

**Environmental and Cultural History
of the Smith River Basin
[and Rowdy Creek]**

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This paper was first published in 1995 as the cultural resources input section of the Six Rivers National Forest Smith River Watershed Assessment. I have placed a copy on the web to make it more easily accessible to researchers and the general public.

Authors Note:

I wrote this paper in 1995 as a member of an interdisciplinary team (including biologists, botanists, foresters, hydrologists, and archaeologists) studying the ecosystem of the Smith River and Rowdy Creek watersheds. On the subject of mining also refer to a subsequent paper: *Historical Overview of Copper and Chromite Mining in Northwestern Del Norte Country, California*. Both papers can be found on my web site:

www.solararch.org

I have tried to refrain from making substantial changes to the original text except for some badly needed editing. I have in a few places, however, included within text boxes or brackets comments due to subsequent research that in some way (for better or worse) has led me to change or modify my data or conclusions.

TK

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Three Rivers, CA.

Introduction

For centuries human land-use activities have influenced to some degree the environment of the Smith River Basin ecosystem. The purpose of this portion of the Smith River Basin Watershed Analysis study is to present an overview of the prehistory and history of this region emphasizing how past human land-use activities have affected the ecosystem through time. In addition, this overview presents a summary of heritage resources properties that have been recorded within the basin as well as archaeological reconnaissance data on what areas of the basin have been surveyed for heritage resources.

For purposes of this study, the Smith River basin has been subdivided into four distinct geographical areas:

* The North Fork Watershed.

- * The Middle Fork Watershed--east of the town of Hiouchi.
- * The South Fork Watershed.
- * The Rowdy Creek Watershed (National Forest lands in Oregon and California)

The lower portion of the Smith River west of Hiouchi is beyond the scope of this overview. This region is, however, referred to in more general terms throughout this study in order to provide contextual information relevant to the rest of the basin.

Chapter 1

The Climate and Environment of the Smith River Basin During the Holocene

Historically, the climate of northwestern California has not remained static. For example, William Long (1977) presents evidence documenting that small glaciers existed at various times during the Pleistocene on some of the higher mountains surrounding the Smith River basin (including Sanger Peak, Ship Mountain, and Doctor Rock). Studies of regional climatic trends during the Holocene (see West 1993) suggest that at other times yearly temperature averages were warmer than today with possibly less precipitation. It is likely, therefore, that even prior to the entry of humans into the area, long term fluctuations in climate affected [over time] to some extent the mix of plant and animal species inhabiting the Smith River Basin.

Paleoclimatic Studies

No paleoclimatic research has been conducted within or adjacent to the Smith River basin. Further to the south, James West (1983) conducted pollen analysis studies in the North Coast Ranges at locations on Pilot Ridge (Six Rivers National Forest), and at several locations on the Mendocino National Forest including A&M Lake (West 1991) and Lily Pond (West 1983). To the north some studies have been conducted in the coastal regions of Oregon and Washington.

Jeff LaLande (1995) summarizes the paleoclimatic data relevant to southwestern Oregon in

the Little Applegate Watershed Analysis. It is likely that, in general, climatic patterns in the Smith River basin followed a similar trend. The generalized model of Holocene climate proposed by LaLande (1995:9-10) is presented below. The Holocene can be divided into three climatic epochs:

Early Holocene

From approximately 10,000 to about 8,000 to 7,500 years ago the climate was somewhat cooler with more precipitation than today. It was not cool enough, however, to precipitate another glacial advance.

Xerothermic Period

Beginning about 8,000 to 7,500 years ago, the yearly mean temperature increased and yearly precipitation decreased. The Xerothermic Period lasted several thousand years ending about 4,500 B.P. LaLande (1995:8) hypothesizes that with the spread of more drought resistant species, oak savanna and oak woodlands vegetation communities might have actually increased faunal and human carrying capacity.

Medithermal

The last epoch, beginning about 4,500 years ago, was a return to the earlier more maritime influenced climatic regime. The trend would have been for a retreat of oak savanna and oak woodlands vegetation distributions and an increase in conifer forest. The use of anthropogenic fire by aboriginal groups may have slowed this process.

Interestingly, the above hypothesis does not quite match chronologically with climatic studies undertaken in northwestern California. For example, in northwestern California it is hypothesized that the Xerothermic extended from about 8,500 B.P. to about 2,300 to 3,800 B.P. (West 1993: 230). James West suggests that this disparity is transgressive north to south in the early Holocene (West 1993:230) and may be a result of the position of the westerlies. He noted that: "shifts in the jet stream and associated atmospheric frontal systems because of changes in mean air mass boundaries of even tens of kilometers would have had a significant effect on the region's climate."

Based on regional data from both northern California and southern Oregon, it can be hypothesized that during the Xerothermic Period (whatever its length), climatic conditions within the Smith River Basin resulted in milder winters and warmer, slightly drier summers that lasted somewhat longer than they do today. Temperatures during this period probably averaged about 1.3 to 2.1 degrees centigrade warmer than today.

With a warmer and possibly somewhat drier climate, some plant species extended their ranges up slope as much as 1000 feet. In addition, plant species found further to the east and south such as Oregon oaks [another common name for these trees is white oaks] (*Quercus garryana*) extended their ranges to the north and west during the Xerothermic Period. For example, there is a limited and disjunct [isolated] distribution of Oregon oak groves within the Smith River Basin. Generally this tree prefers a drier climate. The few surviving groves of Oregon oak within the Smith River Basin are remnant populations surviving from the Xerothermic Period. During that period, it is likely that Oregon oaks were more widely distributed in the interior of Del Norte County. To date, isolated stands of Oregon Oak have been noted at Gasquet Flat, Big Flat, and along the North Fork at Sourdough Camp. Today, the nearest distributions of Oregon oak woodlands are found in the Bald Hills south of the Klamath River and to the north and east in Jackson and Josephine Counties in Oregon. It is probable that the survival of these remnant stands of oaks resulted from periodic fires (both natural and human caused) that discouraged the natural succession to conifer over story.

This wider distribution of Oregon oak during the Xerothermic Period, and their much more limited distribution within the basin today, is analogous to what can be found further to the south in the Yolla Bolly Mountains. In that region, providing evidence of the Xerothermic Period isolated populations of aspen (*Populus tremuloides*), fox-tail pine (*Pinus balfouriana*), and western juniper (*Juniperus occidentalis*) survive in a number of isolated stands. [See Keter 1988, 1993, 1995, 1997]

With the end of the Xerothermic Period and the return of a cooler more maritime climate some plant species retreated southward, eastward, and down slope in altitude (Keter 1985:5, West 1983: 168-170).

It is likely that, as the climate changed during the mid-Holocene and affected the distribution of plants and animals across the landscape, this change would have also influenced the subsistence procurement strategies of the prehistoric peoples living within the basin. It is also possible that these changes can be identified in the archaeological record through the types of artifacts recovered as well as site settlement patterning within the basin.

Chapter 2

Prehistory and Ethnography of the Smith River Watershed

The following section is somewhat outdated. Significant ethnographic and archaeological research has been undertaken in this region since this paper was written by the Tolowa as well as the National Park Service and the Forest Service.

Introduction

The following chapter is divided into two parts. The first section outlines and summarizes the prehistory of the Smith River watershed and provides an overview of the limited archaeological research that has been conducted within the area. The second section focuses primarily on an ethnographic overview of the Tolowa--the people who inhabited this region during the ethnographic period (the era immediately prior to historic settlement). The emphasis of this overview is on the land-use activities of the Tolowa and how these activities might have influenced and affected the ecosystem of the Smith River watershed.

Prehistory

Very little is known about when humans first entered this region of northwestern California and southwestern Oregon. Studies further to the south in the Coast Ranges of eastern Humboldt County suggest that human occupation in northwestern California may date back about 5,000 years (Hildebrandt and Hayes 1984). Archaeological research to the north in the interior of southern Oregon suggests that humans may have entered that region as long as 10,000 ago (Nilsson and Maniery 1987:2-13). Therefore, it is likely, based on the two chronologies cited above, that humans first entered the Smith River Basin sometime between 5,000 and 10,000 years ago.

Archaeological research in southern Oregon is summarized in the Cultural Resource Overview of the Siskiyou National Forest (Beckham 1978). [See also Nilsson and Maniery 1987 and LaLande 1995.] Since very little of the Smith River watershed extends into Oregon, the interested reader is referred to these reports for specific data related to the prehistory of southern Oregon.

To date, the only archaeological excavations to have taken place within this region of

northwestern California were undertaken in 1964 by Richard Gould at Point St. George (CA-DNO-11) located on the coast to the north of Crescent City. For that reason, the prehistory of the Smith River watershed has yet to be written.

While no definitive date has yet been established on when humans first entered this region of northwestern California. Gould's work at Point St. George provides some suggestions. Gould, directing a crew from the University of California, excavated a village site (CA-DNO-11) located north of Crescent City along the coast at Point St. George. This village site was large in areal extent and included a habitation site, an adjacent area where flint was worked to produce tools (for example, projectile points, scrapers, and cutting implements such as knives), and an area where sea mammals, fish, and shellfish were processed. Also identified by local Tolowa informants was a cemetery. The cemetery was not excavated.

Gould hypothesized that there were two distinct components to the Point St. George site.

* Point St. George I

The earliest component of the site was found at the deepest levels in trench 3. Gould (1972: 41) noted the materials recovered from this level included "chipped stone projectile points and other artifacts differing considerably in style from those occurring in the midden [upper] levels."

*Point St. George II

The upper levels of the site consisted of shell midden deposits with projectile points, bone needles, and other artifacts which comprised an assemblage resembling that of the ethnographic Tolowa of the region. This assemblage is similar to the artifacts recovered from Gunther Island in Humboldt Bay (in ethnographic Wyiot territory) and *tsurai* (a village in ethnographic Yurok territory).

Gould (1972:41) concluded that the materials recovered from Point St. George I, including chipped stone projectile points and other artifacts, differed "considerably in style from those occurring in the midden [upper] levels" of the unit.

In 1969, Gould (1972) had five charcoal samples from Point St. George I radio-carbon dated. The samples provided a date of 2260 B.P. (+/- 210). This is the earliest date yet documented in the archaeological record for human settlement along the northwestern California and southwestern Oregon coasts.

At this time, it is not clear just how Point St. George I relates to the later cultural deposit

(Point St. George II). The current hypothesis, based on linguistic evidence, suggests that the Athabascan speaking Tolowa did not enter this region until about 1100 A.D. Therefore, Point St. George I may represent a location visited periodically by inland peoples to secure marine resources or lithic materials (cryptocrystalline chert-like nodules are common along the coast in this area). Dave Fredrickson (*in* Morratto 1984:491) hypothesized that this early component may "represent limited ancestral Karuk use of the Pacific shore."

Gould (1965) supplemented the archaeological record from his excavation with ethnographic data which provided insights into site function and the interpretation of artifacts and features. The information provided by informants also included information connecting the site with inland locations used for the gathering of seasonally available resources.

Archaeological Excavations within the Smith River Watershed

Within the interior of Tolowa territory there has been virtually no archaeological work accomplished except for archaeological site surveys. The only excavation conducted to date was a very limited subsurface investigation of site CA-DNO-89/H (by Wilson and Keter in 1991). The site is located at the approximate spot identified by Drucker's informants as the inland settlement *tenitcuntun* ("trail at the foot of"). No diagnostic artifacts were recovered from the unit placed on the site. Significant, however, is the fact that the number of obsidian flakes recovered from the unit was greater than the number of chert (cryptocrystalline) flakes recovered. [No cultural materials were collected, the purpose of the test was to confirm that a subsurface cultural deposit did indeed exist at this location.] At other inland locations excavated in northwestern California (see Hildebrandt and Hayes 1984, Hayes and Hildebrandt 1985), the percentage of obsidian flakes recovered made up less than 5 percent of the chipped flake materials recovered. It is also significant to note that at site 35Cu149, located several miles inland on the Pistol River just to the north of the California/Oregon border, the obsidian recovered comprised only .08 percent of the lithic materials recovered (Nilsson and Maniery 1987:5.3).

Ethnography

During the ethnographic period, the major portion of the Smith River watershed was occupied by the Tolowa. Two other Native American groups may have inhabited the northern region of the North Fork of the Smith River watershed. Immediately to the north of the Athabascan speaking Tolowa, the closely related Tututni inhabited the Oregon coast

and immediate inland region. Inland to the east and north of the Tolowa was the territory of the Takelma. The Takelma claimed much of the Illinois River Valley region. Linguistically the Takelma language has been placed within the Takelman-Kalapuyan family, a sub-grouping of the Penutian Stock and is related to languages spoken by peoples living in the Willamette Valley and along the central and western portions of the Umpqua River (Beckham 1978:14). While ethnographic boundaries between the Tolowa, Takelma, and Tututni are poorly defined, it is likely that some portions of the North Fork watershed, north of about current state line) were either claimed as territory or at least regularly visited by members of these three groups. Because the majority of the basin is located within Tolowa territory, the following overview focuses primarily on the Tolowa.

Tolowa

The aboriginal people who inhabited the Smith River drainage and coastal plain of Del Norte County during the ethnographic period are, today, referred to collectively as the Tolowa. A brief overview summarizing the ethnographic data available for the Tolowa is presented below, followed by a brief overview of Tolowa culture--primarily oriented towards land-use activities within the Smith River basin. Finally, given the kinds of land-use activities pursued by the Tolowa, suggestions are then presented related to how these activities might have affected the environment.

