

ELIGIBILITY STUDY

East Fork Illinois River And Its Tributaries

USDA - Forest Service  
Siskiyou National Forest

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EAST FORK OF THE ILLINOIS RIVER AND TRIBUTARIES  
ELIGIBILITY STUDY

## I. INTRODUCTION

In 1968, Congress enacted the National Wild and Scenic Rivers Act, establishing a system for preserving outstanding free-flowing rivers. The Siskiyou National Forest Land and Resource Management Plan (Forest Plan) was released in March, 1989. American Rivers, Inc. and the Oregon Rivers Council appealed the Forest Plan in June 1989. The appeal was based, in part, that the Forest Plan and accompanying FEIS did not adequately assess potential wild and scenic rivers on the Forest.

To settle the appeal, the Siskiyou National Forest agreed to evaluate the eligibility of tributaries to the Illinois River. Eligible streams are those determined to be free-flowing that possess at least one stream-related value that is "Outstandingly Remarkable". Potentially eligible streams will be managed to protect those values, along with their potential classifications (wild, scenic, or recreational) until their final suitability for inclusion into the Wild and Scenic River system is determined.

After an initial eligibility screening, four streams on the Illinois Valley Ranger District were determined to have segments which are free-flowing and might possess "Outstandingly Remarkable Values (ORV)". An Eligibility Study will be prepared for each of these streams to determine whether indeed the stream contains one or more ORVs. East Fork Illinois River is one of the four streams.

## II. ELIGIBILITY STUDY PROCESS

This Eligibility Study provides data on the existing condition of each resource and serves as the foundation of the river management planning process. It provides a standardized approach to evaluation of values of the tributaries and rivers. Interim management, management direction, and potential boundaries will be determined based on information provided in this assessment. Although the determination of value significance is a matter of informed professional judgement and interpretation, this process includes the following steps or verification techniques:

- An interdisciplinary team approach (see Appendix C, List of Preparers).
- Consideration of uniqueness and rarity at the regional and national level.\*
- Consideration of whether or not values are river-related (owe their existence to or contribute to the functioning of the river system and its immediate environment).
- The use of qualitative guidelines to help determine significance.

\* Regional boundaries are based partially on the eight geographic regions described in the 1989 Statewide Comprehensive Outdoor Recreation Plan for Oregon. The East Fork of the Illinois River and its tributaries are in SCORP Region 9, which includes Josephine, Jackson, Klamath, and Douglas Counties (see Appendix B). Regional boundaries are also evaluated according to physiographic regions.

### III. EXECUTIVE SUMMARY

The upper East Fork provides the best-preserved glacial landform and stream system on the Siskiyou National Forest. Few other areas in the SCORP region have this type of feature. The close proximity to the coast, low latitude, and relatively low elevation of the glacial topography is unusual.

The area provides a unique ecological setting - uncommon or relic endemic plant and tree species grow here. The largest Brewer's spruce in California is found in the study corridor.

Two scenic gorges with waterfalls, pools, and interesting rock formations grace the East Fork (below the Wilderness Boundary) and Dunn Creek (above the North Fork of Dunn Creek).

There is high probability that prehistoric sites may be found along streams in the study area. These sites are important because few prehistoric sites have been discovered in Southern Oregon.

The East Fork Illinois River is considered free-flowing through most of its length, although impoundments and diversions along the lower reaches disrupt the flow.

### IV. PUBLIC INVOLVEMENT

Public involvement and input was sought for this study. Individuals and groups were contacted through public meetings, phone conversations, and the mail. Few people responded to requests for information. The mailing list, and all correspondence concerning this study are on file at the Illinois Valley Ranger District office.

### V. STREAMS INCLUDED IN THIS STUDY

The East Fork Illinois and its tributaries are located in the Siskiyou Mountains, in the northern part of the Klamath Geologic Province along the California/Oregon border. The East Fork is a major tributary to the mainstem Illinois. The study area begins at the Siskiyou National Forest boundary about 8 miles south of Cave Junction. Some of the major streams that flow into the East Fork (Grayback, Sucker, Althouse and their tributaries) were screened separately and are not included in this study. The perennial tributaries that are included in the study area are listed below.

Some of the East Fork flows through private lands and other ownerships (federal and state). The East Fork originates in the Siskiyou Wilderness. Otherwise, most of the watershed is roaded and readily accessible to motor vehicles. In total, about 56.5 miles of creek are considered in this study. About 3.66 miles of the East Fork are within the Siskiyou Wilderness. The map used to estimate the lengths shown in Figure 1 is the 1/2 inch to the mile Siskiyou National Forest map (see Appendix A, East Fork Illinois Study Area Map).



The following chart shows lengths of each stream and corresponding acreage:

Figure 1. Streams Considered in this Study

Stream Name	Miles	Acreage - Stream Miles X 1/4 Mile on each side of Creek
<b>Mainstem East Fork Illinois</b>		
From Forest Boundary to Wilderness	8.9	2,848
From Wilderness to Headwaters	3.7	1,184
Little Elder Creek	3.0	960
Elder Creek	3.4	1,088
Page Creek	2.8	896
Scotch Gulch	0.4	128
Cedar Gulch	0.7	224
Long Gulch	1.2	384
Bybee Gulch	0.5	160
Chicago Creek	2.7	864
Sanger Canyon	2.0	640
Unnamed Tributaries to East Fork	1.9	608
<b>Dunn Creek</b>		
Mainstem Dunn Creek	7.6	2,432
Unnamed Tributaries to Dunn Creek	7.8	2,496
<b>North Fork Dunn Creek</b>		
Mainstem	1.6	512
Unnamed Tributaries	0.6	192
<b>Black Creek</b>		
Mainstem	1.8	576
<b>Packers Creek</b>		
Mainstem	1.6	512
<b>Poker Creek</b>		
Mainstem	1.6	512
Unnamed Tributaries	2.7	864
<b>TOTAL STREAMS INCLUDED IN THIS STUDY</b>	<b>56.5</b>	<b>18,080*</b>

\* All of the streams combined including some overlap for stream junctions.

## HISTORIC USES

The East Fork Illinois River is presently used for irrigation; numerous diversions and ditches occur on the privately owned land downstream of the study area. Many people take water directly from the river. Mining occurred during Oregon's gold rush in the late 1800's, although the study area was not as heavily mined as adjacent mining districts. Several claims are current. Much of the river corridor has been logged in the past. Other uses include recreation.

## BLM STUDY

The Bureau of Land Management (BLM) assessed about 17 miles of the East Fork (of which only 0.5 miles is on land administered by the BLM). It was not found eligible for further study.

## VI. DISCUSSION OF STREAM-RELATED VALUES

### SUMMARY

Several resource areas will be discussed in this section, including physical, biological, social, and cultural resources. Each resource is discussed separately. The criteria for the "Outstanding Remarkable" rating is provided, followed by a detailed description of the resource, and a "finding" which summarizes the resource description.

## GEOLOGICAL/HYDROLOGICAL

### CRITERIA FOR OUTSTANDINGLY REMARKABLE RATING

The stream, the area within the stream corridor, or the drainage basin contains example(s) of a geologic or hydrologic feature, process, or phenomenon that is rare, unusual, one-of-a-kind, or unique to the geographic region. The feature(s) may be in an unusually active stage of development, represent a textbook example, and/or represent a unique or rare combination of geologic features (alluvial, erosional, landslide, soils, volcanic, glacial, and other geologic features) or hydrologic phenomena (large aquifers, springs, bogs, or other features).

### EXISTING CONDITION

#### Geology

#### Bedrock Geology

The river corridor is similar to others in the Klamath Mountains Geologic Province of southwestern Oregon and northwestern California. Bedrock types include granitic rocks, ultramafic rocks (serpentine and peridotite), and metamorphic rocks (mostly slate and metavolcanic rocks). These rocks were added the western edge of North America during the Triassic and Jurassic Periods, from 200 million to 150 million years ago.

## Topography

Elevations range from 1500 feet about two miles downstream from Takilma at the mouth of Little Elder Creek to just over 6300 feet at Young's Peak and Lookout Mountain. Black Butte and the other high peaks are almost as high.

