

# Middle Illinois River Watershed Analysis

## Social Module

**Key Questions:** What are the major historic uses of the watershed? What is the recreational use within the watershed? What is its potential? What is the economic importance, past, present and future, of the watershed?

## Native American History

### Prehistory and Ethnography

Broadly speaking, the native people of the region were hunter-gatherer-fishers who made their living from a wide variety of natural resources to be found in the narrow canyons and small interior valleys they occupied. People wintered in semi-permanent villages located along major rivers and dispersed during the spring-summer-fall season to exploit upland resources. The archaeological record reflects this subsistence-settlement system.

Ethnographically the region was occupied by Penutian and Athapaskan speakers. Tribes included the lowland Takelma of the upper Illinois River; Athapaskans occupied the Applegate Valley (Kendall 1990). Gray (1987: 20-24), however, concludes that the entire Illinois River drainage was occupied by Athapaskan speakers. At the time of Euro-American contact native cultures could be characterized as simple stratified village-based societies with ceremonial systems much like that found among the Hupa, Karuk, and Wiyot of northwestern California (Aikens 1993, Kendall 1990: 591). An excellent synthesis of the Takelma and their Athapaskan neighbors is provided by Gray (1987).

The prehistory of southwest Oregon has recently been summarized by Aikens (1993: 221-266). The oldest recorded site in our immediate area is located at Marial on the Rogue River. This site has been dated to around 8000 years before present (BP) (Schriendorfer 1985). Recorded archaeological sites located in the analysis area include the MaCalaeb's Ranch site (35JO32), possibly correlated with the ethnographic site "Talsalsan", and the Gallaher site (35JO28), a late Archaic site that was occupied to the mid-1800's. In addition, pit house village sites have been recorded on the wild section of the Illinois River (Steep 1994). A village site was reported at the mouth of Deer Creek. Many sites were lost as river terraces were mined for gold beginning in the late 1850's.

Traditional Native American cultures were effectively destroyed in the Illinois Valley area by the arrival of miners in the early 1850's, and the subsequent Rogue Indian Wars. After the 1853 treaty, most of the Takelma were on the Table Rock Reservation. On March 25, 1856 an important but indecisive battle was fought in the vicinity of Eight Dollar Mountain. In 1856, after the cessation of hostilities, they were moved to the Grand Ronde Reservation, and also to the Siletz Reservation.

At present there does not appear to be any formal use of the area by Native Americans.

## **Indian Burning**

Fire is an important aspect of ecosystem function in southwest Oregon. Major plant communities are dependent on fire and other types of disturbance to successfully maintain ecosystem health (Atzet and Martin 1991). In this context, Native Americans played an active role in maintaining fire dependent communities over time, and in establishing themselves as the dominant "edge dependent species" (Bean and Lawton 1993; Lewis 1989, 1993).

There are numerous parallels between modern vegetation management and Indian burning. Each seek to maintain an array of early to mid-seral plant communities across the landscape. Such communities provide small and big game habitat, natural fuel breaks, and for native populations various edible plant foods, materials for basketry and other technological uses. Other uses for Indian fires included hunting, crop management, insect collection, pest management, warfare, preparing foods, and clearing areas for travel (Williams 1993). Fire also recycles nutrients, provides vistas, and often destroys forest pathogens. See Williams (1993) for a recent bibliography of the use of fire by Native Americans.

Until recently specific ethnographic information for the use of fire in southwest Oregon was limited (Lewis 1989). However, research specific to the Applegate and Illinois Valleys has been published (McKinley and Frank 1995, Pullen 1995). In addition to these recent publications, detailed information is available for the Willamette Valley (Boyd 1986), and it is possible to extrapolate techniques to native populations in the analysis area based on similarities of plant communities. Similar plant communities also occur in northern California, such as chaparral, and ethnographic data is available for burning by those tribes. Natives' burning practices in southwest Oregon must have functioned similar to those described for such tribes as the Miwok, Hupa, Tolowa, and Wintun found in California (Lewis 1989, 1993). See Blackburn and Anderson (1993) for other aspects of natural resource management by Native Americans.

The following review is based on Lewis (1989) and Pullen (1995). In addition, Pullen (1995) provides an extensive review of historic journals and other writings illustrating Applegate and Illinois Valley plant communities at the time of historic contact.

**Riparian zones:** Conifers were an important part of riparian zones along the Illinois River and their tributaries; ponderosa pine along the upper Illinois River and Douglas-fir on its lower reaches.

**Valley floor-oak-grasslands:** These plant communities were burned beginning as early as late July and continuing through September. Burning often occurred after spring rains. Burning initiated early growth of grasses and provided habitat for game. Burning also controlled acorn destroying insects (McCarthy 1993). Native American seasonal habitation sites are usually found along the boundaries of this zone. Recent research indicates that more oak-pine habitat existed in the past and that these communities were specifically maintained by native burning (Pullen 1995). Open ponderosa pine was maintained, interspersed with open groves of Oregon white oak.

**Valley slopes:** North-facing slopes in the Illinois Valley were covered with open stands of ponderosa and sugar pine, and an occasional Douglas-fir. South-facing slopes were covered with grass, except along ravines where oaks, chaparral, and scattered ponderosa pine occurred.

**Chaparral:** Fires were usually initiated in the fall. The primary goal was to maintain a mosaic of early to mid-seral plant communities that functioned as small and big game habitat. Edible plant species were also produced. This mosaic created natural fuel breaks. Spring burning helped to maintain more

permanent openings. Fire was also used to create seedbeds for planting of tobacco; tobacco was the only "cultivated" plant species.

**Mid-elevation forests:** Fire was possibly used to maintain open understories in stands dominated by Douglas fir and ponderosa pine. Fires eliminated the build up of ladder fuels that could contribute to stand replacement fires. Meadows were maintained but overall the native use of fire in this zone was limited.

**Upper elevation forests:** Upper elevation forests in the Illinois River drainage was composed of mature forest of fir, pine, and cedar. Meadows were likely maintained by Indian burning but overall use of anthropogenic fire in this zone was limited.