A Summary of Ethnographic Research

During the ethnographic period, the Athabascan speaking Tolowa claimed all or nearly all of the lands within the Smith River watershed. The culture of the Tolowa is poorly documented in the ethnographic literature; even the boundaries of Tolowa territory are poorly defined. The reason for this lack of ethnographic data Tolowa can be traced to the fact that, in this region of northwestern California, work by ethnographers in the early 20th Century was focused primarily on the Tolowa's neighbor to the south--the Yurok. During this era, the formative years in the evolving discipline of anthropology, Alfred Kroeber, professor at the University of California at Berkeley and the first professional anthropologist in the state, was influential in determining which aboriginal groups within the state of California were to be studied. Kroeber (and other anthropologists, including Pliny Goddard and C. Hart Merriam) realized that time was running out and that few Native Americans remained who had knowledge of their precontact cultures. The race was on to gather as much data as possible on precontact cultures in California before knowledge was lost. This effort was termed by anthropologists "salvage ethnography."

One of the paradigms that guided the approach of anthropologists in the collection of

ethnographic data during this era was the concept of culture area. A culture area was defined as a geographical region within which all of the cultures tended to share the same cultural traits---despite differences in language. In this region, the Yurok living on the lower Klamath River were considered to be the “center” of the northwest California culture area (Kroeber 1925:910-911). For this reason, the main emphasis of Kroeber and his students in northwestern California was to record the culture of the Yurok. Kroeber spent many summers working with the Yurok and also encouraged others to do field work in the area. In his monumental study, the *Handbook of the Indians of California* (1925), he devoted only six pages to Tolowa culture while devoting nearly 100 pages to Yurok culture.

The earliest ethnographic work within Tolowa territory was conducted in the late 19th Century by Stephen Powers (1877). Powers, a journalist by trade, wrote articles for *Overland Monthly* and, at the urging of J. J. W. Powell, then in charge of the Department of the Interior’s Geographical and Geological Survey of the Rocky Mountain region, summarized these articles in his pioneering book *Tribes of California* (1877). Powers visited the Crescent City area and included a few pages on the culture of the Tolowa in his book. Although Powers was not an anthropologist by training, Kroeber acknowledged his contributions to California ethnography in his *Handbook* (1925: IX).

Pliny Goddard (who was primarily a linguist but also recorded some ethnographic data) visited the region in 1902-03 and worked with some elderly informants in the Smith River area. Goddard did not publish any of his material. His field notes run to eighteen volumes and are mostly related to linguistic data (these manuscripts are located at the American Philosophical Society in Philadelphia and are available on microfilm).

In 1909, Kroeber dispatched Thomas Waterman (who, after Goddard, was the third professor hired in the anthropology department at Berkeley and, like Kroeber, was also a student of Franz Boas; his emphasis was linguistics) to study the Yurok. But, as Waterman (1925:528) wrote, “in intervals with my business with the Yurok I used to look across the bay to distant Point St. George, dim, romantic, and far away, and my soul took fire to wander thither and work with the Tolowa.” In 1921, Waterman got his chance and spent a month there during that summer as he wrote (1925:528): “carrying out at my own expense, some investigations on local ethnology.” Much of Waterman’s data concerns the location and names of village sites and place names of various geographical features within Tolowa territory. These data (along with Goddard’s linguistic studies) were the source of Kroeber’s brief overview of the Tolowa in his *Handbook* (1925:121-127).

C. Hart Merriam also visited the region and conducted some interviews (Baumhoff 1958:225). While he never published anything on the Tolowa, his field notes (located at the Bancroft Library, Berkeley) from a visit in July of 1923, when he interviewed a number of Tolowa near the mouth of the Smith River, are summarized in Martin Baumhoff’s 1958 study *California Athabascan Groups*. Additional field notes as well as Merriam’s personal journals that document his many field trips (including those to Del Norte County) are

located at the library of Congress in Washington D.C. These field notes contain some linguistic data (Box 27) as well as a National Forest map (Box 56) outlining Tolowa territorial boundaries. No village sites are listed on this map. The Library of Congress also has Merriam's personal journals.

Merriam visited Del Norte County a number of times (September 1910, September 1923, July 1934, June 1938). His journals indicate that he only spent a few hours during each visit actually interviewing members of the Tolowa community--primarily recording word lists. For example, his visit of 1938 consisted of interviewing Edward Lopez on June 16 for part of the day. Therefore, despite a number of visits to Del Norte County, his total time working with Tolowa consultants cannot be considered significant.

Cora Dubois (1929) interviewed a Tolowa woman working in the Bay Area in 1929 and published an article in the *American Anthropologist* in 1932 based on this interview. Dubois also worked with the Tututni in Oregon. She did not, however, work in Del Norte County.

The most in-depth study of Tolowa culture was conducted by Philip Drucker (1937). He was a graduate student of Kroeber's and spent the summer of 1933 in the hamlet of Smith River interviewing members of the Tolowa community. Drucker's study includes comprehensive data on Tolowa geography--including the names and locations of major village sites and other important place names.

Richard A. Gould, a graduate student at UC Berkeley, for his dissertation, conducted ethnographic field work among the Tolowa and the first (and only) archaeological excavations in the region during the summer of 1964. This study (Gould 1965) includes interview data and, as discussed earlier, the results of the archaeological excavation at Point St. George. Gould (1978:128 -136) has also summarized the existing ethnographical data on the Tolowa for the Smithsonian series the *Handbook of the Indians of North America: California* (1978:Vol 8).

Loren Bommelyn (1989), a Tolowa, compiled a dictionary for the Tolowa language and included a map with village locations and names. From a linguistic standpoint, this publication is an important contribution to both the Tolowa and the anthropological communities.

From the brief summary presented above, it is clear that little in the way of substantive data exists on the precontact culture of the Tolowa. Especially lacking is data related to usage of the inland regions of Tolowa territory. While it is known that substantive seasonal use of the inland region took place, neither the exact timing of the visits nor even basic data regarding site settlement patterning exists (for example, whether there were any permanent, inland village sites or where temporary hunting and gathering camps were likely to have been located).

Tolowa Community and Social Organization

Prior to the historic era, the Tolowa were not organized politically at the tribal level. Powers (1877: 65) noted that he found three distinct sub-groups or communities in the Smith River region; the *he-nag-gi* living along the lower Smith River, the *tol'-o-wa* living around Lake Earl, and the *ta-ta-ten* living in the Crescent City area. It is not entirely clear just when the word "Tolowa" became the generally accepted name for the Indian people of this region. It appears likely, however, that it was first used by Powers. In his chapter on the Tolowa, Powers (1881: 65) writes, "[a]s the Tolowa are the principal band, they may stand for all." The word *tol'-o-wa* is the Yurok name for the village that was located at Lake Earl.

Merriam visited Del Norte County in September of 1923 and interviewed Sam Lopez, his wife, and father near the mouth of the Smith River. He (Baumhoff 1959: 225) indicated that the Tolowa had definite names for regional communities based primarily on the name of the only or principal village in that area. His names for the various Tolowa community regions differ somewhat from those of Powers. Those living near the mouth of the Smith were called the *hah'-wun-kwut*, those living south of the Smith River but to the north of Earl Lake at Burnt Ranch were called the *yahnk'-tah-kut*, and those living in the Crescent City area the *tah-ah'-ten*. Merriam's consultants indicated that although the Tolowa had no distinctive name for themselves, they referred to themselves collectively by the name *huss* their word for people (Baumhoff 1959: 225).

Drucker (1937: 222) apparently following the lead of Kroeber and Powers noted:

The southern most villages on Crescent bay [sic] and Lake Earl in California formed a group which has been lumped under the name "Tolowa" with the Smith River Towns. Although this usage is not the happiest possible one, for convenience it may be retained.

It appears that prior to the historic era the Tolowa were organized into a number of independent communities. The term community (see also Keter 1993) is used in this study to denote a major village or closely related group of villages and their surrounding suburbs which formed a relatively independent political and economic unit. It is likely that during the ethnographic era, the people today referred to collectively as the Tolowa inhabited a number of communities scattered along the coastal plain of what is now Del Norte County. Each community was organized around a large village or an association of several villages situated in close proximity. These loose knit but interrelated communities shared a general world view, dialect and were related through kinship and marriage. The region surrounding the community was utilized to provide the subsistence resources needed by

its residents. In addition, families and communities owned specific inland locations where subsistence resources were located. For example, the *Yontucket* claimed the Gasquet Flat area.

As with the Southern Athabascans, and the other groups inhabiting the region, the concept of political organization at the tribal level simply did not exist among the Tolowa. Since there was no feeling of tribal unity, for example, the people from the community of *tatatun* might join the Yurok from the village of *rekwoi* where they had relatives in warfare against other "Tolowa" communities (Drucker 1937: 244).

Community structure was somewhat fluid and occasionally new villages (perhaps rarely a new community) might break off from the main village. This might occur when a certain lineage (with a patrilineal figure recognized for his wealth) would have prospered for several generations and as a result some people gravitated around this budding subgroup eventually splitting off from the main village. In addition, Drucker noted (1937: 244) that his informants indicated that quarrels were a major reason for population shifts. For example, over several generations the suburb of *meslteltun* broke off and came to rival its parent village of *tataun* in importance. Another reason that villages might become established was economic in nature; for example, the desire to be close to a good fishing spot.

As with other local groups in this region, marriage outside the village was the general rule. Marriage was an important factor in cementing ties and alliances between different communities and as Drucker noted (1937:247), "the bond between the two families connected by marriage was as strong as well as a formal one."

Because of the lack of political structures at the group or "tribal" level, "warfare," or more accurately feuds or the raiding of another village, was limited to the community or village level. There were, however, no wars between the groups referred to collectively by ethnographers as the Tolowa and the adjacent Tututni or Yurok.

Tolowa Geography

The Athabascan speaking peoples of northwestern California can be broadly divided into three distinct subgroups. Tolowa connections to the other two groups are, as Drucker (1937: 222) noted, related more to events taking place during the historical era when the California/Oregon border was created as a new geographical boundary, rather than to any relationship based on common cultural characteristics.

The most southerly group of the Athabascan speakers in California occupied the central and southern portions of Humboldt County, northern Mendocino County, and

southwestern Trinity County. They were referred to in the anthropological literature as the Southern Athabascans (the Wailaki, Lassik, Nongatl, Bear River, Sinkyone, and Kato) to differentiate them from the Hupa, and the closely related Chilula and Whilkut, who occupied the area of northeastern Humboldt County along the Trinity River, and portions of the North Fork of the Mad River and Redwood Creek drainages. The third group of Athabascan speakers in California, the Tolowa, was centered on the coastal plain that fronts the high mountains and deep canyons of the Smith River drainage.

The Tolowa have more in common with the Athabascan speaking Rogue River, Chetco, and Pistol River groups that inhabited the coastal and immediate inland regions of the Coast Ranges of Oregon than with the Athabascan peoples of California. Kroeber (1925: 902) noted this fact when he wrote that the native cultures along the Oregon coast south of the Umpqua River were very similar to the Tolowa.

The Tolowa were separated by some distance from the Hupa by the Yurok and as Gould (1978:128) noted, the Hupa and Tolowa languages are not mutually intelligible. Drucker (1937:222) outlined the relationships of the Athabascans who inhabited the coast from Northern California into Central Oregon.

The inhabitants of each drainage system formed something of a linguistic and cultural unit. (There was absolutely no national or tribal sense, nor any political entity greater than the village.) Though dialects were mutually intelligible throughout the region, there were sufficient variations of sound and usage from one river valley to the next to make a speakers provenience readily recognizable.

The northern boundary of the Tolowa was south of the Winchuck River (location of the Tututni village of *um-sahng'-ten*), roughly at the northern end of the coastal plain at the Oregon/California state line. Their territory extended south along the coast almost to Wilson Creek and inland to about the crest of the Siskiyou Mountains. The Yurok village of *o'memhipur* (Tolowa *tah-geshl-ten*) was located at the mouth of Wilson Creek and there were close kinship ties between this village and some of the Tolowa communities to the north (Kroeber 1925: 10).

As noted earlier, it is not clear just who claimed the upper reaches of the northern portion of the North Fork of the Smith River, north of about where the state line is today. Undoubtedly this region was frequented by aboriginal people. However, given the relatively steep canyon with large areas of laterite and serpentine soils supporting rather sparse and unique plant communities throughout much of this watershed it is not clear just how much human activity occurred within this watershed.

Waterman (1925:529-536) documented the names and locations of Tolowa villages as well as place names for a number of other cultural and geographical sites based on interviews

with consultants during his visit to Del Norte County. The map he used (1925:529) is somewhat inaccurate from a cartographic perspective; however, it appears that the furthest up river village identified by Waterman was near the present confluence of Peacock Creek with the Smith River.

Drucker's map (1937:300) is much more detailed and contains the names of villages and other important locations, including some spiritual areas. He noted (Drucker 1937:226) that the most important Tolowa towns were located near the mouth of the Smith River and southward along the Coast. He also indicated that unlike the Yurok who had a number of important settlements inland along the Klamath River, the Tolowa had only minor settlements or suburbs up river. Drucker believed that the reason for this lack of inland settlements was due to the fact that the Smith River is only navigable for its first few miles. Also, the inland mountains in the Smith River drainage are more densely forested with the rhododendron, manzanita, and other brush species making cross country travel difficult. [This hypothesis may not have taken into account native burning practices.]

Although Drucker (1937:226) wrote that "there was a slight shifting inland," presumably towards the end of the ethnographic period, he never cited the reasons that led him to this conclusion. He did indicate that the resources along the coast were so plentiful that "the population never came close enough to the margin of subsistence to make large scale expansion necessary" (Drucker 1937:226). Some Tolowa who were interviewed to provide information related to a village site near Gasquet (*Mus-yeh-sait-neh*) indicated that certain inland villages were inhabited year around. Gould (personal communication) indicated that in 1964, his elderly consultants had told him that the Gasquet area was not inhabited during the winter. At this time, the question of whether some of the inland villages of the Tolowa were populated year around cannot be answered definitively.