## Glaciation

The cluster of high peaks at the head of the study area supported numerous glaciers. The glaciers occurred between 10,000 and 100,000 years ago, during the Pleistocene or Ice Age. The upper valley of the East Fork had more recent glaciation than the tributaries.

**East Fork:** The broad divide between the uppermost reach of the East Fork and Young's Valley was occupied by an ice mass that moved both south down what is now Young's Valley and north down the East Fork. The glacier lasted much longer on the north side than on the south side. Young's Valley has lost much of its glacial appearance due to post-glacial erosion, while the glacial character of the East Fork is well-preserved.

The uppermost four miles of the East Fork, down to about Sanger Creek, is a glacially carved U-shaped valley. The valley bottom is about one-quarter mile wide. The bottom of the upper valley has not been eroded since the glaciation, although the river has eroded and redeposited many moraines (unconsolidated deposits of sand, gravel and boulders made by glaciers).

The mountain peaks that surround the upper end of the drainage are horns, bare rock peaks sculpted on several sides by glaciation. Little soil or vegetation has developed on the upper slopes.

Below the upper rocky slopes is a band of brush and stunted trees. Numerous scars from several episodes of snow avalanches mark the mid-slopes, particularly along the East Fork above Sanger Creek. These are revegetated with brush and small trees.

Other glacier features found along the East Fork are hanging valleys and cirque lakes. About four hanging valleys and four small lakes are found in this area. Additional intermittent lakes and tarn basins are plentiful. Several small marshes occur in the upper ends of formerly glaciated tributaries. Whiskey Lake, located on the divide between Chicago and Sanger Creeks, is ponded by a moraine.

**Sanger Creek:** A deep deposit of unconsolidated sand, gravel, and boulders appears throughout Sanger Canyon. Post-glacial debris from the slopes may be covering glacial deposits. The stream has cut a notch up to 50 feet deep through the detritus.

The glaciers ended at Sanger Creek, evidenced by the change in topography along the East Fork. The U-shaped valley ends with a 50-foot deposit of sand and boulders from the terminal moraine. The valley bottom tapers to a narrow V-shaped canyon similar to other canyons of the east side of the Forest.

Dunn Creek: The headwaters of Dunn Creek are also glaciated, although less recently than the East Fork; thus, the landforms are not as well preserved. Black Creek and Poker Creek (the two major tributaries to Dunn Creek) also show glacial features (cirque lakes, tarn basins, etc.). The cirque that once occupied the head of Poker Creek is now eroded into a deep canyon. Adjacent to the head of the canyon, but outside the East Fork drainage, is Poker Flat, a two square mile remnant of pre-glacial landforms containing meadows and flattish slopes. The combination of the two contrasting landforms is an excellent example of the way that glaciers can alter the landscape.

### Mining

Some of the earliest gold discoveries in Josephine County were at Sailor's Gulch, Allen Gulch, and Scotch Gulch (adjacent to but outside the study corridor). Hydraulic ditches were constructed along the East Fork and some tributaries. The gold was derived from an ancient gravel deposit on the ridge between Takilma and Waldo. Several historic, but relatively small, gold placers were explored along lower Dunn Creek.

Gold lode discoveries are rare; the area has no reputation as a significant gold lode district. Southeast of Takilma is a cluster of five moderate-sized sulfide deposits that were mined for copper around the turn of the century. Chromite mining has intermittently taken place at about twenty scattered small deposits in the serpentine terrain.

Numerous valid claims (none currently operating) exist on the lower reaches of both the East Fork and Dunn Creek. Suction dredging probably occurs on a small scale. A significant increase in mining in the foreseeable future is unlikely.

### Hydrology

Both the East Fork and Dunn Creek have a variety of channel types including braided, meandering, and confined. Streambanks range from sandy and gravelly alluvium to bedrock. Old alluvial terraces (10 to 30 feet above the stream) are common.

Downstream from the confluence of the East Fork and Dunn Creek, the valley widens and the stream channel is incised into a flood plain. Soil and gravel from the 1964 flood has been added to the bars within the current channel. The wide channel does not appear to be significantly altered by mining or by the recent aggradation.

Rain and snow-melt tend to run rapidly off the rocky peaks and serpentine terrain. The fractured serpentine bedrock supports springs and a few bogs.

### East Fork

Forest Boundary to Dunn Creek: This one-mile stretch has a relatively straight 50-foot wide gravel bed, incised 10 to 20 feet into bedrock. Shade (less than 50 percent canopy cover) is mainly from conifers and hardwoods on the banks.

Mouth of Dunn Creek to the "East Fork Canyon": This half-mile reach is a depositional area for sediment washed through the canyon. Clumps and strips of hardwood, established since the 1964 flood, are growing on the wide gravel bars along the edge of the stream.

East Fork Canyon: The East Fork Canyon extends to the mouth of Sanger Creek. It has two distinct reaches. The lower reach extends upstream for two miles to Chicago Creek. The stream is confined to the canyon bottom. Almost the whole length was aggraded in 1964. The streambed is largely composed of boulders; little bedrock is exposed in the channel. Stream shade (less than 50 percent canopy cover) is provided by conifers and hardwoods along the banks.

At Chicago Creek, the drainage is incised within a narrow, V-shaped canyon containing rock cliffs, waterfalls, and bedrock pools. The river has carved a sinuous path. The canyon bottom is between 15 and 40 feet wide. Steep slopes alternative with vertical rock walls up to 90 feet tall. Four to ten foot high cascades are numerous, with two falls larger than 25 feet.

Substrate size and composition is varied. The bedrock areas are sculptured by the river, and boiling pots are common. Concentrations of large, well-rounded boulders occur along and within the watercourse. Glacially derived breccias and conglomerates are of special interesting.

Wilderness: The portion of the East Fork within the Siskiyou Wilderness flows through a wide, glaciated valley. Most of this area has a low gradient, except for the uppermost mile or so which is steeper and cascades over rock ledges. A box canyon sits at the very headwaters. The riparian canopy throughout the wilderness is shadier than the lower reaches, but provides less than 75 percent cover.

#### Small Tributaries to the East Fork

Little Elder Creek and Elder Creek comprise about three to five square miles each. Their lowest reach is a small valley and the streams run parallel to each other about 1000 feet apart for one mile before entering the river. Landforms suggest they have not always run parallel. They both have middle reaches that are small canyons, and they both have upper reaches that have flatter gradients and basin landforms. The lowest reach is private agricultural land, and the upper reaches have been intensely roaded and logged. Fifteen to 20 percent of the drainage is serpentine with its associated vegetation. The streams are fairly well shaded with hardwoods that have regrown since logging and the 1964 storm, but riparian vegetation is scanty in the private land. Some of the summer flow is diverted for agriculture.

Page Creek is a three square mile drainage, almost all of which is within the National Forest. The Cowboy coper mine is about a half square mile. The lowest part of the watershed is privately owned; agricultural withdrawal may limit the quantity of water reaching the East Fork in summer. Within the National Forest there is one mile of flattish valley about 1/4 mile wide. Despite selective logging, this part of the stream is well-shaded, mainly with hardwoods. The middle third of the drainage is mostly serpentine, but the riparian zone is moderately well-shaded with hardwoods. The two main branches



of the upper reaches have more shade from conifers, despite the Forest Service roads and harvest units there.

Scotch Gulch encompasses two square miles. It is half serpentine and was placer mined in the 1850's. The Forest land has roads and harvest units. The lower part is private land.

Cedar Gulch has a drainage area of 2 square miles. The upper parts, which are partially serpentine, burned in the Longwood fire, and there are roads and timber harvest. The lower part is private land and is covered with hardwoods.

Long Gulch encompasses two square miles of which about half is serpentine. The Long Gulch riparian canopy was totally destroyed by the Longwood Fire of 1987.

#### Dunn Creek

Confluence with East Fork to North Fork Dunn Creek: This 2 1/2 mile reach is confined to a 40 foot-wide gravel bed with meanders and a fair canopy of hardwoods on the gravel bars. Little sediment appears to have been deposited here in 1964.