One of the management objectives of native burning was the maintenance of wildlife habitat, therefore a brief discussion of wildlife populations at the time of contact is in order. Based on a review of historic sources Pullen (1995: VI-19-20) provides the following general observations:

**Deer, elk, bear and wolf:** Deer, elk, bear and wolf populations were much higher before or at the time of Euro-American contact. This can be attributed to the positive effects of Indian burning.

**Beaver:** Large numbers of beaver existed along the Applegate River, but it is difficult to determine beaver populations for the Illinois River drainage.

**Rabbits and squirrels:** Rabbits and squirrel populations may have been considerable in the Illinois Valley. Jack rabbit populations may have been high due to the maintenance of quality habitat in the valley. Silver grey squirrel populations would have benefited from fire maintained oak-pine woodland habitats.

### **Fire in the Landscape-Cultural Landscape Restoration**

One consequence of the removal of Native Americans through either direct violence or forceful removal to reservations was the interruption of periodic burning of specific plant communities, especially those communities found at the interface of oak-pine valley woodlands and forested slopes. Miners, by contrast, tended to burn indiscriminately to improve access to mining areas. Burning by miners, and other Euro-Americans, embodied an "*ecological transition*" which changed the distribution of habitats and array of seral communities across the landscape, and may have contrasted sharply with those communities which existed over time from Indian burning. The legacy of burning from mining and the subsequent distribution of plant communities across the landscape may bias our vision of what we consider to be pre-settlement conditions.

Forest Service fire suppression policy also influenced the composition and structure of plant communities. After 1910 fire suppression became better organized, and following WWII, new techniques such as smoke jumping and easy access to previously unroaded areas, allowed for more efficient fire suppression. In addition, large fires primarily caused by lightning, such as the Silver and Longwood Fires of 1987, still periodically dominate the landscape.

The natural fire frequency of the area can lead to questioning the role of Native American burning. Is it possible to separate out the role of Native American habitat management from naturally occurring fire? If we allow for a large time frame in which native people used fire, possibly thousands of years in specific habitats, we can posit that a number of plant communities were primarily *anthropogenic* in nature,

and owed their continued existence to the periodic use of fire by Native Americans. In this context, prescribed fire will play a critical role in maintaining the vitality of the watershed over time.

For a discussion of fire and fire management in the watershed, see the [Fire](#) section of this analysis.

### **Native Management of the Anadromous Fish Resource**

The importance of anadromous fish resources to aboriginal societies is well documented in the ethnographic literature for northwestern California and southwestern Oregon (Hewes 1942, 1947; Kroeber 1925; Kroeber and Barrett 1960; Rostland 1952; Suttles 1990). Estimated total yearly consumption of salmon in native California, which includes northwestern California watersheds, is estimated at over 15 million pounds (Hewes 1947). Chinook salmon, *Oncorhynchus tshawytscha* and silver or coho salmon, *O. kisutch* dominated aboriginal fish harvest. The abundant seasonal runs and ease of procurement of anadromous fish strongly influenced the distribution of aboriginal settlements and the spiritual life of native peoples.

Harvesting and storage of anadromous fish in the Pacific Northwest has been part of a yearly subsistence routine dating back to prehistoric times (Aikens 1993). Charred salmon bone was recovered at the Marial site located on the Rogue River. This site dates back to at least 8000 BP (Schriendorfer 1985). North of the analysis area exploitation of riverine resources occurred at the Umpqua-Eden site located on the Umpqua River estuary. Artifacts associated with fish procurement and salmon-coho bones were recovered; this site dates to 1010 BC (Ross 1990). The recent excavation of the Gallaher site on the Illinois River yielded artifacts associated with fishing technology.

Fishing techniques used throughout the region include hook-line, netting from canoes, dip nets from falls, harpoons, night fishing with torches, clubs, salmon fences (weirs), and basketry traps (Gray 1986; Kroeber 1925). Salmon was cooked and then pulverized for storage for winter use. Fish drying was a common method of preservation and extremely important as a winter food source. Salmon eggs were smoked. In hard times towards the beginning of spring, the tails and heads of salmon might be eaten with some acorn mush. Spring runs of salmon were especially important at a time when stored winter reserves were dwindling or exhausted.

The distribution of villages and camps along the Rogue and Illinois Rivers and their tributaries attest to the importance of obtaining and processing fish. Major villages were often located near falls or rapids to facilitate harvesting. Examples are the village sites at Gold Hill and Marial on the Rogue River, the village site of *Tlegetlinton* located at the confluence of the Rogue and Illinois Rivers, and McCaleb's Ranch located within walking distance of a falls on the Illinois River. These same sites are used by fisherman today.

Native peoples were familiar with all major fish species: trout, salmon-trout, steel-head, silver-side, and chinook (Gray 1987). In addition, fresh water fish, mussels, and crawfish were taken. Willows and other wetlands materials were used in basketry.

Harvesting of anadromous fish was incorporated in a larger web of ceremonial interactions. Ritual procedures were used to organize harvest of a variety of food resources and to insure a sustainable resource. Part of the yearly ritual cycle was devoted to salmon (Sewezy and Heizer 1977). Tribes in northwest California and southwest Oregon had "first salmon" rites. Rites were often held with the onset of the spring king salmon run, a fish migration of major importance. These rites were used to recount orally the myth of the origins and travels of the first Salmon, who became a culture-hero and was invited

to ascend the rivers and streams again. In northwest California, timing of these rituals was controlled by a priest or formulist (Kroeber 1925), who held special knowledge. Tribal members were strictly forbidden to eat salmon until rituals were completed, and often up to ten days afterwards. These restrictions had the ecological effect of avoiding premature harvest of salmon and to insure that a portion of the run could travel upriver. Inter-tribal conflicts concerning downstream overharvest were thus avoided. A first salmon ceremony was performed at Ti'lo-mi-kh falls in Takelma territory. This was a central place which drew people from the entire watershed (Gray 1987). Among Athapaskans the first five or ten Chinook were ritually eaten by the entire group (Miller and Seaburg 1990). Failure to incorporate salmon into the ritual cycle was believed to result in poor fish runs or failures of entire watersheds to produce fish.