Tolowa Culture

A number of summaries exist on Tolowa culture (see Kroeber 1925, Drucker 1937, Gould 1978). This overview emphasizes cultural activities related to land-use practices within the Smith River basin. The primary way that the Tolowa influenced the environment was through subsistence procurement activities such as hunting and gathering. Population estimates for the Tolowa during the ethnographic period vary greatly. The lowest estimate of 450 individuals by Cook (1943: 4) is almost certainly too low. Kroeber (1923: 883) estimated the population to be about 1,000. Using updated figures to make an estimate, Cook (1956:101) and Baumhoff (1963:231) estimated the precontact population at 2,400. It is likely [there is little doubt] that given a population of about 1,000 to 2,000 people, their land-use activities would have had an effect at some level on the environment of much of the Smith River Basin.

Subsistence

Gould (1965: 146-152) described how the people, who once inhabited the Point Saint George site, procured their subsistence resources. Consultants indicated that in the late summer inhabitants of the village would first travel up the coast a short distance to catch and dry smelt which were then carried to the village and stored for the winter. They would then travel inland (about early September) to harvest acorns. Gould noted that the village claimed an area on upper Mill Creek drainage (*n ntu n*, Drucker's *nuntu'tun*). By mid-September everyone would be at this location. As the fall season advanced, the site of *tsahu me* (Drucker's *cu'ctaixotme*) located at the confluence of Mill Creek and the Smith River was used to catch salmon. Gould (1965: 148) noted that although this fishing location is not the best place along the Smith River to catch salmon, the combination of nearby oak acorns and fish in a central location "provided an excellent combination of the two resources."

Gould (1975) noted that three species of oak acorns were available to the Tolowa in this region; valley oak (*Quercus lobata*), canyon live oak (*Quercus chrysolepus*), and tanoak (*Lithocarpus densiflora*). Gould misidentified the white or Oregon oak (*Quercus garryana*) found in this region, as being the valley oak. This may be because, in certain areas of California, the valley oak is also referred to as white oak. Valley oaks, in fact, do not grow in this area and Oregon oaks are uncommon. They are found at only a few locations in the region, including Big Flat, Sourdough Camp, and Gasquet Flat.

[See Griffin and Critchfield 1972: Map 74,

Link: http://www.fs.fed.us/psw/publications/documents/psw_rp082/psw_rp082.pdf]

According to Gould (1965:177), the Indians of this area rated the three varieties of acorns equally in relation to preparation, flavor, and storability. The most common acorn by far was that of the tanoak. The least common were the acorns of the Oregon oak. Gould (1975:155) noted that informants told him that the furthest inland grove of Oregon oaks regularly used by the coastal communities was located at Pappas Flat (Oregon oaks are also found across the river [just] to the south on Gasquet Flat). Gould's consultants said that at one time: "[w]omen with burden-baskets full of acorns would move constantly back and forth between the oak groves and their home villages."

In addition to Pappas Flat, Oregon oaks and associated grasslands are also found at Big Flat in the area referred to as Stevens Prairie. Since the trip to Gasquet that follows a trail along the Smith River to Gasquet Flat would have been about twelve to fourteen miles in each direction; for those on or near the coast it is apparent that Oregon oak acorns were a desirable resource.

Before leaving the oak groves at the end of harvest season, families would set fires beneath

the trees to reduce the understory so that it would be easy to see and collect the acorn harvest the next year (Gould 1975:156). This annual burning was an important factor in helping to preserve the Oregon oak groves in this area. [By discouraging the invasion and growth of conifers: see Keter 1995 and 1997.]

Although none of the ethnographers who worked in this region noted the importance of grass seeds to the local diet, this resource was probably utilized to some degree. Although none of the Tolowa interviewed remembered the use of grass seeds, I was told by one interviewee that when she was younger she was told by her mother that many of the plants in the area once used as a food resource were no longer used. Prior to the historic era and the introduction and almost complete domination of the grasslands by introduced species of annual grasses, native perennial bunch grasses provided a rich source of protein. This resource was an important part of the diet for some of the aboriginal groups living to the south. Many of these native perennials grow in association with the Oregon oak woodlands vegetation community and it is likely that, in those areas containing this type of vegetation association, grass seeds were utilized to some degree as a food resource (see Keter 1989).

Tolowa Use of the Interior

There is little documentation on use of the interior by the Tolowa. Gould (1968:96) noted that there was a major trade route up the South Fork of the Smith River. This trail passed through Big Flat and continued south to Hupa Valley. Trade goods moving into Tolowa territory included obsidian, red woodpecker scalps, and red clay, while flint, dried fish, and sea lion meat were traded inland.

The Tolowa After 1852

With the discovery of gold in the interior and the settlement of Crescent City in Del Norte County (then a part of Klamath County), the Indians of this region were rapidly and in many cases violently driven from many of their coastal and river settlements. During the early years of Crescent City, the local newspaper, the *Crescent City Herald Weekly* referred to the local native peoples by either the term Indian or by the general location where the rancheria was located; for example: the "Smith Rivers," the "lagoon" Indians, or the "Yontocket." In 1881, A. J. Bledsoe wrote the first history of Del Norte County. This publication, which included a business directory, was published not only to document the history of the area but to promote the area for outside investment. Bledsoe's references to the local Indian population are extremely belligerent and racist. Little interest was displayed in providing any information about them as a people. Bledsoe (1881:62,104) variously referred to the local Indians as the "Smith Rivers," "Yontocket Tribe," or the disparaging term used to refer to California Indians in general, "Digger Indians."

Perhaps one of the most surprising things about research into the history of the Indians of Del Norte County during the early historic era (1850s and 1860s) is the almost total lack of information in the historic record concerning the Tolowa. In reviewing several months' issues of the *Herald* from 1854 and 1855, it was found that the local Indians were for the most part ignored by the newly arrived residents of Crescent City. Among the articles announcing a new business establishment, marriages, births, deaths, elections, and even wars and events in Europe, Asia, and other parts of the world, the only articles that mention the local Indians relate directly to some confrontation usually violent between the two communities. It is as if the Indians in this region had somehow disappeared, retreating to the fringes of Del Norte County and were living in a world almost totally isolated from that of the white society.

It is interesting to note, however, that when violence against whites perpetrated by Indians did occur (often in response to provocations or depredations by whites) the response was immediate and intense. When a man named French was murdered and Indians were suspected the *Herald* (November 15, 1854) reported that every Indian within the limits of Crescent City was arrested for questioning and that the "jail was filled with Indians." It can be inferred from this and similar articles that some Indians did reside or spend time in Crescent City, but other than this kind of passing remark, little can be found of aboriginal life in the late 19th century in Del Norte County.

Takelma and Tutuni

As noted earlier, it is likely that some portions of the North Fork Smith River watershed were inhabited by the Takelma and Tututni. Although territorial boundaries are poorly defined it appears that the Tututni occupied portions of the North Fork watershed to the west of the North Fork of the Smith and somewhere to the north of about the current state line, while the Takelma occupied portions of the watershed to the east of the river (Beckham 15: Map). For those interested in this subject, Stephan Beckham (1978) has summarized the ethnographic data related to these two groups in a *Cultural Resource Overview of the Siskiyou National Forest*.

Chapter 3

The Smith River Basin: Exploration and Settlement 1850-1865

It is likely that the first white men to enter the interior of the Smith River watershed were members of the Jedediah Smith Party in June of 1828. Doris Chase (1959:5-6) after studying Smith's diary theorized that on June 18 of that year, Smith and his men crossed the Smith River below Peacock Crossing and headed inland to the ridge just to the west of Myrtle Creek and camped at the head of Myrtle Creek. From there, they headed north and crossed into Oregon on June 22 (Chase 1959:31-32).

Historical development of the Smith River basin is linked to "Gold Fever" that swept the nation after President Polk's State of the Union speech to Congress in December of 1848. By the spring of 1849 thousands of Americans as well as foreigners were arriving in California and heading for the gold fields.

The initial discovery of gold took place along the American River in the Sierra Nevada Mountains east of Sacramento, but this was followed closely by discoveries in the Trinity Mountains; along portions of the Klamath River near Happy Camp; and in the Yreka area. Thus, the first impetus to settle Crescent City (with its natural harbor) was in an effort to supply the mining camps located in the Yreka and Happy Camp areas of California as well as those located in southern Oregon. Gold was also discovered in Del Norte County at a number of locations within the Smith River watershed including Myrtle Creek, Haines Flat, and French Hill. The discovery of gold in the mountains east of Crescent City spurred hundreds of miners to explore and stake mining claims within the Smith River Basin in the 1850s.

The first settlement at Crescent Harbor was a shanty town of tents on the beach in 1852. By the spring of 1854 nearly 300 houses had been constructed and by the summer, Crescent City had a population of 800 and its own weekly newspaper (first published on June 10, 1854). The principal impetus for growth, initially, was as a supply center for the mines and as a departure point for miners heading inland to the gold fields.. As Doris Chase (1959: 20) noted in her history of the region: "[i]t was the trails and people and the supplies that went over them that made Crescent City the most important seaport between San Francisco and Portland."

The lower Smith River region contained substantial lands of high agricultural value and before long settlers were busy homesteading farms in this area. By 1854, 75 farmers were supplying Crescent City with produce; some goods were even shipped to San Francisco.

Since Crescent City was the closest port along the coast connecting with the inland mines of

northern California and southeastern Oregon, large numbers of miners passed through the city. During the summer of 1854, 39 steamers and nine sailing ships visited Crescent Bay bringing 4,000 tons of freight and 2,286 passengers (Chase 1959:25). While some of the freight was bound for Crescent City, most of it was destined for the inland mining areas as were many of the passengers. As a major supply center for the mines, the city had many businesses related to trade including flour mills, packing companies, and offices for some of the larger mines. By 1857, all of the ships that sailed along the coast advertised that they stopped in Crescent City. For a short period time in the late 1850s and early 1860s, Crescent City was the most important seaport between Portland and San Francisco (Chase 1959:30).

It is not entirely clear just how the Smith River got its name. A. J. Bledsoe (1881:18) wrote that the most generally accepted account of how the river was named is related to the exploration of the southern Oregon region by James Fremont in 1842. Fremont named what is today the Illinois River in southern Oregon after Jedidiah Smith. After the "Smith's River" in Oregon was named, other explorers crossing the mountains followed the Smith River of California to the sea and believed it to be the lower portion of the "Smith's River" in Oregon. Eventually the upper "Smith's River" in Oregon was found to flow into the Rogue River and was renamed the Illinois, while the "lower" portion of the river retained its original name.

Gold was first discovered in Del Norte County (at that time the area was part of Klamath County) along the Smith River in 1851. This discovery and the realization by the merchants of Crescent City that improved transportation links to the inland mines were needed were the main forces that opened up the interior region of the Smith River watershed. Therefore, during the early years of historical development, transportation links (wagon roads and trails) and mining (including gold and copper mining) were the primary land-use activities affecting the environment of the Smith River watershed. Due to the generally steep terrain, actual settlement and homesteading was limited to those few locations that are relatively flat including Big Flat and Gasquet Flat, and along the lower portions of the river below the confluence of the Middle and South Forks of the Smith.

Mining

The height of the gold mining boom in Del Norte County lasted from about 1852 to 1858. In 1858, gold was discovered along the Fraser River in British Columbia and most of the miners left Del Norte County for the new "diggings." This had a serious economic effect on Crescent City and mining activity within the Smith River Basin declined (the Fraser River gold rush was short lived and many of the miners returned to Del Norte County within a year). With the discovery of copper, the inland region again saw an influx of miners. With the beginning of the Civil War, copper was in great demand and the mines of Del Norte County contributed much copper to the union war (copper was used in the brass casing of

bullets). With the end of the Civil War mining activity within the Smith River watershed declined precipitously.

During this era mining was quite profitable. Chase (1959: 29) notes that while a day's wages varied considerably, many of the men, working independently, could make as much as 20 to 40 dollars a day panning for gold; men who for worked for someone else might make five to 15 dollars a day. As is often the case, however, some of the most profitable ventures were those related to supplying the miners with needed supplies--including tools, food, and liquor--all brought in via mule from Crescent City.

During the 1850s while gold was still drawing miners into the hills and canyons of the Smith River watershed some of the men noticed that there were also copper deposits at a number of locations. It was not until March of 1860, however, that several miners took some specimens in to be assayed by D. S. Sartwell and Dr. Henry Smith of Crescent City. The report indicated that the ore contained a high percentage of copper. With the advent of this news, just as the placer gold was playing out, a new rush began to establish mining claims on the rich copper deposits that could be found throughout the interior region of Del Norte County (Bledsoe 1881: 66).

By the summer of 1860 miners from as far away as San Francisco were heading for Del Norte County. A company of Cornish miners proclaimed the ore the richest they had ever seen. The streets of Crescent City were almost deserted as men headed for the hills and not a horse or mule could be rented from McClelland's Livery Stable at any price (Bearss 1969: 193).

The first copper mine to open was located along the road to Oregon about one-half mile east of the Smith River and Black's Ferry. Several others were also located in that vicinity. Others were scattered throughout the region. Most of these companies were organized during the summer of 1860. Unlike gold mining, where the lack of capital was not a problem since a man with a shovel and a pan could actually strike it rich if he was lucky, copper mining took a substantial capital investment. For that reason many of the "companies" that were organized never mined an ounce of copper.

The third most important mineral to be mined within the Smith River watershed is chromite. Chromite deposits are found in several areas. [Refer to Maps 1-13 and Table 1 for the location and names of the major mines.] Prospecting for chromite was limited to those areas which contain peridotite outcrops and within these areas to locations that have deposits of dunite. Because of their poor soils these areas are generally not heavily forested and often have unique endemic species of plants.