North Fork to Poker Creek: This one mile reach is similar to the lower reach, with a narrower gravel bed.

Dunn Creek Gorge: Above Poker Creek is a half-mile of narrow gorge (similar to the gorge described under East Fork Canyon). There are rock cliffs hundreds of feet high, and several bedrock waterfalls with deep pools. Sediment moves through this segment rapidly.

Above the Gorge past Black Creek: The three mile reach to the upper forks is heavily aggraded and parts may be dry in summer, at least during droughty years. There are few terraces and slopes are generally steep. There are conifers on the steep stream-adjacent slopes, but the wide stream bed has poor cover of scattered brush and hardwoods.

The Upper Forks: The upper reach is two twin valleys, each 1 1/2 miles long, that were glaciated. They are flattish but narrow. The eastern one has a perennial lake and possibly an intermittent lake. Early road construction and logging in the westernmost fork has provided much sediment to Dunn Creek.

#### Small Tributaries to Dunn Creek

Poker Creek is four miles long and provides cool water to lower Dunn Creek. The upper end is a scenic eroded glacial basin from glaciation older than that of the East Fork. High rock cliffs surround the upper end of the basin. The hardwood vegetation in the upper channels show that several major snow or debris avalanches occurred here long before the 1964 event, which had no obvious affects.

Black Creek is three miles long and includes 2 1/2 square miles. The origin is a glacial basin with a small lake. The Crazy Peak slide entered Black Creek about one quarter mile from Dunn Creek. This stream has a 50% canopy of fir along much of its length, and may be contributing water that is cooler than that of Dunn Creek, despite the large serpentine area in its drainage.

Packers Creek drains about 1 1/2 square miles and the drainage is about 1/2 serpentine terrain. The upper part was severely burned in the Longwood fire and was salvage logged. Although the riparian areas were not burned as intensely as other parts of the slopes, this small rocky drainage probably does not supply much cool water to the Dunn Creek.

The North Fork of Dunn Creek has a drainage area of about three square miles. There are three reaches. The lowest is a canyon about one half mile long with two tracts of private land. The riparian canopy is mostly hardwoods. The central part of the drainage is steep slopes and a steep stream gradient for one half mile. This area was intensely burned in the Longwood fire. The upper part is a flattish basin that has numerous roads and harvest units, some of which burned in the Longwood fire.

## FINDINGS

The upper East Fork is the best-preserved glacial landform and stream system on the Siskiyou National Forest. Few other areas in the SCORP region have as well-preserved glacial landforms of this size. The valley of the Middle Fork of the Rogue River appears similar, but the East Fork is the only place in the region where this glacial terrain is developed on Klamath Mountain geology. It is the southwesternmost area of recent glaciation in the region. Proximity to the coast, low latitude, and relatively low elevation contribute to the unique geological setting.

Outside of the SCORP region, but nearby in Northwestern California, particularly in the Marble Mountains and the Trinity Alps, similar glacial features are more abundant.

Two unique gorges display contorted rock features weathered by the river and waterfalls. The gorges display excellent water quality and scenic value, however, these values can be found throughout the region.

## WATER QUALITY

### CRITERIA FOR "OUTSTANDINGLY REMARKABLE" RATING

The river has exceptionally pure, clear, and/or clean water. The river is known for its water quality nationally or regionally. The river provides or has potential to provide exceptionally high water quality for a variety of beneficial uses including, but not limited to, fish and wildlife, recreation, and communities.

### EXISTING CONDITION

The flow of the East Fork and its tributaries is unregulated. Water withdrawals at Takilma are for irrigation and possibly domestic use. Water withdrawals outside of the study corridor.

Logging, road construction, the 1964 storm, agriculture, and other development have probably increased water temperatures and intermittent turbidity.

Moderately-high summer water temperatures in the lower reaches due to a wide shallow channel, open riparian area, and normally low summer flow.

Temperature data from the gage on the East Fork 0.3 miles below Dunn Creek and at the mouth of Dunn Creek indicate summer average highs in the low 70's. Mean daily discharge from 1942 through 1987 varied from 13 cfs in late summer to 375 cfs in January.

#### Recent Stream Aggradation

##### East Fork

Early logging and stacked low-standard roads in Section 16 contributed to stream aggradation in the vicinity of Chicago Creek. The section was acquired by the Forest Service in 1968.

The 1964 storm triggered 13 major slides large enough to be seen on aerial photographs. They occurred on undisturbed land as well as on previously entered areas. The event aggraded Chicago Creek and at least three miles of the East Fork, mostly below Chicago Creek, and probably added at least some sediment to the gravel bars below the confluence with Dunn Creek.

Much of sandy part of the aggrading sediment has been washed from the system, although a great bedload of boulders remains, some as large as 20 feet in diameter. Banks of sand and boulders ten to twenty feet deep still exist here and there along the sides of the channels, particularly along Chicago Creek and along the East Fork just below Chicago Creek. The deposits and the scars on the banks indicate that Chicago Creek and the East Fork just below the confluence were buried 20 feet deep in landslide debris. Summer streamflow in some reaches may have been underground, although no such places were seen during the trip to Chicago Creek in July of this year.

The two largest slides on Chicago Creek lie about one half-mile above the confluence. Surface erosion is still delivering sediment to the creek. The pre-1964 streambed is buried by 20 to 30 feet of debris, although the stream is flowing over the debris. Between the slides and the mouth, no places with totally underground flow were seen.

Small fresh deposits of sand and silt were seen along Chicago Creek and the East Fork below Chicago Creek. The system is apparently still moving the finer sediment during high flows. The streambed is made up of boulders. No bedrock is visible in the streambed, although it is exposed in the banks. Among the boulders are numerous small pools up to five feet deep, as well as much large woody material.

The upper part of Sanger Creek also had a half-mile of aggraded stream from early Forest Service logging and roads. A total of almost 200,000 cubic yards entered the East Fork, mostly from Chicago Creek. This is a minimum quantity, and does not include additions from scouring of stream banks.



## Dunn Creek

On Dunn Creek the whole length of the stream was aggraded. About 30 slides occurred, and some 2.0 million cubic yards of soil and rock entered the stream. This figure does not include sediment from scouring of stream banks. The single largest contributor was the Crazy Peak slide (1.7 million cy), which appears not to have been influenced by the then newly constructed road about two hundred yards up the slope. The other major source was the early road construction and harvested areas in the upper west fork of Dunn Creek.

The stream aggradation depleted the only modest pre-1964 riparian canopy. In part due to the serpentine influence, riparian zones of major streams had a scattered overstory of conifers above alders and willows. The shade lost in 1964 has not been totally replaced, although the wide gravel bars at and below the confluence with Dunn Creek now have strips of hardwoods along the edges of the gravel bars. Numerous small conifers, as well as hardwoods, are growing on the debris deposits at the mouth of Chicago Creek. The upper aggraded reaches of Dunn Creek have only a spotty canopy, mostly hardwoods. In most places, the canopy generally does not extend over the water. Overall shade is poor to moderate.

## Relationship to Beneficial Uses

### Fisheries

Water temperatures in the lower reaches are good in the winter, but marginal in summer and early fall. The upper reaches have cool summer temperatures, but anadromous fish may not be able to go that far upstream. Much of the sandy sediment from 1964 has been washed from the system, but remaining boulders and large woody material provide much structure in the aggraded reaches.

### Scenic

The water is normally clear, except during short periods in winter, and contributes to scenic values. The green color of the water and the steep cascades, waterfalls, and pools within the two gorges provide breathtaking scenery.

### Recreation

The clear water and warm summer temperatures reaches attract local swimmers to the lower reaches. A few campers use the cooler high elevations in hot weather. Skiers use the higher elevations when snow is on the ground.

### Community Use

Water is taken from the lowerst reaches for irrigation and possibly domestic use.

## FINDINGS

The water quality on the lower reaches of East Fork and Dunn Creek is good, despite the aggraded channels and moderate to high summer water temperature. Riparian shade and water temperatures have been slowly improving since the 1964 flood.