These same ritual specialists organized the building of fish dams and weirs at critical locations. Weirs were left open at night both to ensure that facilities weren't damaged as well as to allow the continued passage of fish upriver. Dams were removed after a set fishing period (Waterman and Kroeber 1938).

For a discussion of the anadromous fish resources of the watershed, see the [Aquatic](#) section of this analysis.

## **Euro-American History**

### **Gold Mining**

The discovery of gold in southwest Oregon brought about tremendous change in the Illinois Valley area. The first known trails into the Illinois Valley from the west were opened in early 1851, bringing people from Trinidad, California, and over the Siskiyou from above present day Happy Camp. Reviews of regional environmental and mining history are found in McKinley and Frank (1996), Ramp and Peterson (1979), and Francis (1988).

In the spring of 1851 the first road from the southern Emigrant route was opened over Hays Hill and into the Illinois Valley by the Rawlings party. Like many others of that time period, the Rawlings entered the Illinois River basin in search of gold. Lead by a native American guide, they found gold at the mouth of Josephine Creek in May of 1851. Josephine Creek and later Josephine County was named after Josephine Rawlings, a young member of the original discovery party (Street 1971). The actual date of the discovery of gold in the Josephine Creek drainage is clouded by various accounts. Some place the date in July of 1850. For a complete discussion of the confusion about dating see Casteran (1992).

Mining activities eventually covered a wide area within the analysis area. Josephine Creek and Canyon Creeks, and their tributaries, were intensively mined from 1852 through the early 1900's and had important production (Brooks and Ramp, 1968: 194; Ramp and Peterson, 1979: 30). Placer sites in the watershed include Sixmile Creek, Hoover Gulch, Rancherie and Briggs Creeks, and Oak Flat (Brooks and Ramp, 1968: 194).

Ramp and Peterson (1979: 30-31) state: "The mining history is mainly in its placer activity. There were numerous moderate-sized hydraulic mines on Josephine Creek, where the bed rock is entirely serpentine, and where two prominent benches or terraces of partially cemented gravels occur. The higher and more extensive terrace is 150 ft. above the present stream channel and is well cemented. Early miners did considerable drifting (tunneling) on the bedrock. The lower, less extensive terrace is about 30 ft. above the stream and has been worked out. Platinum and nickel-iron mineral josephinite were also contained in the placer gravels of Josephine Creek. The Anderson Mine, No. 310, was operated by hydraulic methods

during the late 1880's and early 1900's and had a considerable production of gold and platinum from a broad gravel bench on both sides of the Illinois River below the mouth of Josephine Creek and above the mouth of Deer Creek." The proposed **Petite Placer project** will take place on a section of the old Anderson Mine site.

Canyon Creek, a tributary of Josephine Creek, was explored early by miners and contains a rich history. Canyon Creek, often spelled "Kenyon" or "Cannon", "...was the first good sized settlement in southern Oregon...This was one of the four polling places established by the legislature when Jackson County was formed [Jan. 12, 1852]. The four places were; Willow Springs, Long's Ferry on the Rogue River, R.P. Daniles Store on Canyon Creek and Port Orford" (Street, 1976). The settlement at Canyon Creek was called Sebastopol. Street (1971) contends that the name Sebastopol referred to the foreign siege of Sebastopol during the Crimean War (1854-55). He claims the site to be "...the first gold mining town in Oregon...The site of this town was not mined away, as often happened. Traces of six to eight buildings can still be seen [as of 1971]. There were records of two stores and one saloon having been there. The saloon also had a license for a billiard table. There are at least two graves on the hillside above the old town, one marker with a headstone, another marked only with two rocks" (Street, 1971). "The early mining camps...Sevastopol and Pondtown on Canyon Creek at or above its confluence with Josephine Creek, were settlements of several hundred persons. Now it is difficult to find traces of them" (Wells, Hotz, Carter, 1949). Sebastopol roughly correlates with the recorded historic site Sk-699.

The town of Kerby played an important role in the development of mining in the Josephine Creek and Canyon Creek area. Kerby was named after James Kerby who took a donation land claim in 1855. Originally called Kerbyville, the town was at one time the county seat and served as a stage stop for the Crescent City Stage. Kerby also served as a trading center for the miners of the Canyon Creek area. By an act of the legislature of January 1859, the name was changed to Napoleon (possibly as a mate for Josephine) but the name failed to adhere. In 1858 Kerby had two stores, two hotels, a livery stable, barber shop, and billiard saloon (Hill, 1976).

By 1855 the Chinese had arrived in southwestern Oregon to participate in the regions mining boom. The overwhelming majority of these immigrants came from the impoverished farming and fishing villages of southern Kwangtung ("Canton") Province in southeast China (LaLande, 1981). The typical immigrant considered himself a "sojourner" who was usually intent on returning home when financial circumstances allowed. Chinese mining sites are common in the Siskiyou Mountains and sites have been documented in the watershed analysis area (Boyd, 1991). Sites located at Canyon Creek are typically stacked rock walls with associated camp sites. These sites are very valuable archaeologically because of the information they contain about Chinese adaptation to the 19th century mining and social environment. See McKinley and Frank (1995) and LaLande (1981) for further discussion of the Chinese in southwest Oregon.

Subsistence mining occurred in the area, primarily in Josephine Creek, during the 1930's. This was in response to the economic conditions generated by the Great Depression. Many old mine sites were remained during this time. Palmer (1992) recorded a number of Depression-era sites (see below).

A number of lode mines are found in the analysis. These include the Calumet Mine on Rancherie Creek, the Gold Ridge (Pocket Mine) west of Mike's Gulch, and the Hoover Gulch Mine (Brooks and Ramp, 1968: 195-199). Dredging began in 1903 near Eight Dollar Mountain on the Illinois River (McKinley and Frank, 1995: 143) and possibly on Josephine Creek.