Chromite was first mined as early as 1860 by the Tyson Mining Company at its Mountain View Mine at High Divide. There is little in the way of documentation on the early mining operation, however, it appears that between about 1860 and 1889 about 1,500 to 2,000

tons of ore were shipped annually via Crescent City around Cape Horn to Baltimore. The tariff protecting chromite prices was removed in 1894 and as the domestic price fell production in Del Norte County ceased.

Transportation

The earliest development within the interior regions of the Smith River watershed during the historic period was related to the construction of pack trails. Two trails were constructed from Crescent City to the inland mining regions. One trail was constructed to supply the miners working at Sailor Diggings in Jacksonville and other areas in southern Oregon. Another trail was built to the mining camps directly to the east of the crest of the Siskiyou Mountains in what is now Siskiyou County (in the Happy Camp and Yreka areas).

To improve commercial travel to the inland regions, it was announced via the local paper (*Herald Weekly* September 9, 1854) that a survey was to be undertaken to improve the primitive trail from Crescent City to Jacksonville Oregon. This trail was called the Cold Springs Trail. It paralleled the Smith River along its north bank and continued east to the confluence of the North Fork and Middle Forks of the Smith River. After crossing the North Fork, the trail then ascended the mountain northeasterly towards Cold Springs (much of this section of the trail is still maintained by the Forest Service). The North Fork of the Smith was difficult to ford at high water and in 1853, a man named Mace built a ferry and a road house at this location.

The Cold Springs Trail was a major supply route to the mines of southern Oregon. Near the California/Oregon border there was a stopping place for travelers called "The Robin's Nest." J. S. Watkins, proprietor, wrote (as quoted from Chase 1959:32) a letter to the Crescent city paper noting that:

"From your city [Crescent City] to Sailor's Diggings the trail seems literally crowded. Train after train stops to rest their weary feet. The passenger train [a train of horses or mules that carried people] does more benefit to all the country than it was supposed to do, and...all who travel feel perfectly secure against the Indians...I would be glad to write you something of interest but there are three teams at the 'Nest' and I must attend to business."

The major transportation link with the mines in the Klamath River region and Yreka was the Kelsey Trail. Ben Kelsey was hired to construct a trail from Big Flat over the Siskiyou Mountains to the Klamath River (Chase 1959:32). The first portion of the trail--east from Crescent City to Happy Camp--was completed in August of 1855 at a cost of \$4,100 (*Del Norte Triplicate* 1978:83). The citizens of Yreka finally raised money to finish the trail across the Marble Mountains from the Klamath to their city. This trail was used for about 25 years as a major supply route to the interior mines of Del Norte and Siskiyou Counties.

After the rail line to Red Bluff was constructed this trail was no longer needed as it was much less expensive to bring supplies into the Yreka and Klamath River region from Red Bluff.

During the hey day of the mule trains traversing the trails of the Smith River watershed, thousands of men and tons of supplies were transported to the mining camps. One issue of the *Crescent City Herald* noted that 500 mules were packed out to the mines in just one week (Chase 1959: 32).

It was recognized as early as 1854 that a wagon road for moving passengers and freight was needed to connect Crescent City with the mines in southern Oregon. Eventually, a company, the Crescent City Plank Road and Turnpike Company was organized. Local merchants raised capital for the project and finally in 1857 construction began. The road was finished in the spring of 1858 and the first stage arrived in Crescent City from Jacksonville on May 19, 1858. This road was relatively primitive with some portions covered with planks; a two horse team paid \$5, a four horse team and \$8, and a six horse team \$10 to use the road. The stages could cross the North Fork of the Smith River when it was low, but there was a ferry used to provide passage across the river when it ran high.

Land-use Activities within the Smith River Watershed

The purpose of this portion of the study is to document the exploration and land-use activities taking place within the Smith River watershed during the period 1850 to 1865. During this era, the Smith River watershed was the location of numerous mines, mining camps, and prospects. All of these areas experienced land-use activities that were totally different both in kind and scale from the types land-use activities taking place during the prehistoric era. A summary is presented at the end of this section discussing the kinds of impacts to the environment likely to have occurred given the kinds and intensity of land-use activities occurring during this period of time.

North Fork Smith River Watershed

Settlement

Other than the establishment of the roadhouse by Mace along the Cold Springs Trail at the mouth of the North Fork, and the small settlement of Rocklin (actually a small mining camp which included a roadhouse where the toll road crossed the North Fork), it appears that there were no homesteads established during this period within the North Fork watershed.

Mining

The principal land-use activity during this period within the North Fork watershed is related to the exploration for and the mining of gold and copper. It is likely that intensive exploration and prospecting took place along the stream channels of just about every creek located within the Smith River watershed. The locations listed below are the principal areas that experienced any significant impact from the mining of minerals as documented in the literature.

Since, initially, the actual mining of gold was restricted to panning and the use of picks, shovels, and occasionally rockers or long-toms, it is likely few major impacts to the stream channels resulted from gold mining activity during this era.

During this period, some of the mining activity and exploration associated with the mines in the Altaville/Low Divide area extended into portions of the North Fork watershed directly to the east of the divide between Hardscrabble Creek and the North Fork. Since Low Divide actually lies at the headwaters of Copper Creek in the Rowdy Creek watershed and Hardscrabble Creek in the Middle Fork watershed, this mining activity is covered in those sections of this study.

An 1863 map of the copper region by County Surveyor R. B. Randall (Williams, Maniery, and George 1982: Map 3) lists four mines (Gruklshank, Diamond, Crystal, and Pearl) as located just to the east of where the wagon road (now County Road 305) crosses the North Fork (Map 3, Key 75). Another copper claim (Map 6 key 74) was located just to the north of Gasquet's parcel on the North Fork on the east side of the river just above its confluence with the main Smith River.

Transportation

Although today the North Fork watershed is the least developed region within the greater Smith River watershed, it was, as noted earlier, the location of one of the earliest commercial developments when the Pioneer Wagon Road was constructed across portions of the upper watershed near the California/Oregon line in 1857-58. The wagon road crossed the North Fork about one mile to the south of the Oregon Border.

Rowdy Creek Watershed

Land-use Activities

In April of 1853, several men travel north from Crescent City to settle on the north bank of

Rowdy Creek and established ranches in this area. Cooper (1939: no page number) notes that when they arrived they “found...shoulder high, luscious grass, many elk, deer, bear, pheasant, ducks and geese.”

The headwaters of Copper Creek are located at Low Divide. The copper mining activity conducted in this area is described in the section on Low Divide and the town of Altaville.

Middle Fork Smith River Watershed

Settlement

The Middle Fork watershed was the site of the first permanent settlement within the Smith River basin at what was to become known as Gasquet Flat. The lands directly to the south of the confluence of the North and Middle Forks where Mace had built his roadhouse (on the Cold Springs Trail) was located (claimed) by Sashel Woods in 1853 (Chase 1974: 6). Apparently Wood's parcel of land and that owned by Mace were purchased by R.B. Morford who continued to operate the ferry and roadhouse. Eventually, in January of 1857, the land (320 acres) and improvements were purchased by Horace Gasquet for \$4,500. The property included 160 acres on the north side of the Middle Fork and 160 acres on the south side both centered on the confluence of the two rivers. The homestead was located on what became known as Gasquet Flat--the largest valley and relatively flat piece of land within the entire Smith River watershed. [Big Flat may very well be a bit larger than Gasquet Flat.]

Gasquet, a native of France, moved to Del Norte County and first established a place near the mouth of Hardscrabble Creek where he sold pie and coffee to miners for 50 cents (Smith 1953: 145). After buying the property at the confluence of the North and Middle Forks from Morford, Gasquet continued to operate the ferry and also established a store on the south bank of the Middle Fork. During the height of the mining boom in this region Gasquet also established stores in Waldo, Oregon, and Happy Camp. Over the next several decades, Gasquet was a major influence on the development of the Gasquet Flat area.

Mining

By 1865 with the end of the Civil War mining activity again subsided. During the late 1800s mining was a boom and bust cycle with renewed interest coinciding with events affecting the national economy, such as war, depression, or the availability of inexpensive overseas resources. For example, increased shipments of chromite from Greece and Asia Minor during the mid-1870s led to the shutdown of the mines at Low Divide since these mines were in remote, rugged terrain making shipment of the ore difficult and relatively expensive.

During this decade, the principal mining activities within the Middle Fork watershed took place at the following locations:

Myrtle Creek (See Map 5 Key 76)

Louis Gallise discovered gold along Myrtle Creek in 1853 (Childs 1894:319). During the 1850s, Myrtle Creek was known as one of the only really “paying” streams in the county and two express wagon companies out of Crescent City advertised that they stopped here (*Del Norte Triplicate* September 13, 1978: 44). The early mining activity along Myrtle Creek was primarily small placer mining by individuals with pick and shovel (Bledsoe 1881:167). Bledsoe in his *History of Del Norte County California* (1881:21) wrote

The mines of Myrtle Creek, twelve miles from town [Crescent City] were doing exceedingly well. The general average was from five to fifteen dollars per day to the hand, and in the month of June one man took out in about two hours, four hundred dollars.

Although Myrtle Creek and adjacent creeks were among the earliest in the Smith River Basin to be mined by the early 1860s the richest portion of these streams had been worked out (Childs 1894: 319). In addition to gold, several copper mining claims were located along Myrtle Creek by 1863 (Evoca, Excelsior, Cliff, Evoca S. Extension, Excelsior N. claims) and one mine (Eureka) was located several miles upstream near the headwaters of the creek. No data could be located on the productivity of these mines during this era.

Altaville/ Low Divide (Headwaters of Hardscrabble and Copper Creeks)

In 1860 copper was discovered at Low Divide (Bledsoe 1881:140). On May 26, 1860, a meeting of miners in the Low Divide area established some mining laws for the area. These laws included the size of claims, the number of claims per person or company, and the cost of filing claims. Also noteworthy was the size of the district. The district was to be 4 miles square with Low Divide as the center (thus including a portion of the North Fork watershed).

The Civil War was the principle reason for the rapid growth of this mining region. Copper was considered a strategic mineral as it was needed to manufacture the casing for ammunition for the Union Army (Del Norte County Historical Society Files). For that reason, a subsidy was placed on copper making it very profitable to mine. The copper was first shipped from Crescent City to Swansea (a port city in Wales) and to Germany. [In order to process the ore; it was then shipped to the Baltimore and other port cities.] In 1862, at Low Divide, county surveyor R.B. Randal mapped a 60 acre parcel for the town of Altaville. The town of Altaville typical of the mining boomtowns of California grew rapidly

(the local newspaper estimated that population peaked at around 1,500 (*Del Norte Triplicate*, June 27, 1981).

Newspaper reporters visiting from Sacramento and the San Francisco Bay Area sent back glowing reports. The *Alta California*, for example, described the copper as “some of the finest specimens ever recovered. By 1863, Altaville boasted two hotels, several saloons, company houses, and a town square. It is likely that there were also a number of businesses including a blacksmith shop a general mercantile store, and cabins for miners. At this time there were about 25 companies at work mining or prospecting in the area (Williams et al 1982: Map 3). In December 1863, William H. Brewer visited Altaville and wrote in his journal, “a filthier, dirtier, nastier, noisier place I have not struck in the state” (Brewer 1966:486).

Between 1860 and 1863, 2,000 tons of high grade ore were shipped from the Alta and Union mines. With the high cost of labor and transportation, however, copper mining was not the profitable venture that had been anticipated. Peak production years were from 1863 to 1865. With the end of the Civil War, Altaville began a steady decline and by 1868 chromite had replaced copper as the most important mineral in Del Norte County. By 1873 only 8 registered voters remained in the Low Divide Precinct. [For additional information on Altaville and Low Divide see ARR 05-10-107.]

[This overview failed to mention that there was a substantial Chinese presence at Altaville. They were segregated to an area just to the south of the main town. This subject is discussed in the Altaville excavation report cited below.]

[Major excavations took place at Altaville during the summers of 1998, 1999, and 2000. Refer to *The Filthiest, Dirtiest, Nastiest, and Noisiest Place in California: Welcome to Altaville, 1860s*. PAR Environmental Services, Inc., Rick Morris and Mary L. Maniery coauthors. On file Heritage Resources, Six Rivers National Forest.]

Transportation

As noted earlier, in 1853, the first trail to be constructed from the coast inland paralleled the Middle Fork of the Smith along the north bank to the confluence of the North Fork. It crossed the North Fork and then headed in a northeasterly direction ascending Cold Springs Mountain. It stayed on the mountain ridge and dropped down into the Illinois River basin and continued on to Sailor Diggings and Jacksonville (Chase 1959: 31).

During this era other trails were constructed that lead to Big Flat, Summit Valley, Baldy Peak, Pigeon Roost, High Plateau, Chimney Rock, and Kelly Jump-Off (Theodoratus 1979: 14).

South Fork Smith River Watershed Land-use Activities

Settlement

Big Flat, the only significant area of flat land within the watershed, was settled relatively early. Many miners lived in this area along the lower reaches of Hurdy Gurdy Creek. There was even a small settlement of Chinese workers in the area during the 1860s. Some homesteaders also settled in this area and it is probable that some farming and livestock grazing took place in the Big Flat area. For the most part, however, settlement was directly related to the mining industry and was transitory in nature.

Mining

General areas that experienced mining activity during the 1850s and 1860s within the South Fork Smith River watershed included Mill, Gordon, Coon, and Craig Creeks, Haines Flat, French Hill, and Hurdy Gurdy Creek (Big Flat) (Childs 1894: 319).