The upper reaches of East Fork and Dunn Creek have excellent water quality and good clarity, although anadromous fish probably cannot pass the waterfalls to utilize this habitat. However, the cool, clear water produced in the upper reaches provide important contributions to the fish habitat in the lower reaches. These upper reaches are relatively pristine (unaltered), while the smaller tributaries to the East Fork and Dunn Creek have been extensively logged and roaded. The clear or green-tinged water, and unique gorges enhance scenic values. Warmer summer temperatures in the lower reaches enhance local recreation.

## FISHERIES

### CRITERIA FOR "OUTSTANDINGLY REMARKABLE" RATING

Fish values may be judged on the relative merits of either fish populations, habitat, Native American cultural use, or a combination of these river-related conditions. Consideration shall be given for potential as well as existing values.

#### Habitat

The river provides or has the potential to provide exceptionally high quality habitat for fish species indigenous to the region. Of particular significance is habitat for wild stocks and/or federal or state listed or candidate threatened, endangered and sensitive species. Diversity of habitat is an important consideration and could, in itself, lead to a determination of outstandingly remarkable.

#### Populations

The river is internationally, nationally or regionally an important producer of resident and/or anadromous fish species. Of particular significance is the presence of wild stocks and/or federal or state listed threatened, endangered and sensitive species. Diversity of species is an important consideration and could, in itself, lead to a determination of outstandingly remarkable.

### EXISTING CONDITION

#### Overview

The lower reaches of the East Fork and Dunn Creek provide spawning and rearing habitats essential to the survival of wild anadromous salmonid fish genetics in the Illinois River system (D. King, personal communication) (J. McCleod, personal communication). Anadromous barriers occur along the East Fork about one mile above Chicago Creek, and up Dunn Creek, about one-quarter mile above Poker Creek. Above the barriers, the streams provide cool water.

However, anadromous fish stocks endemic to the East Fork and its tributaries are currently at depressed population levels (USFS, 1993c and USFS, 1993d). President Clinton's Forest Ecosystem Management Environmental Analysis identified ("Option 9") the East Fork of the Illinois River as a "Key Watershed" for the overall recovery of these fish stocks (USDA, et al., 1993).

#### Habitat

Habitat surveys within this study area have been conducted by California Department of Fish and Game (1984) and the Forest Service (1980, 1989, 1993). The following excerpts are from reports associated with these surveys.

"The headwaters of the East fork of the Illinois River begin at about 4800' and drop to about 1800' at the California border. The canyon walls are steep V-shaped, except for some box canyon sections between Sanger and Chicago Creeks. The Gradient averages about 5% throughout most of the area surveyed, except in the 1 1/2 mile section above Dunn Creek where it averages about 2%. Pool depths range from 2'Wx4'Lx6'd to 15'Wx30'Lx15'd and averaged 6'Wx10'Lx2'd. Riffles average about 4" deep. The quality of available spawning gravel is generally good. The shade canopy ranges from 85% in the headwaters to about 10% above Dunn Creek" (CDF&G, 1984).

The amount of spawning sized gravel seems sparse but there is obviously a fair amount of utilization by Coho Salmon and probably Steelhead" (USFS 1989).

"Stream segments within the overall study area are characterized by widely fluctuating water volumes throughout the year. These large seasonal flows leave a wide scoured stream beds which gives the streams in the study area a more open character with respect to overhanging vegetation. There is little stream wood in the low-volume summer/fall channel(s)" (USFS 1989).

#### Populations

The study area contains both anadromous and resident salmonids (CDF&G 1984). Winter steelhead trout and Coho Salmon are the predominant anadromous fish within the study area. Resident salmonids consist of both rainbow trout, cutthroat trout and the introduced brook trout (USFS 1989). Precise population information within the East Fork (or the entire Illinois River system) does not exist.

In 1991, the American Fisheries Society (AFS), identified several native salmon and trout stocks within the state of Oregon thought to be facing some risk of extinction. Thus, winter steelhead stock on the Illinois River are presently classified by AFS as facing a high risk of extinction within the river system. In 1991, the Oregon Department of Fish and Wildlife (ODFW) listed the Illinois River winter steelhead stock as a sensitive species. The National Marine Fisheries Service (NMFS) reviewed the Illinois River winter steelhead stock for federal classification as either a "Threatened" or "Endangered" species. NMFS release a decision not to "list" the Illinois River Winter Steelhead stock in the spring of 1993.

The California Dept. of Fish and Game documented sightings of fish in the East Fork up to Sanger Canyon Creek. The one-mile area above Chicago Creek supported more fish than any other area surveyed (rainbow, cutthroat, sh?). The East Fork also is thought to support a run of steelhead and silver salmon. (CDF&G 1984).

A limited low-flow inventory of fish habitat and juvenile fish population was conducted in the East Fork of the River and Dunn Creek by the Illinois Valley Ranger District during the summer of 1989, using the USFS Region Six standard Stream Inventory methods. Limited low-flow Fisheries Level I inventories of selected stream segments on both the East Fork and Dunn Creek were also conducted in 1993. Anadromous fish barriers were evaluated in association with this most recent inventories.

The surveys indicate that coho salmon (*Oncorhynchus kisutch*) utilize only the lowest reaches of the East Fork, about halfway up to the anadromous barrier, but are found all the way up to the anadromous barrier on Dunn Creek. The habitat on both streams is similar, and no reason for the difference in utilization has been found to date.

Rainbow trout were found below the two 30-foot falls in the East Fork gorge (above Chicago Creek), while a small population of Eastern Brook Trout was found above the falls, up to Sanger Canyon.

## FINDINGS

### Habitat

Fisheries habitat within the study area is thought to be of generally poor quality resulting from a lack of key fisheries attributes ( Large woody debris, pools/mile, and width to depth ratios). Anadromous fish barriers limit access beyond approximately one mile above Chicago Creek on the East Fork and one-quarter mile above Poker Creek on Dunn Creek. The headwaters areas provide the primary cool-water refugia within the system, which may be of great value to the recovery of the anadromous fishery.

### Populations

The study area is not known to support any unique fish stocks. However, the East Fork is key to the overall recovery of endemic anadromous fish stocks in the Illinois River system (USDA, et al. 1993). Few, if any, other streams within the upper Illinois River Basin contain a greater quantity of anadromous fish habitat and/or potential high quality habitat.

## BOTANICAL/ECOLOGICAL

### CRITERIA FOR "OUTSTANDINGLY REMARKABLE" RATING

The river or river area contains nationally or regionally important populations of indigenous plant species. Especially important are species considered to be unique, or significant populations of federal or state listed or candidate threatened, endangered, or sensitive species. Diversity of plant communities is an important consideration, and could in itself, lead to a determination of outstandingly remarkable.

### EXISTING CONDITION

The East Fork of the Illinois River and its tributaries contain a wide diversity of plant communities. The Siskiyou Mountains are nationally recognized for botanical diversity; the study area epitomizes this diversity, and contains many of the habitats found across the Forest.

The Brewer's spruce is among the most important species in the study area, mainly because it has a limited range which appears to be declining. The upper, rocky reaches of the East Fork and its tributaries provides a cool refugia for this uncommon spruce.

Port-Orford-cedar also has a limited range, but is common along the East Fork and its tributaries, as well as serpentine habitats and water channels in southwestern Oregon. Port-Orford-cedar plant associations are dependent on riparian habitats.

#### Mainstem East Fork

The upper reaches of the East Fork provide a unique ecological setting. The combination of metavolcanic, granitic and ultramafic soils, along with the high altitude and glacial features, provide habitat for uncommon or relic species. Endemic plant and tree species such as Brewer's spruce, huckleberry oak and Sadler oak occupy the glacially formed slopes. These grow among the Douglas-fir, western hemlock, Shasta red fir, along with other true fir species. Other species such as western red cedar and Alaska yellow cedar, which is documented on glacial topography in both Applegate and Galice Districts, may also grow in the headwater basin.

River-related plant associations documented in the headwater areas include: Port-Orford-cedar/dwarf Oregongrape/twinflower; Port-Orford-cedar - huckleberry oak; white fir/Port-Orford-cedar. The Port-Orford-cedar - huckleberry oak plant association has not been documented anywhere except the East Fork.

