Statement (Study Report/DEIS) being prepared for this project include discussion on the following items:
...work force for public and private concerns,...
...potential impacts to revenue sources within the Kern River Valley,...
...impacts to local services, particularly impacts to law enforcement and fire protection,..."

An evaluation of the potential impacts of designation to these socioeconomic factors will be discussed in Chapters 2 and 5 of the Study Report/DEIS.

GENERAL C&O'S

22J "Evaluate the combined effects of the proposed designation and other proposed or ongoing operations on adjacent National Forest and private lands (including the 72.5-mile stretch of the river immediately upstream that is already designated as Wild and Scenic as well as the Nature Conservancy's downstream Kern River Preserve)."

Cumulative effects of proposed designation and all relevant activities on adjacent National Forest land will be discussed in Chapter 5 of the Study Report/DEIS.

22K "The analysis should also cover any potential effects of proposed projects on resources which have been adversely affected by past forest management practices."

(Screening Criteria 1) This Study Report/DEIS is being prepared to determine the suitability of this portion of the South Fork Kern River for Wild and Scenic River designation. The potential effects of proposed projects are not within the scope of this Study Report/DEIS. There are no known adverse effects from past forest management practices.

APPENDIX C

Sequoia FLMP Management Area Prescriptions

WILD AND SCENIC RIVER STUDY REPORT/DRAFT ENVIRONMENTAL IMPACT STATEMENT ON THE SOUTH FORK OF THE KERN RIVER

MANAGEMENT AREA PRESCRIPTIONS

A Management Prescription is a cohesive and compatible set of practices and activities selected and scheduled for application on a specific area of land, the Management Area, to attain desired goals and objectives. Further information on Management Areas and Prescriptions can be obtained from the Sequoia National Forest Land and Resource Management Plan.

MANAGEMENT AREA PRESCRIPTION PS1

This prescription emphasizes **general dispersed recreation** in **pinyon-sage**. This management area encompasses 1,000 net acres.

Emphasis

Recreation emphasis will range from Semi-Primitive Non-Motorized to Roaded Natural. A mix of activities will be permitted. Hiking and equestrian use will be stressed in nonmotorized areas. In motorized areas, driving for pleasure, OHV use, and viewing scenery will be emphasized.

Opportunities

Firewood cutting for personal use will be favored over commercial use. Developed recreational sites will be managed to enhance dispersed recreational and visual opportunities. Watershed improvements which enhance recreation opportunities will receive priority. Transportation system planning and management will favor dispersed recreational and visual needs. Wildlife habitat and diversity will be managed to enhance recreation except those areas where OHV use occurs. Livestock management techniques will be utilized to reduce direct conflict with dispersed recreation.

Developed Recreation

1) Build and manage new facilities to enhance dispersed recreational opportunities.

2) ROS capacity guidelines for developed sites:

ROS	PAOT/ACRE
SPNM	7
SPM	9
RN	13
R	17

Dispersed Recreation

1) Increase opportunities for public enjoyment and benefits with emphasis on hiking and equestrian use in nonmotorized areas; and driving for pleasure, OHV use and viewing in motorized areas.

2) Maintain and develop trails to meet user needs and to protect resource values.

3) ROS capacity guidelines for all activities:

ROS	PAOT/ACRE
SPMN	.055
SPM	.500
RN	1.800
R	3.500

4) Emphasize providing and maintaining a comprehensive network of OHV trails.

Fish and Wildlife

1) Create clearings and edges where possible.

2) Retain existing stands of pinyon pine and other hardwoods.

3) Lop and scatter slash.

4) Limit habitat management activities where concentrated OHV use occurs.

5) Provide water where it is limiting.

Range

1) Utilize livestock management techniques to reduce conflict with dispersed recreation.

Timber

1) Favor firewood cutting for personal use over commercial use.

Watershed

1) Give priority to watershed improvement projects which enhance recreation opportunities.

2) Minimize treatments on slopes greater than 15 percent.

3) Limit activities to produce no more than 5-7 percent bare ground per 1,000-acre or smaller watershed.

Transportation and Facilities

1) Maintain trailhead access roads at a minimum of Level 3.

2) Limit road development in SPM ROS areas to low density, local roads.

Fire Management

1) Utilize "control" suppression strategy. The maximum size of 90 percent of all wildfires at containment is expected to be 15 acres.

2) Generally, do not use prescribed fire.

3) Restrict heavy mechanical equipment use where soil will be adversely affected.

4) Focus fire prevention program on dispersed campers and OHV users.

Visual

1) Provide openings with random sizes and spacing and simulate natural edges.

2) Use undeveloped vistas for viewing scenery.

3) Use M as minimum VQO with emphasis on R and PR (VQO Classes).

MANAGEMENT AREA PRESCRIPTION WF4

This prescription emphasizes **wilderness with the natural role of fire.** This management area encompasses 264,000 acres.

Emphasis

This area will be managed for the preservation and enhancement of wilderness characteristics. Fire under prescribed conditions will be used to maintain long-term plant diversity in the wilderness. Confinement will be used as a suppression strategy when the potential fire size will generally not exceed 100 acres. Fires generally will not threaten lands outside the wilderness if allowed to burn; nor will fire present a threat to wilderness users. Fires will not be allowed to cause significant increase in soil movement. Areas where past activities have resulted in adverse wilderness impacts will be identified and managed to rehabilitate the sites.

Opportunities

Timber harvesting will not occur, although 36 CFR 219.18 states: "(B) Evaluate the extent to which wildfire, insect and disease control measures may be desirable for protection of either wilderness or adjacent areas and provide for such measures when appropriate." Under extreme situations, this may necessitate limited timber activities. Firewood gathering will be limited to dead and downed wood for wilderness recreational uses. Dispersed recreation, excluding mechanized uses, will be provided. Trails will be provided, but will protect wilderness solitude and soil and water quality. Grazing will be permitted.