The Big Flat area was the location of a number of major operations related to gold mining continuing sporadically from the early 1850s well into the middle of the 20th century. Gold mining took place here as early as 1854. Early mining activity was limited to simple labor intensive methods such as panning, sluice boxes, and long toms.

Transportation

As noted earlier, the principle route linking the inland mines along the Klamath River and at Yreka during the late 1850s was the Kelsey Trail. This trail passed through Big Flat and therefore was also the principle transportation link between the mines at Big Flat and Crescent City.

Land-use Activities: 1850-1865

Given the historical data presented for this era, it is likely that the major land-use activities within the watershed were related to prospecting and the mining of gold and copper. Road and trail construction, and even settlement of inland areas, to some extent were driven by economic factors related to gold and copper mining. The establishment of mines

and mining camps within the Smith River watershed was based on two simple criteria--- were valuable minerals available to exploit at a particular location and could a profit or potential profit be realized from working the mineral claim? California historian Hubert Bancroft (1886: VI 434-435 in Theodoratus 1980: 16) wrote about how the mining camps sprung up around the site of a valuable mineral strike.

The site of mining camps received apparently little of the consideration governing the location of settlements. In the rush for gold, nothing was thought of save the momentary convenience of being near to the field of operation. And so they sprang up, often in the most out of the way spots, on a sandy flat left by retreating river currents, along the steep slope of a ravine, on an arid plain, on the hilltop, or in the cul-de-sac hollow of some forbidding ridge, with lack or excess of water, troublesome approach, and other obstacles. Even the picturesque faded fast as the foliage fringe round the white-peaked tents was reduced to shorn stumps, midst unsightly mounds of earth, despoiled river beds, and denuded slopes, the Ghastly battlefield of Titanic forces.

There was no plan for setting up an orderly camp. Any order amid the chaos was created by the merchants who followed the miners and set up businesses. Tradesman usually setup to sell their wares at a centralized prominent location. They established a "thoroughfare" and usually businesses were lined up along what could be considered a kind of "Main Street" consisting of stores, saloons, and boardinghouses--all surrounded by a jumble of tents, brush huts, and log cabins (Bancroft 1886: IV 434-435 in Theodoratus 1980: 16).

Mining was an opportunistic venture and the idea was to get in early, make a fortune, and the head for new "diggings" when the returns began to dwindle. For that reason, little thought was given to the future of an area or how any of the mining activities would effect the immediate environment or even those people living downstream. In comparison to gold prospecting and mining, copper mining although more localized, may have resulted in more severe affects to adjacent stream channels because of leaching and heavy runoff--especially in the Hardscrabble and Copper Creek watersheds. Copper mining often involved blasting, and the digging of adits or tunnels to reach the veins of copper.

It is possible that human-caused fires were common during this era. The reason for this supposition is based on the incidence of fires (both intentional and accidental) related to mining activity in other regions. By burning an area it was easier to locate the kinds of geologic indicators suggesting the occurrence of a particular mineral. In addition, it is likely that unattended campfires, the discarding of matches and cigarettes, and other similar activities related to daily living probably contributed to numerous wildfires during this period.

Another impact to the environment would have been the hunting of game to provide food for the miners. During this era, commercial game hunters often worked for the larger mining outfits or for hotels (like those at Altaville). They would scour the countryside hunting primarily deer and other small game such as grouse and quail to be served at the hotel restaurants. Due to the fact that miners were occupied with mining work and were usually making wages, much of the food in mining camps was imported. Given this scenario, it is likely that some effects did occur to certain wildlife populations, however, these effects were probably localized and they did not last for too long (the main mining activity lasted only about 10-15 years). It is likely that mining activities, the construction of the wagon road and other ground disturbing activities would have added some sediment loads to adjacent streams, but given the relatively small scale of development as of 1865 the Smith River Basin remained a relatively wild remote area with few human-caused impacts from historical land-use activities.

Chapter 4

Smith River Watershed: 1865-1907

By the end of the Civil War, some of the high expectations trumpeted by the merchants of Crescent City for the Smith River watershed regarding the rich deposits of gold and copper had failed to materialize. In addition, new supply routes to the inland mines from Humboldt Bay and the northern Sacramento Valley were beginning to have a negative effect on the Crescent City economy. In general, the result was to reduce the amount of human activity related to development taking place within the Smith River watershed. Over the next several decades the intensity of development followed a rather erratic course of ups and downs based on the excitement of the latest discovery of gold, silver, copper, chromite or some other mineral.

By the mid -1860s, gold mining methodology began to change. In 1894, John Childs (1894: 61) of Crescent City, referring to the water courses within the Smith River watershed, noted: “[t]he richest portion of the beds of these streams were worked out over thirty years ago.” Thus, during this era, with most of the surface gold bearing gravels within stream channels having been worked by hand, new methods to get at the subsurface gravels were developed. Unlike the earlier placer mining that required little in the way of investment or equipment (a pan, pick and shovel, and perhaps a rocker or long-tom) and could be undertaken by an individual, the preferred method predominating after 1865 was hydraulic mining. This method of mining required a substantial up front financial investment and the construction of a ditch to supply the mining area with water. It was also very damaging to the environment since at the mining site, the water was fed via gravity through piping to a large nozzle called a hydraulic monitor or "giant" that used the high water pressure to wash off the over-burden to get to the auriferous gravels.

Stream beds were often washed clean to bedrock, in other cases stream banks and entire terraces were washed away. Water was usually conveyed to the mining areas via a combination of ditches (earthen structures) and flumes (wooden troughs) often referred to as canals. Generally, water was diverted into a ditch upstream from the mining area, perhaps as much as several miles or more away. It was then conveyed to the mining site via the ditch. Along the ditch, sections of flume were constructed as needed; for example across very steep unstable slopes or to bridge small deeply eroded side drainages. Flume construction often necessitated the construction of a mill to supply the lumber.

[See Table 1 for information on mining ditches constructed within the Smith River watershed.]

Table 1
Ditches and Flumes of the Smith River Basin*

<u>MIne</u>	<u>Area</u>	<u>Year</u>	<u>Years open</u>	<u>Length</u>	<u>Comments</u>
Ora Grande Ditch (05-10-51-16)	Hurdy Gurdy/Big Flat			2.5 miles	Large Ditch carried water on the west side of creek Rebuilt by Ora Grade Co. 1930s
Big Flat Ditch (05-10-51-92)	Hurdy Gurdy/Big Flat	c1878	1878-1889	9 miles	Destroyed by flooding eastern slope
Big Flat China Flume (05-10-51-152)	Hurdy Gurdy/Big Flat	1879	1879 -1889	12 miles	By Big flat Mining Co.
Big Jones Creek Canal (05-10-51-41)	Jones/Hurdy G.	c1881			Owned by Mountaineer Mining Crossed ridge into Hurdy Gurdy Watershed to supply water to Big Flat (Bledsoe 1881:135)
French Placer Canal	Craigs Creek			5 miles	
Haines Flat Canal #1	Gordon Creek/Haines Flat	1878	1880-1888		Constructed with Chinese labor
Haines Flat Canal #2	Coon Creek Haines Flat	1878	1880-1888		Longer than above
Haines Flat	Coon Creek Haines Flat		1902-1909		Original was rebuilt and an additional 3-4 miles in length added by Marlow- (rebuilt and extended)
Lind Flume					(Noted in HRM: District File) Transported water to claim 300 yards east of the Lind Cabin.
Monkey Creek Flume					
Myrtle Creek Ditch	Myrtle Creek		c1893/94		[determined eligible for the National Register]
Patrick Creek Flume		1890s			(HRM:District File) Serviced the old Elkhorn mining claim located To the east of the Lodge. Art Kelly and Sam Melderson operated the claim in the 1890s. Oak Flat mine probably renovated and used this ditch as late early 1950s (see Jenkins 1952:278)
Pigeon Point Flume					(HRM: District File) served a mining claim adjacent to the River at Pigeon Point. The ditch originated SE of the Esther Smith Cabin on French Hill passed below Humboldt Flat and crossed into the Middle Fork Watershed.
Sawyers Flume	Little Jones	1890s			Serviced a mining claim across the river from Cedar Rustic Campground during the 1890s

* This table is incomplete-- Additional research is needed to include all ditches within the basin.
The purpose of this table is to begin the task of organizing this data into a useful format.

Within the Smith River watershed the majority of ditches were constructed using Chinese labor. Ditch construction could involve as many as several hundred men and was extremely labor intensive. In addition, quite a large number of men were needed to run a hydraulic operation. Each activity related to hydraulic mining was both capital and labor intensive including maintaining the ditch, running the hydraulic giants, processing the auriferous gravels, maintaining equipment, and keeping a steady stream of supplies coming in from Crescent City to house and feed the men at the mining camp.

During this era, events taking place within the inland regions of the Smith River watershed directly influenced the economic health and vitality of Crescent City. Periods of intensive mining activity produced economic opportunities and potential wealth for Del Norte County merchants who supplied the mines with needed materials and supplies and provided employment opportunities for many of the area's residents. For this reason, Crescent City and the business community took a great deal of interest in what was happening in the mining areas. In addition, some of the wealthier businessmen invested in some of the mining ventures.

In 1881 A.J. Bledsoe a businessman and Del Norte County promoter published *History of Del Norte County California, with a Business Directory and Traveler's Guide*. He optimistically promoted the interior of Del Norte County.

The gold mining districts comprising Big Flat, Haynes [Haines] Flat, and French Hill will prove to be the richest in the state, should they ever be properly developed. The Big Flat is the richest of these localities and miners have worked there more or less since 1854.

The high expectations for gold mining within the basin by the merchants and promoters from Crescent City were never fully realized although, periodically, there was a flurry of mining activity as the latest "big discovery" filtered back into town.

One of the culturally significant factors related to mining activity during the 1870s and early 1880s is the use of Chinese labor to help construct the mining ditches. The principle locations that have been recorded where Chinese laborers worked in significant numbers were Low Divide, Haines Flat, Myrtle Creek, French Hill, and Big Flat. Although some Chinese men were miners and worked small placer claims or reworked abandoned mines most worked for wages on construction projects (as noted elsewhere, Chinese labor was also used to construct some of the wagon roads in the region).

At Big Flat during the early 1880s, local historian Thomas Peacock (1977:4) noted that there were three main mining camps in the area: the Mill, Brady's Camp, and the Store. The Store was owned by a local miner named O. M. Paris. It included a general store, a boarding house, tent, five cabins, and a pig sty that was referred to as "Parisville" or "Paris City." A Chinese community, consisting of men primarily engaged in digging the mining ditches

evolved in the general area of Parisville (site #05-10-51-52). The Chinese stayed here at least until 1885. In February of that year, all of the Chinese residing along the coast in Del Norte and Humboldt Counties were expelled with less than 24 hours' notice. It appears that they were, at that time, expelled from interior regions of Del Norte County as well. No more mention is made of the Chinese in this region until the late 1890s when Ed McLaughlin, owner of the Big Jones Creek Mining Company, sold the majority of his mine to a San Francisco Chinese man named Ock. Ock paid \$7,000 for the claim and worked it until 1906 when he left the area. He appears to have been the last Chinese man to have worked in the Big Flat area and perhaps the entire Smith River watershed (Hamilton 1919:58).

Gold prospecting continued throughout this era; and, in 1891 when State Assistant Mineralogist Watts (1892:195) visited Del Norte County he noted that:

Del Norte is one of the few places in California where a poor man still earns a living with a sluice and rocker, and recent prospecting has demonstrated that there are deposits of auriferous gravel in the country which are yet unworked.

Copper, chromite, and other minerals were mined periodically. Chromite deposits are located within the Smith River watershed in several broad areas based on the presence of dunite or serpentine. Not all outcrops or deposits of dunite or serpentine have pods of chromite. Generally, chromite lenses or pods are associated with shear zones and in areas where dunite has been altered to serpentine. There are two different types of deposits: pod and disseminated. Pod deposits are "clean ore" that can be mined, sorted, and shipped as lump ore. Thus, it is relatively easy to mine with little processing work involved. Nearly all of the chrome deposits within the Smith River watershed are of the pod type (Albers 1966:52). Historically, Del Norte County was the largest producer of lump chromite in the United States (Jenkins 1952:268). Wells (1946) listed 71 chromite deposits that had been worked within the watershed. Total production for the region through 1952 is recorded as 70,000 long tons (Jenkins 1952: 268).

Copper is found within the same bands of peridotite as chromite (see Wells 1946: Map). Generally, copper deposits occur as veins that widen and narrow in lenses along the strike and dip of peridotite deposits and are enclosed in serpentine (Jenkins 1952:276).

In general, chromite and copper mining was boom and bust with the most active periods during times of war or other occasions when economic conditions made mining profitable. For example, the *State Mineralogist Report for 1890-1892* (Watt 1892:197) noted that at that time, no copper mines were active within the county.

Another mineral of economic value found in conjunction with gold was platinum. On French Hill, platinum comprised about 5% of the total value of mineral wealth recovered (*State Mineralogist Report #14* 1914:391). Platinum was also recovered from Myrtle and

Craigs Creeks in small amounts in connection with placer mining.

[Refer to Appendix 1 for a listing and maps and a database identifying the locations of the principal mines and the minerals that were mined within the Smith River watershed.]

Timber production like mining has historically played an important role in the economy of Del Norte County. The first large lumber mill, Wenger's Mill, was constructed in 1869 at the south end of Lake Earl. In addition, a loading dock was constructed in Crescent City. Wagons would haul the finished lumber to the dock where it was loaded directly on schooners or steamers. Large scale commercial logging began in 1872; by 1889, Hobbs, Wall and Company began logging in the area to the east of Crescent City and to the west of the Smith River as well as in the lower Smith River Valley. During era, redwood was the most important tree commercially. Much of the timber harvested was shipped to the San Francisco Bay Area. Except for relatively small logging operations adjacent to some of the mining areas, it is unlikely the large scale commercial logging took place within those portions of the Smith River Basin relevant to this study. [It is likely that some stands of redwood trees were logged along lower Rowdy Creek and in the Mill Creek watershed; just to the west of the national forest boundary.]