Rare plants, including some listed as sensitive, such as Howell's Lousewort, occur in the wet rocky areas. A rare Lewisia species and a Wild Buckwheat are found in the rocky, dry habitats of the ultramafic soil. Habitat exists for the water-dependent Siskiyou Daisy, although its presence has not been confirmed.

California Greenbriar, a river-dependent sensitive plant, is found along the East fork between Cedar Gulch and Page Creek, along with other locations outside the study area.



## Tributaries to the East Fork

### Sanger Canyon

Douglas-fir and white fir dominate the overstory along the glaciated Sanger Canyon. Port-Orford-cedar associations were also observed. The understory includes these conifers with Canyon live oak, Pacific yew, and some stressed and dead knobcone pine. Recent fire activity and effects can be observed in the Canyon. Brewer's Spruce is a near constant component of the understory along the trail which follows the stream in Sanger Canyon.

Cool/wet species such as Oregon boxwood, skunk currant, and ladyfern were observed. Dry and rocky indicators such as Sadler oak, California hazel, and creeping snowberry also occur in the shrub layer.

### Chicago Creek

The most prevalent plant association documented in upper Chicago Creek is white fir/dwarf Oregongrape, which is not water-dependent.

Elevation, soil type and aspect contribute to a moderate possibility of rare plant occurrences along Chicago Creek, although surveys have not been conducted to verify their presence or absence.

### Bybee Gulch

Much of Bybee Gulch is serpentine. Serpentine endemic plants such as California Lady Slipper occur in the Gulch. Two sensitive species have been reported in the area, Bolander's Hawkweed and Bolander's Catchfly. These are both dry-site species (not dependent on the riparian zone). There is a high probability of finding other rare and sensitive plants along the gulch, but surveys have not been done.

### Long Gulch

Plant associations in the upper part of Long Gulch are Douglas-fir - tanoak-Canyon Live Oak and tanoak - Canyon Live Oak. These are not dependent on riparian habitat.

Much of Long Gulch is serpentine and was burned in the Longwood Fire of 1987. A medium to high potential for rare, water-dependent plants exists there.

### Cedar Gulch

No ecological information or sensitive plant surveys is available for Cedar Gulch. There are no documented sightings of rare or sensitive plants despite the large amount of serpentine. There is a high potential for finding rare plants in the riparian area.

### Page Creek

Tanoak - white fir is the most prevalent plant association in the upper part of Page Creek. Serpentine plant associations are likely to occur as well, but have not been documented.

Lower Page Creek contains a sensitive species: California globe mallow. This plant is dependent on riparian habitats.

### Scotch Gulch

Ecological information has not been documented on Scotch Gulch. Harvesting and road building have disturbed the natural habitats; sensitive plants tolerant of disturbance may be present.

### Elder Creek/ Little Elder Creek

Both Elder and Little Elder Creeks have been extensively disturbed by roads and harvest. Some rare plants and two populations of a sensitive plant are present in the serpentine portions of these watersheds. The plants are not water-dependent.

### Dunn Creek

Plant associations in the upper Dunn Creek drainage are white Fir - Port-Orford-cedar/Depauperate, Port-Orford-cedar - Huckleberry Oak, Port-Orford-cedar/dwarf Oregongrape/twinflower, and white Fir/Sadler oak - dwarf Oregongrape.

Two rare plants are documented in the Dunn Creek gorge between Black and Poker Creek. One of the two is associated with riparian habitat. Both are found elsewhere on the Illinois Valley Ranger District. Sensitive plant habitat has been mapped throughout the Dunn Creek drainage, but most of the area has not been surveyed for individual species.

The Champion Brewer's Spruce Tree (largest in California) is found in the Dunn Creek watershed. The environment which allows Brewer's Spruce to find refuge in this area is related to the glacial topography and drainage.

Other water-dependent sensitive plants are likely to occur, but no surveys have been done.

### Tributaries to Dunn Creek

#### Black Creek

Plant associations documented in the Black Creek drainage are Port-Orford-cedar / huckleberry Oak and Jeffrey Pine - Western white pine. Water-dependent sensitive plants are likely to occur, but no surveys have been done.

### Poker Creek

Plant associations documented in the Poker Creek drainage are tanoak/poison oak/honeysuckle and white fir - tanoak. Both associations are common. Sensitive plants may occur in this drainage, but surveys have not been done.

### Cobra Gulch

An unnamed drainage locally known as "Cobra Gulch" reportedly has abundant Cobra lily plants (Darlingtonia californicus; on the California watch list). The Cobra lily plant is dependent on direct contact with water. These habitats are associated with other rare plants, some of which are sensitive or candidates for federal listing status such as Threatened or Endangered.

### North Fork of Dunn Creek

Plant associations documented in the North Fork of Dunn Creek include white fir - Port-Orford-cedar, Douglas-fir - white Fir/dwarf Oregongrape and tanoak-white fir. No occurrences of rare plants have been documented.

### Packers Creek

Little is known about the ecology or botanical composition of Packers Creek.

## **FINDINGS**

The study area epitomizes the botanical diversity that characterizes the Siskiyou Mountains. The combination of metavolcanic, granitic and ultramafic soils, along with the high altitude and glacial features, provide habitat for uncommon or relic species. Endemic plant and tree species such as Brewer's spruce, huckleberry oak and Sadler oak occupy the glacially formed slopes.

The Brewer's spruce is among the most important species in the study area, mainly because it has a limited range which appears to be declining. The upper, rocky reaches of the East Fork and its tributaries provides a cool refugia for this uncommon spruce.

The East Fork and its tributaries does not have a concentration of rare plants comparable to Rough and Ready Creek, but several riparian-dependent sensitive plants have been documented in the area, and the likelihood of undocumented occurrences is high.



## WILDLIFE

### CRITERIA FOR "OUTSTANDINGLY REMARKABLE" RATING

Wildlife values shall be judged on the relative merits of either wildlife populations or habitat, or a combination of these conditions.

#### Populations

The river or area within the river corridor contains nationally or regionally important populations of indigenous wildlife species. Of particular significance are species considered to be unique or populations of federal or state listed or candidate threatened, endangered and sensitive species. Diversity of species is an important consideration and could in itself lead to a determination of outstandingly remarkable.

#### Habitat

The river or area within the river corridor provides exceptionally high quality habitat for wildlife of national or regional significance, or may provide unique habitat or a critical link in habitat conditions for federal or state listed or candidate threatened, endangered and sensitive species. Contiguous habitat conditions are such that the biological needs of the species are met. Diversity of habitats is an important consideration and could, in itself, lead to a determination of outstandingly remarkable.

### EXISTING CONDITION

The East Fork and its tributaries provides habitat for many avian, mammalian, reptilian, and amphibian species. Many of these species inhabit or use the riparian corridor for cover, food, and water. The geology of the area and naturally recurring wildfire influence the distribution of wildlife habitat and seral stage development.

The Port-Orford-cedar and true fir plant communities found in the upper reaches of the study area, along with the tanoak series in the lower reaches, are common associations (habitat) throughout the Siskiyou. Upland wildlife populations are likely to be those associated with these plant communities.

Other habitats (microsites) within the study corridor include rock sites (small cliffs, caves, talus) and wet areas.

Many wildlife species are known to inhabit riparian areas. Amphibians, in particular, are directly dependent on streamside moisture and cover. Riparian-dependent species that may occur along the East Fork and its tributaries are: Common Merganser, American Dipper (water ouzel), Great Blue Heron, Killdeer, Belted Kingfisher, Tailed Frog, Red-Legged Frog, Western Toad, Western Pond Turtle, Ringneck Snake, Western Skink, yellow legged frog, and spotted sandpiper.

No endemic species or subspecies of wildlife are known to exist within the study area, however, no specific studies related to subspecies taxonomy have been done.

## Proposed, Endangered, Threatened, and Sensitive Species (PETS)

Site-specific surveys have not been conducted within the study area for Proposed, Threatened, Endangered, or Sensitive (PETS) wildlife species. Forest Wildlife Observation Database was checked for recent and historic PETS wildlife sightings.