Estimates have been made for the value of gold and other precious mineral production for the Illinois River and Josephine Creek. Total dollar value for the period 1908-1972 is estimated at just over \$3,000,000.00. No data are available for Josephine Creek prior to 1908 (Close and Ramp, 1973: 10). Over 2,000 lode and placer mining claims have been located within the Illinois River corridor since 1850. As of 1973 over 492 acres of lode and placer ground was surveyed for patent (Close and Ramp, 1973: 9).

### **Josephine Creek**

Since 1973 less than 50 acres of lode and placer claims have been mined on Josephine Creek (John Nolan, Minerals Technician, personal communication). Occupancy of mining claims is directly incident to the level of mining. Each request for occupancy is reviewed on a case-by case basis by the District Ranger. At present there is one year-round occupancy by a watchman on Josephine Creek. Full time occupancy must be accompanied by an approved Plan of Operations. For 2-5 months each year there are 12 suction dredging occupancies also on Josephine Creek (John Nolan, Minerals Technician, personal communication). Part-time occupancy must come with a Notice of Intent.

### **Chromium Mining**

Chromium, a strategic mineral, has been produced from mines in the watershed at times of national emergencies, such as the two World Wars, or government stockpiling when incentive prices were paid. Chromite is found exclusively in ultramafic rocks. The production of chromite from the central Illinois River area for the period 1917-1958 is estimated at 38,701 long tons at a value of \$2,322,060.00. Mines in the watershed include the Oregon Chrome Mine, No. 249; the Deep Gorge Mine, No. 271; Chrome King, No. 268; the Youngs Daily Dozen, No. 275; and the Robertson Chrome Mine (Ramp and Peterson 1979: 14, 34-35). The road from MaCaleb Ranch to Chetco Pass area was constructed to access claims near Pearsoll Peak, Sourdough Flat, and Bowser Mine. Physical impacts from these and other chrome mining operations are still visible in the form of roads, cabin and mill debris and small pits from ore extraction.

### **Historic Mining Site Surveys**

Two cultural resource surveys emphasizing historic mining have taken place within the watershed analysis area. The first survey was undertaken in conjunction with the Canyon Integrated Resource Project (Boyd, 1991). Thirty sites were recorded and 13 were evaluated as to their eligibility to the National Register of Historic Places (NRHP). Two sites were evaluated as meeting the criteria for eligibility: the Canyon Chinese Site (Sk-939) and the Lighting Gulch "Chinese Walls" (Sk-947). A third site, the Anderson Ditch (Sk-152), has also been found eligible to the NRHP.

A second survey was conducted by Palmer (1992). This survey focused primarily on Josephine and Canyon Creeks. An extensive list of placer and lode mining sites were compiled but without site evaluation. A number of sites were recorded that date to the earliest days of mining.

Much of the archaeological integrity of historic mine sites has been lost due to multiple mining events. For example, sites that were originally mined in the 1860's were mined again at the turn of the century, and again in the 1930's and 1960's. The proposed **Petite Placer** operation, which will take place on a portion of the old Anderson Mine, is an example of the use of modern mining techniques to retrieve valuable minerals from previously mined sites.

## **Environmental Effects of Mining**

Early placer and hydraulic mining profoundly altered riparian and other habitats that are still in various degrees of recovery. Sediment loads from large scale hydraulic mining operations in the watershed probably had an impact on anadromous fish, and water withdrawal, primarily to power hydraulic mining, may have had an impact on water temperature, which in turn may have effected fisheries. Areas along Josephine Creek were mined to bedrock with many areas reduced to cobbles. These areas will take a very long time to recover, if at all, to pre-mining conditions. The same conditions hold true for some riverbank areas of the Illinois River.

For a discussion of the geology of the watershed, see the [Geology](#) portion of this analysis.

## **Livestock Grazing**

After the decline of mining livestock farming grew in the Illinois Valley, and certainly lands within the analysis area were used for grazing. The number of cattle doubled in Josephine County between 1875 and 1883 (McKinley and Frank, 1995: 85). Sheep were also raised and large numbers grazed high mountain meadows around the turn of the century. Atzet and Wheeler (1982: 5) state that "Sheep grazing has been a significant influence on the vegetation of the Klamath Province, particularly in the high elevations... In 1903, a typical year, 103,000 sheep and 7,500 cattle grazed the backbone of the Siskiyou Mountains between where Interstate 5 and U.S. Highway 199 are now located. By 1917 most meadows along the Siskiyou crest were 'badly depleted'." Cattle and sheep tend to change understory composition, reduce fine fuel loadings, and create conditions for the establishment of exotics. In addition, unregulated grazing causes the deterioration of soil conditions. By 1910 the Siskiyou National Forest supported grazing of at least 4000 cattle and horses and about 3,200 head of sheep and goats (*Siskiyou National Forest Grazing Report January 8, 1910*; cited in Mc Kinley and Frank: 1995: 132).

Ranger district range allotment plans and files house information pertinent to livestock grazing in the analysis area. The watershed area supported five grazing areas that were under permit; Hogue Pasture (not to be confused with the area of the same name in Taklima), East Tennessee, West Tennessee, Sauer Pasture, and Gruno Pasture. Permits were for cattle only. District-wide permits were consolidated under the umbrella of the Illinois Valley Coordinated Allotment Plan in 1975. The last remaining livestock permit was terminated in 1985. The permit was district wide, for 144 head of cattle, and held by Jack Sauers of Cave Junction (Don McLennan, Forester, personal communication).

A 1952 Range Management Plan for the district offers some insight on meadow conditions for that time period. District-wide meadow conditions are described as "fair to poor." Grassland areas are described as reverted to a "weed type because of excessive overgrazing in the early days". The Plan proscribes lighter use, shorter seasons, and other practices reflective of range management practices for the period (Range Management Plan, 1952, report on file, Illinois Valley Ranger District).

## **U.S. Forest Service**

The Siskiyou National Forest was created on October 5, 1906. Ranger stations were established at Page Creek in the Takelma area in the spring of 1909 and at Star Flat sometime after; Mr. M. M. Lewis was the Ranger at Page Creek (Cooper 1939). Early forest service activities included the surveying of boundaries, making field examinations of timber tracts, checking on the validity of Homestead entries, carrying on minor timber sales for mining companies, constructing trails, fighting fires, and laying phone line.