Existing wilderness plans will apply except where practices are superseded by these directions and standards. Following Congressional designation of each new wilderness, a wilderness management plan will be completed.

Developed Recreation

1) Limit the amount and kind of primitive structural campsite improvements.

Dispersed Recreation

1) Permit camping within 100 feet of live streams only when terrain does not allow appropriate space further away.

2) Develop loop trails.

Fish and Wildlife

1) Utilize prescribed fire for wildlife habitat improvement work.

Range

1) Allow the current level of grazing.

Timber

1) Do not permit harvesting, although 36 CFR 219.18 states: "(B) Evaluate the extent to which wildfire, insect and disease control measures may be desirable for protection of either wilderness or adjacent areas and provide for such measures when appropriate." Under extreme situations, this may necessitate limited timber activities.

Watershed

1) Do not permit restoration activities, unless allowed by enabling legislation or explicit approval by the Chief of the Forest Service.

Transportation and Facilities

1) Construct and maintain trail bridges consistent with wilderness uses.

2) Maintain administrative facilities consistent with wilderness values.

Fire Management

1) Use a "confine" or "contain" suppression strategy for wildfire when public safety will not be compromised, adjacent resources can be protected, and other management constraints (air quality, watershed, etc.) can be met. A "Control" strategy will be applied to all other wildfires.

2) Use prescribed fire to enhance wilderness values. Planned and unplanned ignitions may be used.

3) Limit and tightly control the use of mechanized equipment.

Visual

1) Maintain P VQO (VQO Class).

MANAGEMENT AREA PRESCRIPTION WSR

This prescription emphasizes the **management of Wild, Scenic, and Recreation Rivers (WSR)**. This management emphasis includes approximately 14,000 net acres outside wilderness and 19,000 net acres within wilderness.

Emphasis

The Wild, Scenic, and Recreation River emphasis is on the preservation of the free-flowing condition of selected rivers with various outstandingly remarkable features, on the protection of water quality and the immediate environment, and to fulfill other vital national conservation purposes.

Opportunities

Intensive timber management will not occur. Firewood gathering will be limited to the immediate use of the recreationist. Recreational facilities may be developed along those river segments classified as "Recreation" to provide opportunities for engaging in activities that are enhanced by the river. Motorized access in specific locations; non-intensive timber management to control insect and disease outbreaks; inconspicuous fish and wildlife habitat improvement; and water management practices to correct resource problems may occur in "Scenic" or "Recreation" segments. For rivers within a wilderness, the most restrictive management in accordance with the Wilderness Act or the Wild and Scenic River Act will apply. Within "Wild" segments, management will favor the protection of natural values while providing river-related outdoor recreation opportunities in a primitive setting that is generally inaccessible except by trail. Consider mineral withdrawal subject to existing claims.

APPENDIX D

Evaluation Letter for the Study Area

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
Pacific Southwest Region
Regional Office
630 Sansome Street
San Francisco, CA 94111

REPLY TO: 2770

DATE: December 12, 1988

Mr. Kenneth F. Plumb, Secretary
Federal Energy Regulatory Commission
825 North Capitol Street, NE
Washington, D.C. 20426

Dear Mr. Plumb:

This letter is supplemental to and amends our 4(e) letter dated August 15, 1986, on the Application for License for the proposed Bloomfield Ranch Hydropower Project No. 4805.

On February 25, 1988, I made a decision on the alternatives presented in the Final Environmental Impact Statement and approved a Resource Management Plan for the Sequoia National Forest. Notice of this decision was listed in the Federal Register on March 4, 1988.

One of the decisions made is that Segment 1 of the South Fork Kern River is eligible for inclusion in the National Wild and Scenic Rivers System. Segment 1 of this River would be effected by the Bloomfield Ranch Project. Therefore, the August 15, 1986 4(e) letter is incomplete and the Forest Service must prepare a suitability determination for the National Forest portion of Segment 1 before it can complete the 4(e) report.

Because this segment of the South Fork Kern River is now a Study River under Section 5 (d) of the Wild and Scenic Rivers Act; and because the Bloomfield Ranch Project, as currently proposed, is located within this segment; we request that the Commission not make a decision on license issuance until the study is completed and a final 4(e) report is provided.

Attached for further reference is the evaluation of the Wild and Scenic River eligibility determination for National Forest portion of Segment 1.

Sincerely,

PAUL F. BARKER
Regional Forester

Enclosure

South Fork Kern River Wild & Scenic River Study/Eligibility
Classification Analysis - Segment 1 1/

CLASSIFICATION

WILD

Free of Impoundments?	Yes
Generally Inaccessible Except by Trail	Yes
Watershed/Shoreline Essentially Primitive?	Yes
Waters Unpolluted?	Yes

SCENIC

Free of Impoundments?	Yes
Accessible In Places By Road ?	Yes
Watershed/Shoreline Largely Primitive & Largely Undeveloped?	Yes

RECREATION

Readily Accessible By Road or Railroad?	No
Some Development Along Shoreline?	No
Some Impoundments or Diversions in the past?	No

HIGHEST ELIGIBLE CLASSIFICATION — Wild

1/ NOTE: This eligibility determination differs from that shown in Appendix E of the Sequoia National Forest Land Management Plan/EIS Appendix E. Segment 1 as presented in the EIS extended from Lake Isabella to the Dome Land Wilderness Boundary (10.5 miles). Only about 1 mile of that total was within the Sequoia National Forest boundary, outside the wilderness and within the administrative jurisdiction of the Forest Service. It is this 1 mile section that could be affected by the proposed Hydropower Project No. P-4805 (FERC) for which eligibility is addressed here.