### Federally Listed Threatened and Endangered Fauna

No northern spotted owl activity centers are currently documented within the study area. One pair was found in Poker Creek in 1980, but has not been located since. No other listed species are known to inhabit the study corridor, except bald eagles, which have periodically been observed within the study area (USFS, 1993).

The steep rocky cliffs of Sanger Peak is potential habitat for the peregrine falcon. No surveys have been done to determine site occupancy. No peregrines have been sighted near Sanger.

Local trappers and wildlife enthusiasts have reported seeing wolverine in the East Fork watershed. Surveys have not been done to verify or refute these sightings.

### USFS Sensitive Fauna

The study corridor likely contains habitat of the following sensitive vertebrate species found on the Forest: Pacific western big-eared bat, California mountain kingsnake, Common King Snake, Red-legged Frog, peregrine falcon, and Northwestern Pond Turtle.

Pacific Western Big-Eared Bats inhabit buildings, deep rock crevices and abandoned mine tunnels; areas that are seldom disturbed by humans.

The California Mountain Kingsnake inhabits forest edges, especially where Western Fence Lizards and Sagebrush Lizards are found.

## FINDINGS

### Populations

The study area contains a number of riparian-dependent wildlife species and may contain some sensitive wildlife species. However, these species are not thought to be unique to the study area corridor. Existing information does not indicate that the study area contains nationally or regionally important populations of indigenous wildlife species.

### Habitat

The wildlife habitats within the study area corridor are unusual from a regional/national point of view, however, comparable areas exist along other sections of the Illinois River including the portion already designated Wild and Scenic. The study area does not provide exceptional habitat for wildlife of national or regional significance, or provide unique habitat or a critical link in habitat conditions for presently listed federal or state or candidate

threatened, endangered, and sensitive wildlife species. However, the study area may be important for some wildlife species as corridor connections that facilitate movement to and from California.

## SCENIC

### CRITERIA FOR "OUTSTANDINGLY REMARKABLE VALUE" RATING

The landscape elements of landform, vegetation, water, color, and related factors result in a notable or exemplary visual features and/or attractions within the geographic region. When analyzing scenic values, additional factors such as seasonal variations in vegetation, scale of cultural modifications, and the length of time negative intrusions are viewed may be considered. Scenery and visual attractions may be highly diverse over the majority of the river or river segment length and not common to other rivers in the physiographic region.

### EXISTING CONDITION

The combination of landforms, rock formations, waterforms, and vegetative features provide a spectacular visual display throughout the East Fork and its tributaries. Portions of the East Fork and Dunn Creek flow through narrow, steep canyons or gorges. The glacial landforms in the headwaters contrast these gorges with broad, gently sloping valleys and views of the upper peaks. Much of the watershed has been roaded and logged, which has degraded the overall visual quality. However, within the study corridor, and along the streams themselves, these modifications are not as visible. Many of the trails and access roads provide long views of the Illinois Valley below, and Siskiyou Wilderness above. The effect of the logging and roads is secondary to the majesty of the valley and peaks.

The combination of rock types in the watershed contributes to the variety of water color, and clarity (see Geology/Hydrology). The East Fork and Dunn Creek flow with clear to blue-green water and clear quickly after storms. Additionally, the water course creates interesting patterns of deep pools interspersed with small boulder rapids; and steep whitewater cascades that have larger boulders, numerous waterfalls and plunge pools. In winter, water cascades from steep tributaries and slopes.

Visual diversity is created by the variety of the vegetation types in the watershed. Large old-growth conifers, hardwood trees and shrubs, and sparse serpentine savannahs provide variety in relation to color, texture and structure. Flowering dogwood, maple, and other deciduous species provide seasonal color variations. The Longwood Wildfire of 1987 burned several thousand acres of the East Fork watershed. The barren hillsides scarred by the wildfire are in stark contrast to the unburned forested slopes.

The East Fork trail #1274 provides access along the East Fork. Through most of its length, it stays high on the hillside, offering long views of high peaks, and the Illinois Valley below. The river itself is not visible except at the extreme lower and upper pieces of the trail.

Several Forest Service roads cross the East Fork watershed. The peaks at the head of the various drainages command the most attention, except where the roads parallel or cross the drainages themselves.

Of special scenic value are two gorges found on the East Fork and on Dunn Creek (see Appendix D, East Fork and Dunn Creek photographs). The gorge on the East Fork begins a quarter-mile upstream of Chicago Creek and continues almost to the Siskiyou Wilderness boundary. The gorge is about 15 to 40 feet wide, contained by vertical rock walls 15 to 90 feet tall. Large, round boulders along with a variety of bedrock and substrate provide a colorful representation of the geologic assemblage within the basin. Seeps and springs create habitat for columbine, tiger lily, and ferns. Two large waterfalls (approximately 25 feet) and four smaller falls, high gradient cascades, boiling pots, and rock sculptures are the most prominent features within the gorge.

The Dunn Creek gorge is similar to the East Fork gorge, but somewhat less dramatic. It is found above Poker Creek. Several small falls, cascades, rock sculptures, and deep pools are hidden beneath steep rock walls. The Dunn Creek gorge is somewhat more forested. Neither gorge is easily accessed or altered by human influence.

## FINDINGS

The scenic values of the East Fork of the Illinois are similar to those of other drainages in the physiographic province (the Siskiyou Mountains). Of particular note, however, is the twin gorges of Dunn Creek and the East Fork. These gorges are visually and aesthetically unique, and of special significance and value as a scenic resource.

The glacial features visible at the headwaters of the East Fork and its tributaries are unique for the SCORP region, and provide contrast to the low-elevation topography, streamcourse, and vegetation.

## RECREATIONAL

### CRITERIA FOR "OUTSTANDINGLY REMARKABLE" RATING

Recreational opportunities are, or have the potential to be, unique enough to attract visitors from outside of the geographic region. Visitors would be willing to travel long distances to use the river resources for recreational purposes. River-related opportunities could include, but are not limited to, sightseeing, wildlife observation, photography, hiking, fishing, hunting and boating.

Interpretive opportunities may be exceptional or have the potential to attract visitors from outside the geographic region.

The river may provide or have the potential to provide settings for national or regional use or competitive events.

## EXISTING CONDITION

The study area currently supports low to moderate recreation use, however, the potential for attracting visitors from outside the local area is high.

The majority of use occurs along the lower East Fork Illinois River trail, the Osgood Ditch trail, the Black Butte trail, the Black Butte Tie trial, and the Sanger Peak trail. Crazy Peak and Sanger Creek trails are used as access trails to the East Fork for hikers who want to make shorter day loops. All totaled, 11 miles of maintained trails access the area. Local residents enjoy hiking, horseback riding, hunting, fishing, sight seeing, botanizing, panning for gold, and swimming.

The East Fork drainage is accessed on the northern end by Forest Service system roads built as haul roads for past timber sales. A Forest Service road system parallels the drainage on ridges to the east and west, leading to the Siskiyou Wilderness on the south.

The drainage above Bybee Gulch is accessed by eight maintained system trails that lead to Sanger Peak, Black Butte, Twin Valley, Young's Valley, the Siskiyou Wilderness, and many other interesting places.

Four small perennial lakes occupy cirques within the drainage but are not well known and use is low.

The study area above Bybee Gulch, gives the recreational user a semi-primitive to primitive non-motorized experience.

## FINDINGS

Recreation use in the study corridor is moderate to low, but opportunities to enhance the recreational values through interpretation are many. Although the East Fork Illinois and its tributaries provide some local dispersed and backcountry recreational use, the study area is not considered unique in comparison to recreational opportunities provided on other rivers in the area.

## CULTURAL - PREHISTORIC

### CRITERIA FOR "OUTSTANDINGLY REMARKABLE" RATING

The river or area within the river corridor contains a site(s) where there is evidence of occupation or use by native Americans. Sites must be rare, one-of-a-kind, have unusual characteristics or exceptional human interest values. Sites may have national or regional importance for interpreting prehistory, may be rare and represent an area where a culture or cultural period was first identified and described, may have been used concurrently by two or more cultural groups, or may have been used by cultural groups for rare or sacred purposes. Of particular significance are sites or features listed in, or eligible for, inclusion in the National Register of Historic Places.