The Civilian Conservation Corps (CCC) was active in the area during the Great Depression. A CCC camp, Camp Kerby (F-47), Company 1746, Medford District, was located in Kerby. A side-camp was located at Cold Springs, just south of Canyon Peak. The CCC constructed the **Store Gulch Guard Station**, and possibly the campground, in 1933. The Station exemplifies the rustic architectural idiom developed by the Forest Service in the 1920's and 1930's. In 1984, the Station was formally listed in the NRHP. Table 1 lists some interesting facts gleaned from historic forest maps.

**Table 1: Details of Historic Forest Service Maps**

Map Date	Trails/Roads	Guard Stations	Property
1915	Trail from Kerby down the Illinois River and over Bald Mountain;	Star Flat RS	Anderson Ranch (McCaleb's Ranch)
1919	same as above	same as above	same as above
1922	road to Oak Flat	Star Flat RS	<b>Stove Gulch</b> not Store Gulch
1924	same as above	same as above	same as above
1926	same as above plus map shows road to area of Fiddler Mountain	same as above	map shows current distribution of private property
1927	same as above	same as above. the 1927 map notes ranger station at Kerby	private property not shown/ <b>Stove Gulch</b>
1933	same as above	Star Flat GS Store Gulch GS	Store Gulch now
1937	road around 8 Dollar Mountain (road probably earlier)	Store Gulch GS	Anderson now McCalebs
1940	same as above	Store Gulch CG Store Gulch GS Star Flat GS is now gone	same as above
1942	same as above	same as above	same as above

A number of fire lookouts were established in the early days of the Forest Service, notably at Pearsoll Peak, Tennessee Mountain, and Canyon Peak. **Pearsoll Peak lookout**, a 1954 L-4 cab, was restored by the district in association with the Sand Mountain Society of Portland. The lookout is eligible for the NRHP.

## Watershed Recreation Use

Tourism is the third largest industry in Oregon. In 1988 visitors to Jackson and Josephine counties spent \$126,235,000 creating 2,826 jobs (Runyan 1991). Approximately 73% of all visitors to southern Oregon are from out-of-state. Regionally, "driving for pleasure" and "sight-seeing" are ranked the #1 and #2,

respectively, demanded outdoor recreation activities in 1987, and are projected to remain 1 and 2 through the year 2040 (USDA FS 1993).

### **Wild and Scenic Illinois River**

In 1968 the Illinois River was named as a candidate for inclusion into the National Wild and Scenic River System (NWSRS). It was legally added to the system in 1984 (PL: 98-494). The final designation includes 50.4 miles of the Illinois River in the NWSRS. Wild and Scenic management allocations for the Illinois River within the watershed analysis total 2,350 acres. Wild and Scenic river standards and guidelines are described in the Land and Resource Management Plan, Siskiyou National Forest, Management Areas 2 and 10, respectively. Many consider the Wild Illinois River the "wildest" river in the lower 48 states.

### **Wild River Section and LAC Monitoring**

The Wild section of the river is 28.7 miles long and terminates at Nancy Creek. The white-water rafting entry point is located at Miami Bar, just upstream from the Wild section which begins at the mouth of Briggs Creek (at the terminus of the analysis area). Monitoring for Limits of Acceptable Change (LAC) began in 1994 for campsites located in the river corridor. A second round of monitoring was completed in 1999. Camp site impacts for the majority of recorded camp sites can be characterized as "light". Camp site impacts at Klondike Creek and Deadman Bar can be characterized as "moderate".

### **Wild River Special Use Permits and Management**

Two commercial special use permits operate on the Wild section of the river; American River Touring Association, Groveland, California, and Sundance, Merlin, Oregon. The river management plan allows for three special use permits to operate on the river. At this time, however, permits will be limited to the existing two and no new permit applications will be considered.

The Illinois Valley Ranger District is the lead district for managing the Wild river section. A management plan for the river was written in 1985. Currently the district is monitoring non-commercial river use to determine if a limited permit system is needed, as outlined in the Illinois Wild and Scenic River Management Plan: Proposed Permit System, page 33. Detailed information regarding the river can be found in [A Proposal: Illinois Wild and Scenic River](#) prepared by the forest service in 1979. No mining is allowed in the Wild river section.

### **Aquatic Conservation Strategy Objectives and Recreation Management**

Under new guidelines associated with the Northwest Forest Plan, all new recreation projects should be designed to help meet Aquatic Conservation Strategy (ACS) objectives (RM-1). In addition, all existing dispersed and developed recreation projects that retard or prevent the attainment of ACS objectives should be reviewed and adjusted if necessary (RM-2). Adjustment measures would include education, use limitations, traffic control devices, increased maintenance, relocation of facilities and/or specific site closures. If such measures are not effective, then sites or practices would be eliminated.

In addition, Wild and Scenic Rivers and Wilderness management plans will address attainment of ACS objectives (RM-3). This may occur at the next Forest Plan revision.

## Scenic River Section

The Scenic portion of the river extends for 17.9 miles, from the forest boundary to Briggs Creek. This section of the river is managed to provide recreation facilities and activities appropriate to the designated Recreational Opportunity Spectrum (ROS) class for the area; Roaded Natural and Semi-primitive Motorized. Table 2 displays the current status of infrastructure development along the scenic section of the river.

**Table 2: Scenic River Recreation Facilities**

Name	Facilities	Type	PAOTS*
Eight Dollar Bridge	1 vault toilet	day use/overnight	25
Six Mile	1 vault toilet; fire rings	above and below road camp sites	50
Store Gulch CG	1 pit toilet; picnic tables; fire rings	access to river via trail; overnight/day use	10
Iron Ring	1 vault toilet	overnight/day use	15
Miami Bar	1 vault toilet	white water put-in	15
Briggs Creek Trail-head	1 pit toilet (needs to be replaced or upgraded)	day use/overnight; access to wilderness	24
Fall Creek/Swinging Bridge Trailhead	trailhead parking/swinging bridge	day use	*

\*PAOTS= People at One Time

In 1968 the entire Illinois River from the headwaters to Agness was closed to mineral entry in order to determine its eligibility to the NWSRS. Subsequent decisions closed the portion from Deer Creek to Briggs Creek to mineral entry. Withdrawal status is reviewed at approximately 20 year intervals. The last review was in 1994. Mining can still occur from the mouth of Deer Creek upstream to the forest boundary.