Timber harvesting required large amounts of manpower and for several decades the Hobbs Wall Company was the biggest employer in Del Norte County. They ran several lumber mills and built a railroad from Smith River to Crescent City where it terminated at the wharf where lumber could be loaded directly on ships. In addition, the company owned a number of merchandise stores, including one in Crescent City, and three steamers that were used for transporting their lumber to market commercially.

Commercial fishing for salmon began with the establishment of a cannery near the mouth of the Smith River in about the mid-1860s. Bledsoe ((1881: 118) noted that this cannery was in existence by the mid-1860s. This activity is likely to have had a substantial effect on the salmon population of the Smith River watershed. It appears that although the cannery had existed for quite some time it was not until 1877 that "an extensive cannery was established" (Bledsoe 1881: 118). Prior to that date the fish were put up in barrels. In 1877 William Fender leased the property located near the mouth of the Smith River to the Occident and Orient Commercial Company for a term of 10 years. The new cannery operators spent about \$8,000 on improvements. The main building was 200 feet long and 60 feet wide. Bledsoe (1881: 118) notes that "[t]he machinery in use in the cannery is of the best make, and everything is conducted in an economical business like way which cannot fail to ensure success." The average catch was from 100 to 1,000 fish per net haul and during the fishing season the cannery employed about 60-75 people. During the season of 1880, 158,750 cans of salmon were produced (Bledsoe 1881: 118).

In his book, Bledsoe (1881: 115-116) briefly describes the fishing method and canning process:

Near its mouth [the Smith River] are a number of sloughs, branching out from right and left, and during the fishing season these waters are literally alive with salmon. The fishing season extends from the first of September to the middle of November. A smooth level beach affords excellent facilities for hauling seines, and as the fishing is not interfered with by rapid currents or obstructing drifts, it is an easy matter to catch and handle the fish...

...There are from ten to fifteen men at this work and their operations are conducted in the following manner. First, a large seine is taken out into the middle of the river in a boat, and another boat takes one end of this and moving in a semi-circle lands the end on the beach some distance down the river. The first boat takes the other end to the shore, and the men prepare to haul the seine. The seine is made of heavy twine, the netting too large to detain very small fish, and small to allow the large ones to escape...The fish caught weigh from five to sixty pounds.

Bledsoe (1881: 116) goes on to describe conditions in the cannery:

The men employed in this work at the Smith's River Cannery are nearly all Chinamen, and the disgusting manner in which they cram the pieces of fish into cans with their claw-like fingers is enough to sicken any mortal.

North Fork Smith River Watershed Land-use Activities

Transportation

In 1882, the right-of-way of the Crescent City Plank and Turnpike Company (owners of the toll road) was given to Jacob Wimer and his sons of Waldo, Oregon. They formed a company to maintain and improve portions of the original road. They sought to avoid the high mountain portion of the original road by constructing a new section of road to the east of the North Fork to Oregon Mountain. By the early 1890s, although the Wimer Road was still in relatively good condition it was not used much for transportation due to the completion of the Gasquet Toll road (see below). The bridge over the North Fork at Rocklin was carried away by the river, however, except after heavy rains one could still ford the river at this location (Watt 1892: 198).

Mining

The major land-use activity within the North Fork watershed during this era was related to

mining. The High Plateau area was the location of a number of chromite mines. By 1869, with the decline in copper production after the Civil War, chromite was the most important mineral economically (Report of the State Mineralogist 1882). Tyson Mines of Baltimore opened the first chromite mine at High Divide (Low Divide Hill) in 1869 (see Map 4 Key 2). From 1869 to 1873, the company shipped 1,500 tons of ore annually (Bledsoe 1881: 141).

By 1873, there was a general decline in the chromite market. The principal reason for the decline was related to the high cost of transporting the chromite to market. For this reason, there has always been a boom and bust cycle in the mining of chromite within the Smith River basin. In 1894, the United States dropped its tariff on foreign chromite sources (principally in Greece and Asia Minor). This effectively ended the mining of chromite in Del Norte County until the beginning of World War I.

In times of war, when inexpensive foreign supplies of chromite were not available and there was an increased demand for the metal, the price increased and mining was profitable. One of the most important uses of chromite is in the production of hardened steel alloys. For this reason, the use of chromite increased dramatically during the 20th Century--especially during times of war when hardened steel was in demand for the manufacture of tanks, armor piercing projectiles, and armor plating (Personal communication with Lex Palmer, mining technology historian).

Middle Fork of the Smith River Watershed Land-use Activities

Transportation

In the 1880s, Niels and Soren Christensen, under contract to Del Norte County, built the first section of what was later (in the 1920s) to become the route followed by the Redwood Highway (US 199) connecting Crescent City with Grants Pass. It was a nine mile section of road lead from Crescent City to the Smith River. This section of road is now referred to as Howland Hill Road. Sections of this road were built with redwood planks split from the best timber along the route of the new road. There were bridges across both Mill and Cedar Creeks. Where the new road crossed the South Fork a narrow one lane bridge was constructed in about 1888 and it lasted until a new one was constructed in 1948. Gasquet built the next section which was also 9 miles in length to his place in Gasquet.

In 1882, Gasquet began construction of his toll road to connect Crescent City and Gasquet Flat with Oregon. Laurent Bonnaz, a close friend of Gasquet, and also a native of France, was in charge of building the road. The route, 23 miles in length, followed lower portion of the Cold Springs Trail, it then branched off and headed easterly to Patrick Creek and then

up Shelly Creek continuing on to meet the old Wimer Road at about the state line. Just to the east of the North Fork of the Smith, Gasquet had constructed a large (160 feet in length) bridge across the Middle Fork. A second, more substantial bridge was constructed at this location in 1894 and a third in 1904 (Endert 1963:4)

The road was completed in November of 1887. Each of the mile posts along the toll route had the initials "H. G. W. R." (Horace Gasquet Wagon Road) engraved in it. All labor secured for building the road were Chinese with the exception of the foreman. The County Board of Supervisors set the toll at 25 cents for a footman, 50 cents for each pack animal, \$2.75 for a wagon and horse, and \$4.00 for a wagon with six horses (Endert 1963:1-3).

There were several stage stops along the way (some of these locations did not open until the early 1900s).

Patrick Creek Crossing (about 4 miles above the mouth)--George Dunn
Shelly Creek--Charlie Baker maintained a saloon
Anderson's--ran by Otto Anderson a miner
Monumental Mine Company---meals were served

By the early 1900s, an occasional car took the toll road. It was at this time that the county began to get complaints that it cost a toll to get into the county (via the Klamath Ferry) and money to get out (via the toll road). So under some pressure, the County Supervisors bought the 23 miles of toll road on August 1, 1904, for \$6,000, from Fred Frantz and J.S. Endert who had purchased it, the ranch, and some of Gasquet's other property from Elie Gasquet, Horace's brother and sole heir (Endert 1963:5).

Mining Activity

Siskiyou Fork Smith River

The *Report of the State Mineralogist* for 1890-1892, noted that some gold mining activity took place within this watershed during the late 1800s. The exact location and intensity of this activity is not mentioned, however, it appears to have been a relatively minor amount of prospecting, quite likely along the lower reaches of the creek near its confluence with the Middle Fork.

Gasquet Flat

Nearly all of the original parcels of land in the Gasquet Flat area (Map 6) were originally staked out as mining claims. Much of activity that took place in this area occurred during the first few decades after historic settlement. By the turn-of -the-century, most of Gasquet

Flat was inhabited by small homesteads, farms, and a few commercial establishments (such as Gasquet's health resort). Some small scale placer mining has continued in this area.

Confluence of the Middle and South Forks (Map 5 Key 78)

In 1896, the *13th Annual Report of the State Mineralogist* 1896:287) noted that at the mouth of the South Fork of the Smith River Neils Christensen owned a gold mining claim. He had constructed a small ditch about one-half mile in length to supply water to the hydraulic giant.

Myrtle Creek (Map 5 Key 76)

Gold was still being mined along Myrtle Creek during this era. For example, the State Mineralogist Report for 1890-92 (Watts 1892) noted that miners were still active along Myrtle Creek. At the time of the report, a ditch was under construction to bring water from higher up Myrtle Creek to the mining areas along its lower portion. The report (Watts 1892:197) also noted that for about three years in the late 1880s and possibly the early 1890s, a quartz mine (to extract gold) was operating at Myrtle Creek. Also, at this time there was a small lumber mill at this location but it was destroyed by fire. During this period, about 200 miners lived near the mouth of Myrtle Creek on or near Bienick's flat at "Town Bar" (ARR 05-10-82 Winter:12).

The Myrtle Creek Ditch was completed in about 1893 or 1894. The ditch (about one mile in length) was constructed by the Myrtle Creek Mining Company of Crescent City--probably a local consortium formed to capitalize the project (see *12th Report of the State Mineralogist*: 388). Although there are reports that the Chinese constructed the ditch, this could not be confirmed (all Chinese were driven out of the county in the 1880s although it is possible that in the back country away from the coastal settlements and where their labor was needed there was an exception to this rule). This mine, using hydraulic monitors, operated periodically well into the 20th Century (Keter 1981).

The State Mineralogist's Report for 1896 noted that the Casey Mine was active on the lower portions of Myrtle Creek and that a ditch two feet wide and one foot deep had been constructed to supply water. The claim was 40 acres in size.

In 1871, a man named Blalock sunk a shaft on Myrtle Creek and found rock containing silver ore. He kept the discovery secret until 1874 when word leaked out. The discovery of silver caused renewed excitement in Crescent City and a new mining district was established at Myrtle Creek. The excitement of the discovery was short-lived because of the great expense required reach and to work the silver bearing quartz. For this reason,

silver mining never became an economically important industry in the Smith River Basin (Bledsoe 1881: 90-91).

Patrick Creek/ Shelly Creek

Located along the Gasquet Toll road just to the south of the Oregon state line the mining “town” of Monumental was established in 1904. The Monumental Mining Company started to develop a project to mine gold and copper two miles below the headwaters of Shelly Creek which are on the state line (Map 3 Key 69). An adit was constructed into the mountain. A sawmill and a number of buildings were also constructed. Shortly thereafter, the small community of Monumental located along Shelly Creek came into existence.

The mining at this location was not placer mining, the predominate method used in mining gold, rather it was hard rock quartz mining. This method requires more processing including concentration of the quartz for shipment and further processing. As the State Mineralogist’s Report (1913/1914:389) notes in this region: “transportation facilities are so poor that development of quartz properties is hindered.” At another location nearby, the same report noted that “5 tons of ore were shipped to the Shelby smelter” from the Hard Luck Mine. The ore was assayed at \$10.40 to the ton in gold.

Although little information could be found related to the Monumental, it appears to have had a brief but active existence. In addition to the mine, there was a rooming house, cook house, shop, barn, office, and store. There was also a Post Office (indicative of a relatively substantial population). A copy of an envelope dated March 4, 1906, with a “Monumental Cal” postmark is located in the Heritage Resources Files in Eureka. A railroad connecting Monumental with Grants Pass was proposed and apparently some of the track was laid. The 1906 Earthquake led to financial ruin for the company (headquartered in San Francisco) and the mine was abandoned (Endert n.d.: 8).

Headwaters of Hardscrabble Creek--Low Divide

By 1870 Altaville was nearly abandoned. In the county election of 1872, there were only eight voters in Altaville. Traffic on the Pioneer Road had nearly disappeared and the Crescent City Plank and Turnpike Company allowed it to deteriorate. A new road (the current county road) was constructed from Altaville down Rowdy Creek drainage to Smith River Corners (Williams, Maniery, George 1982: 12). As noted elsewhere, low-level activity related to copper and chromite continued sporadically at this location during this period.

Settlements and Homesteading

During this era, Gasquet Flat continued to develop as the principal inland settlement of the

Smith River Basin. By 1890, a number of families were living on Gasquet Flat (approximately 20-30 people including several Chinese [Smith 1953: 98]). Horace Gasquet, in addition to his store (and stores in Happy Camp and southern Oregon) established a commercial orchard and vineyard. During the 1880s, Gasquet also established a resort to capitalize on the health craze sweeping the country. In 1894, an advertisement boasted that Gasquet's Health Resort was: "the finest summer resort in northern California with trout and salmon fishing; deer, bear, pheasant, pigeon, and quail shooting" (Smith 1953:147). Gasquet died in 1896. He left no heirs (his brother came over from France to dispose of his property) and over the next several decades the land was divided and subdivided. Today the area is completely developed with small residences but nothing at all remains of the famous Gasquet farm, store, and resort.

Another family that settled on Gasquet Flat during this era was the Adams family. They received the patent for their homestead located to the west of Horace Gasquet's place in 1898. Across the river on the north site of Gasquet Flat at its western end is Pappas Flat. The main portion of Pappas Flat was settled by Laurent Bonnaz. Del Norte County Deed Book "L", page 107 recorded the patent for Pappas Flat as a Timber Patent (Act of June 3, 1878) obtained by Bonnaz on January 24, 1890 (for some reason, the deed shows the land as being obtained through the Act of April 24, 1820, not the Timber and Stone Act of 1878). It is likely that he lived for some period of time on this parcel before obtaining the patent.

South Fork Watershed Land-use Activities

Mining

Craigs Creek

Gudde (1975:82,87) noted that during the early years of gold mining activity ground sluicing was taking place near the mouth of Craigs Creek. Hydraulic mining was carried on at this location in the late 1800s. Childs (1894: 326) notes that there was a small hydraulic giant as well as some washing with sluice rockers.