## EXISTING CONDITION

Cultural resource surveys have recorded two prehistoric sites in the study area. Site SK-243 is located on private land in the Page Creek drainage. It consists of flaked and ground stone tools and is probably associated with the Takelma tribe. Site SK-905 is located in the Little Elder Creek drainage. This site is a lithic reduction center associated with bi-polar flaking techniques. Possible hammerstones and an anvil were recorded.

The probability that additional sites occur along the East Fork or its tributaries is high. Such sites would probably be procurement areas associated with seasonal task-specific activities.

## FINDINGS

The prehistory of interior southwestern Oregon is poorly understood in relation to the rest of the state (Aitken, 1986). The minimal archaeological research conducted to date in the area has centered on establishing a local chronology and segregating the archaeological record into cultural components. In this context, any prehistoric site is important in providing additional information on upland prehistoric subsistence-settlement systems.

## CULTURAL - HISTORIC

### CRITERIA FOR "OUTSTANDINGLY REMARKABLE" RATING

The river or area within the river corridor contains a site or feature associated with a significant event, an important person, or regionally unique location(s) of importance to Indian tribes (religious activities, fishing, hunting, and gathering). A historic site(s) and/or features(s) in most cases is 50 years old or older. Of particular significance are sites or features listed in, or eligible for inclusion in, the National Register of Historic Places.

## EXISTING CONDITION

A total of 15 recorded historic sites exist in the study area: 4 cabin sites, 3 trails, 2 historic dumps, 2 mining sites, 2 ditches, a bridge, and a road segment. Several of the historic sites appear to date to the earliest days of gold mining in the area (early 1850's). The two mine ditches are among the earliest ditches constructed by miners in the area, and are associated with Sailors Diggings and the Easterly Mine, an important hydraulic mining area on private property (Brooks and Ramp, 1968; Murphy, 1988). A number of tributaries, such as Scotch Gulch, were also involved with turn of the century mining (Brooks and Ramp, 1968). None of the recorded cabins are still standing, but at least one dates to the late 1880's and could have some archaeological value. Other sites represent early Forest Service administrative activities (a guard station and two of the trails).

## FINDINGS

Many of the historic sites located in the study area are associated with a major historic event - the discovery of gold in Oregon in 1850. This event was an extension of the ongoing California Gold Rush. The discovery of gold had disastrous effects on local native American populations and led by extension to the settlement and development of southwestern Oregon by Euro-Americans. Historic mining ditches located in the study area are directly river-related. Without water, extensive hydraulic mining could not have taken place at such sites as Sailors Diggings in the Waldo area.

While unique given a national perspective, other sites located in the region, such as the Josephine Creek drainage, offer a more comprehensive picture of early mining activities.

Sites relating to early Forest Service history are important locally, but does not appear to make a significant contribution to the literature.

None of the sites or areas discussed above have been evaluated as to their eligibility to the National Register of Historic Places.

## CULTURAL - TRADITIONAL USE

### CRITERIA FOR "OUTSTANDINGLY REMARKABLE" RATING

The river or area within the river corridor contains regionally unique locations of importance to Indian tribes (religious activities, fishing, hunting, and/or gathering). Locations may have unusual characteristics or exceptional cultural value being integral to continued pursuit of such activities. Locations may have been associated with treated rights on ceded lands or activities unprotected by treaty on ceded lands or in traditional territories outside ceded lands.

### EXISTING CONDITION

No known traditional use areas exist within the East Fork study area.

## FINDINGS

No evidence suggests that the East Fork of the Illinois River study area is presently used for traditional activities by local Indian groups. The three Indian tribes (Tolowa, Karuk, Takelma-Siletz) consulted did not provide additional information.

# APPENDIX A

## EAST FORK ILLINOIS /

## DUNN CREEK

## ELIGIBILITY STUDY

## AREA MAP

SHADED AREA SHOWS APPROXIMATE STUDY AREA BOUNDARY

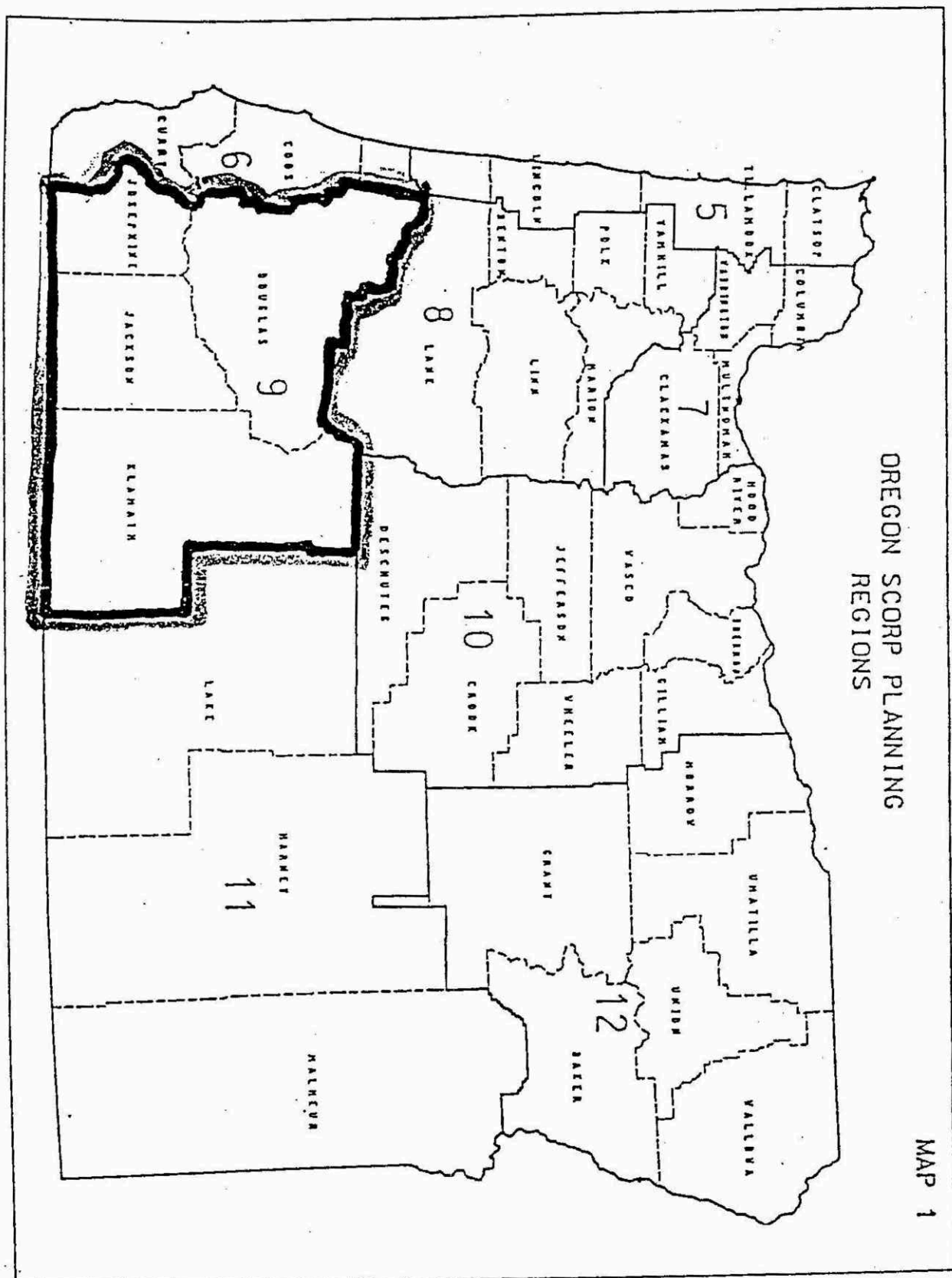
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HUMBOLDT MERIDIAN