## Scenic River Use

The majority of recreational use occurs between **Six Mile Creek** and **McCaleb's Ranch**. The high use season is between May 1 and September 30. This section of river contains numerous turn-outs and short social trails to access the river. The most popular activities are swimming, picnicking, and overnight camping.

Traffic count data for the years 1990-1993 indicate an average 113 cars per day, with an average daily high of 147 cars per day in 1992 during the high use season. More recent data is unavailable. Parking can be tight, with as many as 30 cars parked across from the Store Gulch Guard Station. Recreation abuse has led to such problems as speeding, drunken driving, littering, firing of guns, the presence of human waste, and other use conflicts. In the Iron Ring and McCaleb's Ranch areas conflict has risen due to the proximity of private property. In recent years the installation of toilets at the Eight Dollar Bridge, Miami Bar, Iron Ring and at Six Mile have mitigated human waste problems.

Due to the recreation values present the district has made recent strides to address and mitigate user and resource conflicts. Toilet installation has already been mentioned. In addition, the district has assigned

personnel to patrol the river, including law enforcement, during the high use season. The recent refurbishing of Store Gulch Guard Station should allow a more permanent administrative presence. Future partnerships will be important. Currently the limiting factor is funding.

### **Private Property along the Scenic River Section**

Within the watershed the largest concentration of private land is found at Oak Flat and McCaleb's Ranch along the Illinois River. McCaleb's Ranch is owned and operated by the Boy Scouts of America, Crater Lake council. The **Swinging Bridge site**, located on national forest lands, is located adjacent to the ranch and is a popular summer spot; this often leads to public/private conflicts.

### **Other Illinois River Recreation Sites**

While the majority of recreation use in the watershed occurs from Six Mile Creek to McCaleb's Ranch, others sections of the Illinois River, such as the **Eight Dollar Bridge** area, see recreational use. This area is accessed by road 4201, which is paved till just past the bridge. The site is used primarily as a overnight camping spot. A vault toilet was installed in 1994. Camping also occurs along road 4201-016 from the bridge downstream to the mouth of Deer Creek. This road is easily rutted during the rainy season.

**Star Flat**, located on Deer Creek, has a long history of Forest Service and recreational use. The site was the location of Star Flat Ranger Station up to the late 1930's. The area is subject to resource damage due to serpentine soils that rut easily when wet, and the presence of botanical values that are often damaged by off-road-vehicle (ORV) use (see below). Sanitation has been a problem. Due to the lack of fire, brush and other plant species are occupying the flat meadow area. An attempt was made to close the upper road to the flat in the mid 1990's but this proved ineffective. In addition, the area can be accessed at the mouth of Deer Creek during low water. Past planning efforts have called for a developed campground for the area.

An informal district planning effort is currently underway to address recreation opportunities, issues, and concerns, associated with the Scenic section of the Illinois River. This effort involves personnel from the forest supervisors office, the Illinois Valley Ranger District, private property owners, and individuals from local communities.

### **Trails and Other Recreation Use**

Traditionally the watershed has been traversed to access other areas, notably the **Onion Camp/Babyfoot Lake** high country area, which is located just outside of the analysis area in the Chetco River watershed. These areas serve as day use destinations, as well as portals of entry into the Kalmiopsis Wildernesses. The **Chetco Pass** area serves as trailhead access to the wilderness but the condition of the road 4103-087 requires a 4WD vehicle. **Pearsoll Peak lookout** sits on the edge of the analysis area and is a highly popular overnight rental destination; however, recent legal rulings need to be resolved to be able to continue to rent the lookout. For some members of the public the lookout rental remains controversial. Table 3 displays trails in the analysis area.

**Table 3: Trails in the Watershed Area**

Trail Name	Trail Number	Use	Miles
Fall Creek	1221	light	6.6
Little Chetco	1121	very light	6.7
Onion Camp	1124.2	moderate	4.5
Fiddler Gulch	1212	light	2.0
Snailback	1217	light	1.0
Eureka Mine	1213	light	4.5
Kerby Flat	1218	light	1.5
			<b>Total trail miles: 26.8</b>

The **Little Chetco Trail**, #1121, is little used due to difficulty of access. Access to this trail vis-a-vis Tennessee Pass is across private property which is owned by the Q Bar X Ranch. This trail was used historically to supply mines in the Canyon Creek area from Kerby.

The **Briggs Creek trailhead**, at the terminus of the Illinois River road, is used as a overnight campground and as access to the Kalmiopsis Wilderness, notably Pine Flat, the York Butte Botanical Area, and Bald Mountain. Briggs Creek serves as the boundary between the Galice and Illinois Valley Ranger Districts. The Galice Ranger District administers the Illinois River Trail, #1162.

#### Off-Road-Vehicle (ORV) Use and Concerns

Resource damage often occurs when off-road-vehicle (ORV) users fail to recreate responsibly. Areas of concern include **Horn Bend, Snailback, and Star Flat**. The Horn Bend area, road 4103-045, accesses an old mining claim and campsite located on the Illinois River. Past efforts to close this road have proved to be ineffective. As currently planned, the road would be closed, turned into a trail, and a parking lot located on the main road. The Snailback area, road 4103-026, accesses the Illinois River, and is popular "party spot". Possible mitigation might include stabilization, culvert installation, storm-proofing and/or surfacing, with a 3-4 vehicle parking area at the bottom of the hill. Problems associated with Star Flat, and their possible mitigation, have been mentioned above. The resolution of these and other concerns will be determined through future planning efforts and public involvement.