He describes the mining process at this location:

At Craig's Creek placer mining and ground sluicing are still kept up, the plan employed being to sluice off the top dirt and mine the bottom with pick and shovel.

As of 1892 some mining activity including placer mining and ground sluicing were still going on at Craigs Creek. At this time Watts (1892: 196) noted that "returns from this

creek have been very satisfactory, and that several parties have earned good wages there during the past few years.”

French Hill

Located on the divide between the Middle and South Forks of the Smith River, most of the area referred to as French Hill lies within the Middle Fork watershed near the headwaters of a number of small creeks that flow south to Craigs Creek, including Redwood Creek. The French Hill area is one of the most intensely prospected and mined areas within the Smith River watershed, having been first patented by the Tyson mining Company in 1886. This region is rich in mineral wealth including gold, chromite, and platinum.

French Hill was the location of one of the earliest hydraulic mining operations within the basin. Two pits were worked with hydraulic giants and one ounce of platinum was recovered for each thousand dollars in gold that was mined (Jenkins 1952: 278). Water for the Hydraulic operation was supplied by the French Hill Canal. This ditch and flume was approximately five miles in length and originated near the headwaters of Craigs Creek.

Bledsoe (1881:136) noted that, at the time he published his book, the French Hill Mine had been active for about 15 to 20 years. At that time it was owned by a San Francisco Company and was having financial difficulties with the property “recently being attached by creditors.”

It was noted in the 1892 *State Mineralogist Report* (Watts 1892: 196) that mining was continuing at French Hill with one small hydraulic in use. In addition, there was also some washing and sluice rockers being used. The 1894 Report of the State Mineralogist reported that the Butler Mine mining placer deposits were active in the mid-1890s in the French Hill area using small ditches with a pond as a reservoir, and that ground sluicing was taking place.

Haines Flat (Coon/Gordon Creek Watersheds)

Thomas Peacock, in his 1977 article on mining in Del Norte County, noted that Haines Flat rated second behind Happy Camp as the largest gold mining area in Del Norte County. The operation was run by the Armand Gold and Silver Mining Company out of Oakland and Boston. One of the investors, along with an engineer, a contractor, and about seven to eight employees arrived in the area in April of 1878 with the objective of developing a ditch to bring water to the mining area. Benjamin Jackson, a representative of the company, surveyed two routes for ditches. One ditch constructed in the Gordon Creek watershed was about four miles in length. It began in the headwaters area of Gordon Creek (see Site Record 05-10-51-17). The other ditch was longer and was located in the Coon Creek

drainage. This ditch carried 3,000 miner's inches of water to Haines Flat. [A miner's inch is defined as a one inch hole with a head of 6 inches and would pass about 93 pounds of water in one minute (i.e. about 12 gallons).]

Mining ditches (such as the Haines Flat Ditch) required a significant investment of men and money. Peacock noted that Chinese labor was often used to construct the mining ditches in Del Norte County. The labor was often secured through Chinese companies with offices in China who supplied the men for the developers. Peacock (1977) wrote that:

On Friday, June 19, 1877, quite a lively scene was presented around the wharf and in Chinatown in Crescent City. Charles B. Kendall of the Haynes Flat Mine, arrived in Crescent City on the steamer "Los Angeles." With him he brought along 197 Chinamen to work on the ditches and mine. This was probably the largest number ever to embark at Crescent City at one time...The next morning they left for the mines.

Mining began at this location in May of 1880 and lasted until the end of 1888. Gudde (1975: 82, 87) noted that during the late 1800s, ground sluice mining activity was still continuing at Coon Flat. The mining camp included a cookhouse, mule barn, and bunk house located on the ridge above the mine. During the 1890s, a large fire swept through the area destroying the flumes and camp (HRM: Gasquet District File).

Jones Creek

The Big Jones Creek Canal was constructed in the 1880s. It was built by Ed McLoughlin owner of the Big Jones Creek Mining Company. Bledsoe (1881: 135) noted that

The Mountaineer Mine, near the Big Flat [mine], is supposed to be very rich ground. It is intended to complete a ditch, part of which has been dug, from Jones' Creek to the mine. The ditch will be five miles in length.

This ditch crossed over Fox Ridge and terminated in the Hurdy Creek drainage near the county road. The Big Jones mine was finally sold to a Chinese man by the name of Och for \$7,000 (Leys 1971:3). Some minor activity continued in the early 1890s (Watt 1892: 197).

The *13th Annual Report of the State Mineralogist* (California State Mining Bureau 1896) noted that there was new activity in this area. The mining area was 240 acres in size and in 1895, the Jones Creek Milling, Mining, and Irrigating Company of Crescent City began working the mine. Water was shipped to the mining site on the ridge between Jones and Hurdy Grudy Creek via a ditch three and one-half feet wide and two and one-half feet deep and six miles long with a fall of twelve feet to the mile. A new sawmill with a 50" saw

powered by water was constructed. Hydraulic work was accomplished with 1,300 feet of 13 inch pipe feeding two number four giants.

Mill Creek

Childs (1894: 326) noted that on Mill Creek

Drift mining and sluicing are carried on by H. Rice who owns the mining right of about 20 Acres on Mill Creek... He states that for the last twenty-three years he has made a comfortable living by these means. The gravel at this point is from 10 to 20 feet in thickness.

Goose Creek

The 1892 *State Mineralogist Report* (Watt 1892: 197) recorded that some minor prospecting was taking place in this watershed and that with a sluice and rocker a miner could make about \$1.50 a day. No large scale mining activity could be documented for this watershed.

Hurdy Gurdy Creek

In 1880, there was only one copper mine operating in Del Norte County; the Condon Copper Mine at Big Flat (Bearss 1969: 194). Promoters of the Condon Copper Mine advertised that it was to become the richest copper mine in the state. Bledsoe (1881:141) noted that:

It is supposed to be the richest copper ledge in the state. Mr. Condon, the owner, has sunk a shaft about 40 feet deep and 50 feet back in the hill. The ledge is from 15 to 20 feet wide, and grows wider as it goes down. While the shaft was being sunk a cave was broken into in the middle of the ledge which was about 15 feet square, and was on all sides rich with decomposed ore, leaving what remained almost pure copper.

The *State Mineralogist's Report* for 1890-1892 (Watt 1982: 198) reported that the Condon mine was inactive at this time (as were all other copper mines in the county). Two tunnels were noted and both were caved in. There was no road leading from Big Flat to the mine and the "Big Flat Trail is obliterated" (Watt 1892: 197).

After the initial placer mining in the Big Flat area, gold mining activity remained at a low-level until 1878. Bledsoe (1881: 134) noted that the reason for this inactivity was due to the "difficulty of procuring water with which to work the vast gravel deposits of Big Flat."

In that year the Big Flat Gold Mining Company (also known as the Boston Company) bought 40 acres of land from John Mains. In 1879, they constructed a mining ditch seven miles in length from near the head waters of Hurdy Gurdy Creek. In 1880, operations began and the water was used to run giants at the mouth of Growler Gulch and also lower portions of the mining claim (Bledsoe 1881: 134). This ditch (site 05-10-51-192) is referred to as the “China flume” and local legends attribute its construction to Chinese labor.

Bledsoe (1881:130) also noted that there was a lumber mill constructed at Big Flat near Growler Gulch to supply lumber for construction of the buildings and flumes in the area. The logs were hauled down the Gulch and up a skid road to the mill. The lumber was carried to the ditch by an endless wire rope elevator powered by an undershot waterwheel.

During this period, several other claims were staked out in the Big Flat area, including one in 1877 by Henry Harvey, H. Mulkey, and Captain Fauntleroy along the east bank of Hurdy Gurdy Creek.

During the 1880s, the mining company had a claim of 640 acres on the east side of the creek. This hydraulic mining operation employed over 300 men. One local consultant (Paul Green [ARR 05-10-05) indicated that he had relocated the site of “Hurdy Gurdy Village.” He had been told by Fred Fisher, the caretaker of the Ora Grande Mine, that this was a tent village inhabited by gamblers and prostitutes who catered to the hundreds of men who worked in the area. [This assertion of a Hurdy Gurdy Village could not be confirmed in the literature but given the fact the 300 men earned good wages some sort of “village” is likely to have sprung up.]

From 1879-1895, a number of mining operations were active in the Big Flat area. These included:

Big Flat Gold Mining Company
Big Flat Placer Mining Company
Big Jones Creek Mining Company
Mountaineering Mining Company
Big Flat Gravel Mining Company
Hurdy Gurdy Mining Company

Thus, in the 1880s, there existed what can be termed a boomtown atmosphere near the mouth of Hurdy Gurdy Creek. One visitor (*Mining and Scientific Press* 41 [1] :4) reported that “Big Flat is one of the liveliest mining camps I ever was in, but I must say that it is the most out of the way place that I ever visited...only accessible by rough mountain trail.”

In 1881, the Big Flat Gold Mining Company (Boston Company) had trouble paying its bills and the entire property was taken over by several creditors. A number of other operations

continued however, including the Big Flat Gravel Mining Company. In December of 1882 and 1883, slides destroyed major portions of their main ditch. The ditch was repaired and work continued; also worked were the deposits of the defunct Boston Company. In 1889, there was a major flood that washed away about 165 feet of flume and ditch. The location of this break was on the portion of the ditch to the east of Dry Lake and it is generally believed to have created the large slide at this location. This destruction of the ditch led to the closing of the mine and the end of mining activity at Big Flat.

Sometime during the early 1890s, it appears that most mining activity at Big Flat came to a halt due to litigation (Watts 1892:196). In 1895 some smaller operations were started up in the area and in 1896 the state mineralogist reported four mines were active in the area (Crawford 1896:127-129). In sum, these operations were small in scale and occurred sporadically over the next several decades until major activity again took place in the 1930s (see below).

Transportation

The South Fork Smith River watershed remained relatively undeveloped during this era. The Kelsey Trail was no longer used for supplying the mines at Happy Camp and Yreka and no other significant transportation links were established during this era. It should be noted that cattle were driven over the Kelsey Trail (from Stevens Prairie) to summer in the pastures below Harrington Mountain near the Siskiyou Divide.

Settlements

A number of homesteads were established in the late 1800s in the Big Flat area (Theo:18) In the 1870s the Bose Brother ran about 500 sheep at Big Flat. They sold out to Phil Stevens who sold his property to Bob Stevens (no relation) in 1925 (ARR 05-10-05:41).

Rowdy Creek Watershed Land-use Activities

Mining

Copper Creek

The Copper Creek Mine (Map 4 Key #1) was patented in 1886 by the Tyson Mining Company. It appears that although some mining activity took place and 700 tons of ore

were mined, none of the ore was shipped either due to low chromite prices or inaccessibility to the mine at that time (Wells et al 1946: 21). Several other mines, for example at Hole-in-the-Ground and in the Stone Coral area were also worked during this era.

Environmental Effects Land-use Activities 1865-1907

During this era, mining activity continued to be the primary land-use activity taking place within the Smith River watershed. The scale of mining operations, however, increased. The use of hydraulic giants and the associated construction of ditches and mining infrastructure required significant capital investment and manpower. Given the total area of the Smith River watershed, only a small percentage of the land base was actually directly impacted by mining operations. In those areas of direct effect, however, the impacts were significant. Stream channels were badly degraded. Furthermore, the construction of ditches and the diversion of streams, impacts related to the milling of lumber [deforestation, erosion, etc.], the construction of mining camps, and other ground disturbing activities while somewhat localized were also major impacts to the ecosystem. In addition, conditions were extremely unsanitary and mining camps with large numbers of men (for example at Monumental, Big Flat, and Myrtle Creek) quite possibly affected water quality. Given the relatively short duration of most operations, however, more research is needed to understand and document just how much these activities affected anadromous fish.

It is also likely that human caused fires were not uncommon within the region during this era. As noted earlier, burning off the vegetation permitted prospectors to more easily prospect the underlying geology of a particular area. Homesteading, livestock grazing, market hunting, and quite possibly trapping were other activities negatively affecting the environment.

Note:

Little information could be located related to either fire activity or environmental data such as wildlife populations for this era. However, one significant fact related to wildfire was documented. In 1868 a fire which began during the summer in southern Oregon continued to burn until the fall rains. It is said to have burned all the way south to the Klamath River in California and inland as much as 30 miles. The skipper of one boat traveling along the coast reported that they were in sight of the fire for seven days (Cooper 1939: III-3)

Chapter 4

The Smith River Watershed 1907 to 1947

The year 1907, with the designation of much of the Smith River watershed as forest reserve lands, marked the beginning of a significant change in the intensity of human land-use activities. Although some activities such as mining continued, a more intensive development of the interior of Del Norte County began to take place--including trails, roads, guard stations, fire lookouts, telephone lines, and for the first time, recreational facilities. Prior to this era, much of the activity taking place was accomplished by a relatively transient population of miners, investors, merchants, and laborers (very few women were found in the mining districts). Their goal was usually to strike it rich and make a handsome return on their investment. Very few of these men intended to settle permanently in the area. With the establishment of the forest reserves, a more long term view on the development of infrastructure, resource use and conservation, as espoused by Forest Service Chief Gifford Pinchot, began to influence how lands within the basin were managed.

With the advent of the Civilian Conservation Corps in the mid-1930s, development of the interior of Del Norte County accelerated. For this reason, transfer of public lands within the Smith River basin to the U.S. Department of Agriculture is a watershed event in the history of the Smith River basin.

Forest Service Administration

The following chapter is divided into two separate sections. The first covers both the development of the U.S. Forest Service and its increasingly active role as steward and manager of much of the land base within the Smith River Basin. The second section documents the land-use activities taking place within the basin during this era. For the first time, development within the basin also included tourism and recreation activities (hunting, fishing, rafting, and hiking). Over time these two activities increasingly became important factors in the Del Norte County economy.