SCALE 1/2 INCH = 1 MILE



APENDIX B



APPENDIX C  
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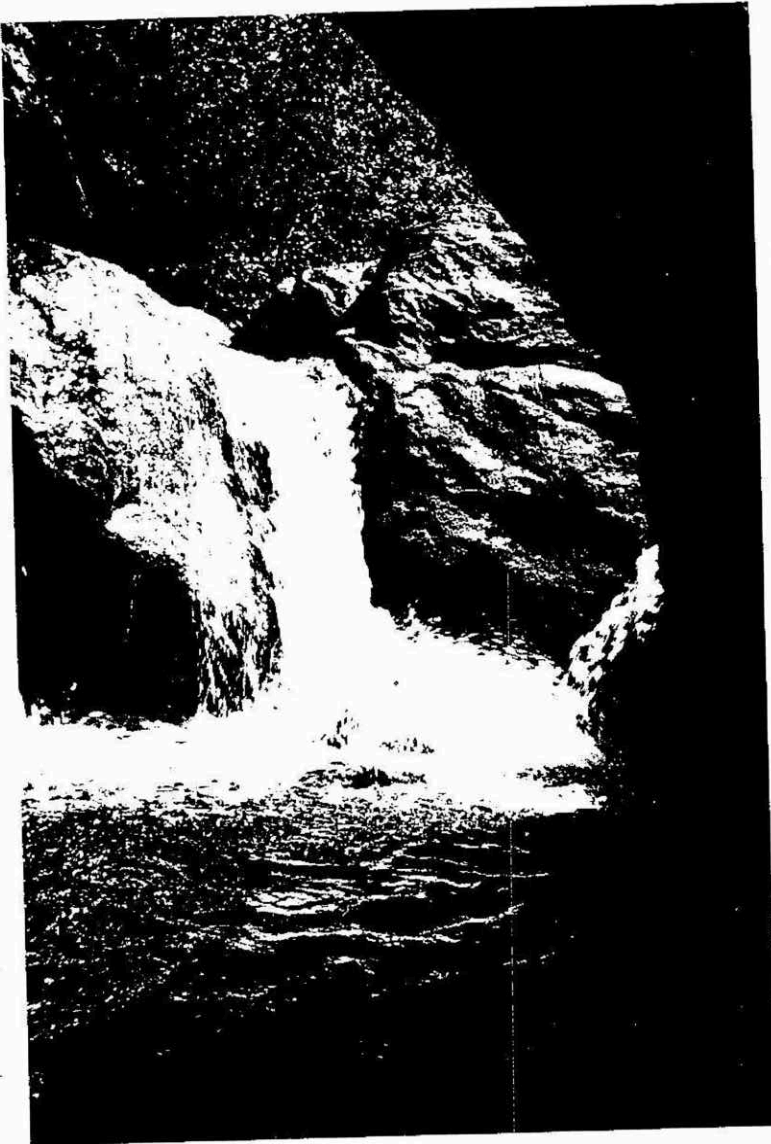
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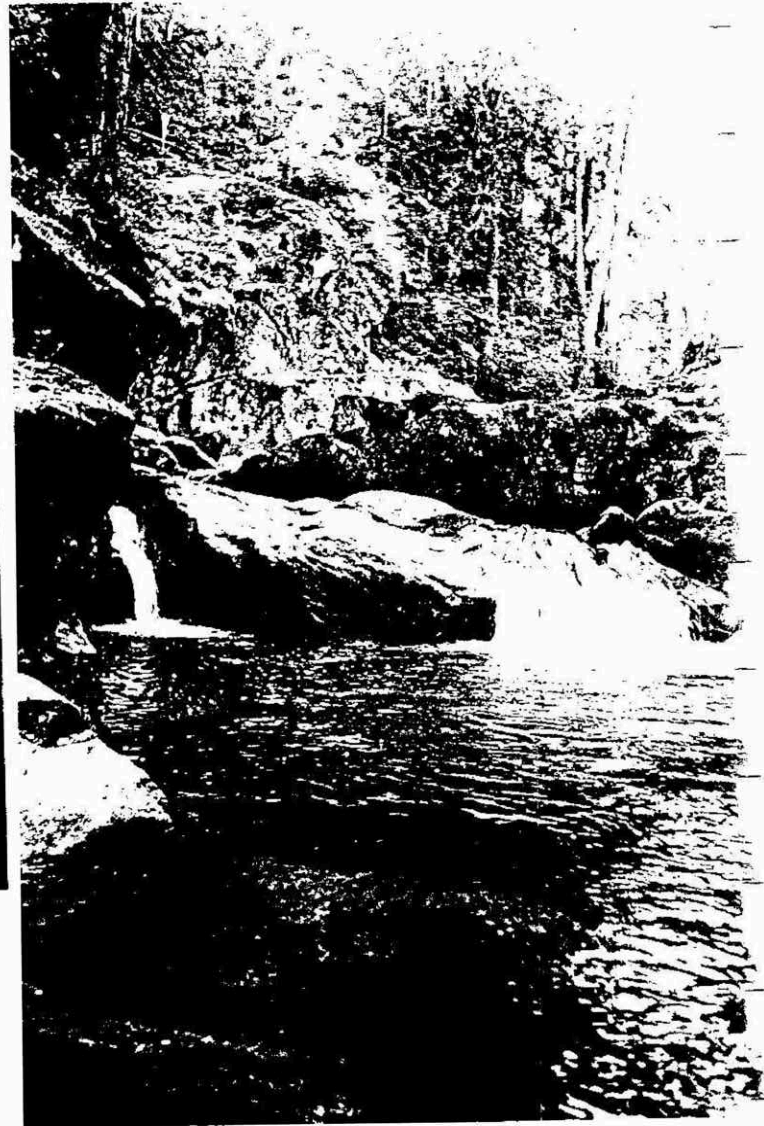
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APPENDIX D

PHOTOGRAPHS OF EAST FORK AND DUNN CREEK GORGES



Typical Smaller Falls - East Fork



East Fork cascade and pool



One of two larger falls on the East Fork



Small falls and pool above second large falls





Clear water and riparian vegetation



Second large East Fork falls at a distance

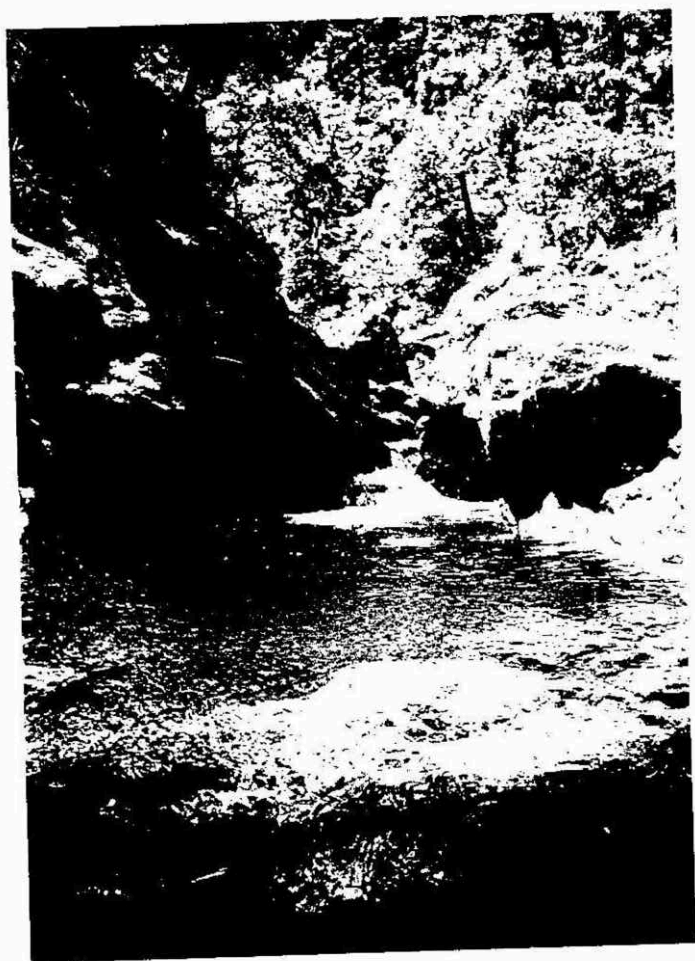


Waterfall and seeps - East Fork





Views from the gorge up to glacial peaks



Scenes from Dunn Creek