#### Roadless Areas

Approximately 52% of the watershed analysis area is in roadless status (66% of NFS lands). The area contains portions of the North Kalmiopsis, South Kalmiopsis, and Squaw Mountain roadless areas, for a total of 42,765 acres. Table 4 displays roadless area acres for the watershed.

**Table 4: Roadless Areas in the Watershed**

Name	Acres in Watershed	Roadless Area: Total Acres	% of Roadless Area in Watershed
North Kalmiopsis	4,620	89,748	5%
South Kalmiopsis	33,323	104,900	32%
Squaw Mountain	4,822	7,704	63%

For a complete description of roadless areas see Appendix C-Volume 1: Final Environmental Impact Statement, Land and Resource Management Plan, Siskiyou National Forest.

## **Backcountry Recreation**

The analysis area contains three areas allocated to **Backcountry Recreation (MA-6) Dailey, Pearsoll, and Fall**. Total acreage is 9,444. The areas are classified in the Forest Plan as "motorized backcountry"; provide a recreation setting appropriate for Semi-Primitive Motorized recreation use. These areas are located in the western portion of the watershed bordering the Kalmiopsis Wilderness and the Illinois River. Standards and Guidelines for MA-6 are contained in the Forest Plan, pages IV: 97-99.

## **TJ Howell Memorial Drive**

The **TJ Howell Memorial Drive** is a self-guided auto/walking tour designed to educate and inform the public on the diversity and value of the flora, geology, history, and other interesting aspects of the area. The route includes 7 stops along 15 miles of the Onion Camp Road (4201). The stops offer opportunities to interpret a variety of plant communities and interesting features. The project is tied to the Record of Decision (ROD) for the Canyon Integrated Resource Project. Work has been done on the first stop, a darlingtonia bog, by the Bureau of Land Management (BLM). The district recently acquired funding for trail construction associated with stop five, the Serpentine Contact Trail. Future work will take place as funding becomes available.

## **Other Public Recreation Resources**

The State of Oregon manages the **Forks State Park** at the confluence of the west and east forks of the Illinois River. The park is currently a day use only area. Popular activities are swimming and picnicking. Planning efforts are under way to assess the viability of providing overnight recreational vehicle camping facilities.

Numerous recreational vehicle (RV) trail-parks are located in the Illinois Valley. The Illinois Valley Community Response Team (CRT) in association with interested parties is reviewing the role of ecotourism in increasing economic opportunities in the Illinois Valley.

## **Visual Quality**

Visitors participating in recreational activities are generally more sensitive to highly modified landscapes. For that reason, the USDA Forest Service (and other Federal land management agencies) manages for scenic quality in highly used recreational areas. The Siskiyou National Forest outlines management of the Siskiyou National Forest Visual Resources in the Land and Resource Management Plan (LRMP) by assigning visual quality objectives (VQOs) to the landscape. Criteria used to define VQOs are: scenery quality ratings, public sensitivity ratings, and distance from the viewer. The Siskiyou National Forest LRMP describes the following management objectives by VQO as follows;

**MA 12: Retention Visual:** This allocation is also called preservation in wilderness areas, where timber harvest is not allowed. This land is managed with the primary goal being "to provide a level of attractive scenery by maintaining the area in a natural or near natural condition." "Management activities will be conducted in such a way that they are completely subordinate to the character of the landscape and not evident to the casual Forest visitor." The watershed contains 354 acres of land allocated as preservation.

**MA 13: Partial Retention Visual:** This land is managed with the primary goal being "to provide a level of attractive scenery by maintaining the area in a near natural condition." "Management activities will be conducted in such a way that they are subordinate to the character of the landscape." There are approximately 4,272 acres in this allocation.

**MA 14: General Forest (VQO: "Modification"):** Land managed with the primary goal being "to obtain a full yield of timber within the capabilities of the land..." There are approximately 2,166 acres in this allocation.

NOTE: All allocations, except for "Preservation" (wilderness), are superceded by the management guidelines described in the Northwest Forest Plan as Late Sucessional Reserves (LSR).

Assessing the visual quality is a two step process. Standardized, objective size and area criteria have been established as a general "rule of thumb." Site specific analysis is more subjective. Using objective criteria outlined in USDA Forest Service Manual 2380 Landscape Management, and the "managed stands" information maintained by the Siskiyou National Forest, the watershed is generally assessed as meeting the stated VQO.

## **Economics and Demographics**

The following discussion is based on Cosby (1997).

Agriculture, wood products, tourism, are the province's three basic industries. Recent data indicates that the main area of the employment expansion will be in the trades and services industries. Although there has been growth in construction and non-timber related manufacturing, there is still strong reliance upon the wood products industry for this area's economic well-being. The decline in wood products activity through the 1980's was locally amplified by the nation-wide recession. Projections by the State of Oregon Employment Division indicate that the timber industry is expected to lose an additional 1,100 jobs statewide over the next 10 years.

Josephine county has consistently rated among the least wealthy of Oregon counties. Unemployment ranges to 8%, and the per capita income in 1995 was \$15,581. This ranges from 80.2% to 85% of the State's per capita income. Typically, citizens in this region are older, retired individuals who rely heavily on income from Social Security, retirement, and public assistance programs. The State of Oregon Employment Department reports that in 1995, 26% of all income in Coos and Curry counties was provided by transfer payments, including Social Security, Medicare, other retirement income, veteran's benefits, unemployment and food stamp programs. This probably hold true for Josephine county as well.

71,100 people live in Josephine county. Approximately 40% of these people live within a one hour drive of the watershed. Grants Pass in the county seat (pop. 18,120) and the largest city in Josephine county. Cave Junction (pop. 1,200) is the second largest community. Currently 15,000 people live in the Illinois Valley, scattered in the backwoods and small hamlets such as Taklema, O'Brien and Holland. Other hamlets include Kerby, and the habitations clustered around Lake Selmac, a popular recreation destination.

The population of Josephine county is focused in unincorporated areas. Much of this unincorporated area is identified as the "interface." Throughout the "interface" of forest and rural development there are a number of usually unnamed communities. These communities are often defined by little more than a small store or tavern, but they play a role in the dissemination of information and the formation of geographic-based community identity.

Over the past decade, a number of demographic shifts have been taking place. Young people who were raised in southwest Oregon have been inclined to leave in search of employment while the region has been experiencing a steady increase in overall population. The increase is primarily due to an immigration of both young, professional ex-urbanites and senior citizens. The median age of Josephine county residents is 39.9 years (risen from 33.7 years in 1980).

In Josephine county the proportion of citizens aged 65 years and older is on the increase. Between 1980 and 1990, the proportion of persons over 65 in Josephine county increased 42%. Seniors are frequently not tied economically to southern Oregon, most receive an annuity of some type. They are commonly here for other reasons including a favorable social climate, proximity to family, and/or enjoyment of southwest Oregon's many amenity values. The new, young immigrants generally possess a higher income, higher education level, they generally have strong environmental values but little experience in land management. Few of these folks have ties to the traditional industries of southwest Oregon.

At a coarse level, demographics of the watershed analysis area seem to match those of the Province. As a point of departure, the Applegate Adaptive Management Area's Ecosystem Health Assessment lists a number social and economic trends that, at a general level, could be applied to the middle Illinois River area.

These include;

- Strong population influx and residential development;
- Dispersed settlement patterns which have created widespread residential/forest interface;
- In-migration of younger, more educated ex-urbanites with strong environmental values and community interest;
- Dramatic shrinking of the local, traditional economic base (specifically, ranching, farming, and timber employment);
- Strong representation and economic contribution of "lone eagles," that is global entrepreneurs" with few ties to the local economy;
- Declining ties to the land for economic contributions and reliance on commuting to urban employment sites;
- Newcomers are less integrated into the community and less knowledgeable about the local ecosystem than in previous decades;
- An increase in a wide-range of recreation activities on public lands, creating endemic conflict between users and challenging management to incorporate these different interests.

## **Timber Harvest**

The Middle Illinois River watershed has seen varying amounts of timber harvest, beginning on National Forest System lands in 1967, the first recorded harvest event, and possibly earlier. Since that time approximately 2,799 acres of forest has received regeneration harvest, primarily in basins north and south of the Illinois River. Assuming 30,000 board feet/acre, approximately 84MMBF of timber has been harvested from National Forest System lands. This accounts for 1,512 jobs over the last 25 years (direct, indirect, and included jobs, based upon the formula provided by the Siskiyou National Forest of 18 jobs/MMBF harvest). This averages 3.4MMBF annually with a mean of 60 jobs per year for National

Forest System lands (note: harvest volumes for private landholders, private industrial, and the Bureau of Land Management (BLM) are not included in the above calculations).

Although timber production will continue to provide employment in southern Oregon, the continued survival of communities, especially rural communities, will depend on the region's ability to diversify their economic base. For many rural areas, the path to sustainable economic development will include innovative approaches to natural conservation, management, and utilization (USDA FS 1993).

## **Data Gaps**

Research has identified a number of data gaps.

### **Cultural Resources**

- A synthesis of mining history in the watershed is needed. A tremendous amount of information is available but it needs to be brought together in a usable format

### **Livestock grazing**

- Nothing specific is known about possible grazing impacts in the watershed and their relative importance

### **Recreation**

- The exact nature of recreation use in the Scenic river corridor is poorly understood and needs to be quantified

## **Findings**

- Using fire Native Americans intensively managed valley floor and valley-foothill habitats for specific resource outputs. Areas upslope from recorded prehistoric sites were probably burned on a regular basis
- Wildlife populations at the time of historic contact were, to a large degree, a function of habitat manipulation by native Americans
- Seral forested conditions at the time of the establishment of the Siskiyou National Forest were partly a function of native American burning *and* indiscriminate burning by miners
- Riparian habitats were heavily impacted by hydraulic mining and some areas in the watershed are still in the process of recovery
- The Josephine Creek area played a significant role in the early history of Oregon, leading directly to the Oregon Gold Rush

- Currently suction dredge mining occurs on Josephine Creek. A Plan of Operation is being considered for the old Anderson Mine area (Petite Placer). Future exploitation of gold in the watershed is dependent on global gold prices and federal management direction
- The next decade will continue to see immigration of younger, more educated exurbanites with strong environmental values and community interests. There will continue to be declining ties to the land for economic contributions and reliance on commuting to urban employment sites
- Timber production has been an important economic contribution in the past and will continue into the present, albeit at much reduced levels
- Recreation will continue to increase with the majority of use occurring along the Scenic river corridor
- ORV resource damage is occurring in specific areas
- Public and private conflicts sometimes occur in the McCaleb's Ranch and Iron Ring areas
- Funding is the primary limiting factor in achieving a high level of quality recreation management

## **Management Recommendations**

### **Recreation**

- Use **The Scenic Illinois River Environmental Assessment for Recreation Development** as a guide for further infrastructure development along the scenic corridor of the river (this document includes recommendations for Star Flat and addresses ORV use)
- Maintain the current road management objectives (RMOs) for the Illinois River road past McCaleb's Ranch
- Continue to form partnerships with all parties and individuals who have a love for the Illinois River. Work closely with private property holders along the river, including working with the Boy Scouts of America, Crater Lake Council
- Maintain a Forest Service presence at Store Gulch Guard Station. Continue to restore and upgrade the guard station
- Continue to seek funding and partnerships to complete the TJ Howell Botanical Drive
- Construct a new trail from road 4201-029 to the Canyon Creek road (011) to improve access to the Little Chetco trail, #1121
- Continue ongoing monitoring of non-commercial use of the Wild section of the Illinois River to determine if a limited permit system is needed

## **Cultural Resources**

- Obtain funding to provide a synthesis and overview of historic mining in the watershed, especially in the Josephine Creek watershed. Evaluate sites for the NRHP
- Explore opportunities to interpret the mining history of the Josephine Creek area

## **Mining**

- Funding must be made available for more on-ground administration of mining claims
- Focus clean-up of mining sites

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