[See: *The Peoples Forests: The Progressive Movement and the Creation of America's National Forest System*. T. Keter, 2015: www.solararch.org]

In 1891 congress passed and the president signed the Forest Reserve Act. Passage of this legislation is a significant event in the management of Public Lands by the Federal government and marks the birth of what was to become the U.S. Forest Service. The Forest Reserve Act permitted the president to designate certain forested lands within the public

domain as forest reserves in order to protect their timber values. Over the next decade and a half the forest reserve system under the direction of Bernhard Fernow and, later Gifford Pinchot, steadily expanded to include forested lands throughout much of the Western United States. Prior to this time, there was a relatively *laissez faire* policy towards most land-use activities taking place on public lands throughout the West.

In February of 1905, 63 million acres of forest reserve lands were transferred to the Department of Agriculture from the Department of Interior. In April and May of that year, the Trinity and Klamath Forest Reserves were created and the Bureau of Forestry was renamed the United States Forest Service. In early 1907, nearly all federal lands within the Smith River watershed (155,580 acres) were withdrawn by the Acting Commissioner of the Federal Land Office for possible future addition to the Klamath Forest Reserve. On August 28, 1907 District Forester (this position is now called Regional Forester) Olmstead approved the addition of 138,240 acres lying within the Smith River basin. Records are unclear, however, it appears that even before this formal declaration, some form of Forest Service administrative presence within the Smith River basin had existed for about one year as records indicate Phil Stevens had the position of guard at "Smith River" in 1906 (Bower 1978: 38).

Bower (1978: 49) noted that miners working within the Smith River Basin had requested the designation of public lands as a forest reserve to prevent timber interests from acquiring the lands (under the Timber and Stone Act) and then closing them to mining. Del Norte County officials, led by John L. Childs, opposed the action fearing a loss of the potential tax base these lands could provide the county. On July 2, 1908, additional lands within Del Norte County were added to the Klamath National Forest (Bower 1978: 69).

A search of records on the Klamath and Siskiyou National Forests revealed that, during the early years of national forest administration [the forest reserves were renamed national forests in 1907] little attention was paid to this area [the Smith River basin], relative to the rest of the Siskiyou and Klamath National Forests. In R. W. Bower's (1978) review of Klamath National Forest records for the years 1905-1910 only a few references are made to the Gasquet District. It does appear that by this time some telephone lines were in place connecting some of the larger mining areas or population centers within the Smith River watershed. For example, Bower (1978: 71) records note the following entry for August 12, 1908.

Left at 7 a.m. and went down Illinois River to Waldo..... Also telephoned to Monumental about a supposed fire in the middle fork of the Smith River.

Interestingly, however, no ranger station or administrative site was located within the Smith River watershed (Bower 1978:80). The first mention of administrative sites that could be documented in the literature (Bower 1978: 94) is the following entry for November, 1909, concerning a revised list of construction projects to be accomplished in

the near future:

District 7- Craigs Creek Ranger Station, buy 2 cabins, Elk Camp Trail, Preston Peak Trail, Smith Fork Ranger Station house, barn and fence.

For the year 1909, however, there was no listing in Bowers (1978:96) for any administrative personnel or buildings within the Smith River watershed. The 1910 listing still has nothing recorded as regards the Smith River District (Klamath Ranger District 7) although it appears that Assistant Ranger Palmer is assumed to have been in charge (Bowers 1897: 121). As early as 1907, rumors began to circulate in local newspapers that national forest lands in Del Norte County would be transferred to District 6 (Region 6; Oregon and Washington) with headquarters in Portland (Bower 1978: 44). In 1911, the Gasquet Ranger District of the Klamath National Forest was transferred to the Siskiyou National Forest.

The primary duties of the ranger during the early days of Forest Service administration included field examinations and reports on lands acquired under the Timber and Stone Act (many of these claims were found to be fraudulent), trail construction and maintenance, constructing a ranger station, and boundary and administrative site surveys. Another important job of the ranger was "forest protection" --primarily fire detection and suppression (Cooper 1939: 5). [For a listing of District Rangers to 1947 see table 1.]

Table I District Rangers of the Gasquet Ranger District		
Phil Stevens (Guard)	1906	(Bowers 1978:38)
no listing	1907-1909	
Cannon (Assistant Ranger)	1910	(Bowers 1978:121)
A. W. Lewis	1911-1918	(Cooper 1939)
George S. Case	1918-1928	(Cooper 1939)
C.D. Cameron	1928-1930	(Cooper 1939:49)
L.D. Quackenbush	1930-1933	
Adolf Nilsson	1933-1937	(Cooper 1939:65)
Merle Lowden	1937-1939	
Gail Baker	1939-1941	(Cooper 1939:85)
L.D. Quackenbush	1941-1947	(HRM files)
<u>Post 1947 Six Rivers</u>		
L.D. Quackenbush	1947-?	

The creation of National Forests and the increased regulation of public lands caused resentment throughout the west among residents who heretofore had virtually no regulations concerning what they could do on public lands. Bower (1978: 39) notes

Of considerable significance was the hostility of the local populations to the need to get a permit for things they had been doing for two generations or more without hindrance. This was a basic cause for much of the incendiarism in later years. The imposition of regulations hit them practically without notice as there were only an indirect reference to the establishment of forest reserves in the local papers which did not reach the remote settlements.

In 1931, a new residence was constructed at Gasquet for the protective assistant (Cooper 1939:59). Entries in the Siskiyou National Forest compendium of historical records (Cooper 1939) indicate that with the improvement in Forest roads to better facilitate response to fires and for administrative work, as well as new housing for employees it “seems that the Forest Service was at the beginning of a new era” (Cooper 1939:59).

The original location of the Smith Fork Ranger station was on the north side of the Middle Fork at site of the present (1978) Gasquet Elementary School (HRM: District File). Improvements there consisted of “a dwelling, two log houses, one of which was used as an office, and a barn.”

In 1933, with the arrival of Adolf Nilsson as District Ranger, more dramatic changes to District organization took place. The original Ranger Station compound was badly in need of repair and was abandoned and a new location was selected closer to the Redwood Highway. In the late 1930s the CCC developed a picnic area with rock fireplaces at the old location; it was noted in 1978 that some of these fireplaces were still being used by campers and picnickers (HRM: District File) a Ranger's residence was constructed at the new location (see Gasquet Compound National Register Nomination Form). It was noted that work on the house was “largely done by ranger labor, the last project recorded to date (1939) where rangers were grouped together to perform manual labor” (Cooper 1939:65). Records also indicate that the Civilian Conservation Corps was involved in construction of the ranger's residence. [Refer to the Gasquet Compound National Register Nomination Form (Keter 1997) for further information on this unique structure.]

[The CCC Gasquet compound is now listed on the National Register of Historic Places.]

The Civilian Conservation Corps

In the early days of the Forest Service (prior to the 1930s), national forest lands were intended for use with primary consideration given to local interests. The major

responsibilities of field officers were protective and custodial in nature. Routine duties included grazing regulation, examination of mining entries and homestead patents, prevention of fire, and timber thefts. Resource improvement was, however, limited to a few reforestation and land rehabilitation projects. Forest administration was decentralized and administrative facilities were uncommon. Those facilities that did exist were for the most part simple log or frame buildings erected by the field officer himself.

In 1932, the Forest Service undertook a nation-wide comprehensive study of the status and condition of the National Forests. The report issued was entitled "*A National Plan for American Forestry*" (better known as the *Copeland Report*). It described the status of and evaluated virtually all aspects of forestry, both private and public, including timber, water, range, recreation, wildlife, research, state aid, and fire protection. This report provided the basis for a major shift in Forest Service policy and the management of public lands. To accomplish the work identified in the report, a larger workforce, as well as more administrative buildings to house additional people and machinery was needed. On April 5, 1933 President Franklin Roosevelt signed Executive Order 101 establishing the Civilian Conservation Corps (CCC). This event, closely following publication of the *Copeland Report*, provided a means--through the CCC--by which the Forest Service could accomplish its new and expanded role in forestry and conservation.

The 1930s and 1940s saw a substantial increase in the infrastructure of the Forest Service, including administrative sites (ranger stations, guard stations, fire lookouts, connecting phone lines, etc.), and forest oriented developments and resource work (trails, campgrounds, timber sales, tree planting), and an increasingly aggressive program to fight fires. The vast majority of this work was accomplished by the CCC.

In June of 1933, a CCC camp was organized and located at Gasquet. By 1934, a large improvement program by the CCC was in place on the Siskiyou National Forest. Numerous improvements were made to national forest infrastructure. For example, fire detection facilities were greatly expanded; road work took place on the Wimer, High Plateau, Patricks Creek, and Rattlesnake Mountain roads, and a new "Redwood Ranger Station-Gasquet Ranger Station telephone link was started this year and completed in 1935, distance of 30½ miles" (Cooper 1939:34).

During the late 1930s and early 1940s, the current Gasquet Ranger Station compound was designed and many of the buildings were constructed. The original portion of the compound (including the fire warehouse, ranger's residence, deputy's house, oil and gas house, and office) have been determined eligible for the National Register of Historic Places.

[Refer to the National Register Nomination Form: on file Heritage Resources (Keter 1997), for additional information on the CCC, a description of the buildings, and an overview of the history of the Gasquet Ranger Station compound.]

In addition to construction projects, the “CCC boys” were also taught basic firefighting skills. The year 1935 was an especially bad fire year and the CCC was an important addition to firefighting capabilities on the Siskiyou National Forest. The CCC continued to work on developing facilities until the CCC camp at Gasquet was abandoned in 1940 (Cooper 1939: 95). For example, in 1938 the CCC constructed the Big Flat Guard Station and a crew house at Gasquet (Cooper 1939:82). Also during the late 1930s a number of lookouts were constructed, phone lines put in, trees planted and recreation facilities (such as Patrick Creek Campground) were developed or improved.

Fire Suppression

Records (Cooper 1939) indicate that fires occurred on the Gasquet Ranger District nearly every fire season during the early years of the Forest Service administration. The principle causes were principally recorded as lightning or incendiary. The year 1915 appears to have been an extremely active year for fires on the Siskiyou National Forest and records indicate that there were four fires on the Gasquet District that year, burning 2,000 acres and costing 576 dollars for suppression. Also, established that year was the first motorcycle patrol route. It was over the Grants Pass-Crescent City Wagon Road--the round-trip, from Bertelda to Monumental and return, was 44 miles long (Cooper 1939: 11).

A policy for the control and suppression of wildland fires by this time was only just becoming a subject of discussion. The Forest Supervisor of the Klamath National Forest sent a letter to local residents in 1915 requesting input on Forest Service policies related to fire suppression. It was noted that of the 41 replies, 23 were strongly in favor of burning brush fields, underbrush, and brushy ridge tops in the spring and fall, seven were undecided and 11 (three of whom were summer employees) were in favor of absolute protection (Cooper 1939: 11).

Nationally, during the 1910s and 1920s, the debate of whether to aggressively fight all wildland fires versus letting some fires burn to reduce fuel loads and for other reasons raged. Although there were some advocates within the Forest Service for the proposition that not all fires should be extinguished, the overall view of the leadership at that time (Forest Service Chiefs Pinchot and then Henry Graves) was that the public was likely to be confused over the idea of “good” fires and “bad” fires. Some fire studies did take place in California where controlled burning to reduce fuel loads was undertaken. Although these studies showed that in certain instances little damage to tree reproduction occurred, the process proved to be more expensive than conventional protection techniques. While sporadic studies continued over the next decade or so by this time the Forest Service had established a policy which was to guide it over the next several decades: to aggressively fight wildland fires regardless of cause or conditions and put them out as soon as possible to prevent “resource damage.” (For an overview on this subject see Supernowicz n.d. and

Steen 1976:135-136).

Records indicate that in 1917 large fires burned within the Middle Smith River watershed (Cooper 1939:17), and in 1918, large fires occurred at Siskiyou Fork, Rattlesnake Mountain, Bald Hills, Monkey Creek and the Harrington Ranch areas (Cooper 1939: 21).

Other items of interest related to fire prevention during this era include: the first airplane patrol for spotting wildfire was initiated for southern Oregon and northern California by the Army Air Service in 1920; also in that year for the first time there were three women lookouts employed on the Siskiyou National Forest during the fire season (Cooper 1939: 27).

In 1921, records indicate that the Siskiyou National Forest began to use specialists in firefighting (protective assistants) more widely during the fire season. In addition, one employee attended a training session in Portland related to law enforcement and fire and was sharing that information to Siskiyou National Forest personnel. These actions signal a more aggressive approach to fire prevention. Records also indicate that air patrols were discontinued that year due to lack of funds.

Entries in national forest records for 1922 indicate that increasing attention was given to the Forest Service role in controlling and preventing wildfire and that: "Fire Prevention Week' was stressed this year more than ever before" (Cooper 1939:32). In 1924, sling psychrometers [a simple hydrometer] were put into use on all Ranger Districts. In 1928, records indicate that Osborne Jr. fire finders were put into use on the forest (Cooper 1939: 50). Siskiyou National Forest records indicate that 1929 was a particularly bad fire year and that a number of fires set by ranchers along the coast burned inland towards the national forest, causing 25,000 dollars in loss of redwoods near Crescent City (Cooper 1939: 53).

In a compilation of historical records for the Siskiyou National Forest (Cooper 1939: 55), an entry for 1930 notes the following:

...25 of the old-timers in the Siskiyou hills are now gone. These old-timers were mostly Indian fighters, prospectors, miners, and war veterans, and quite a few were known incendiaries or 'light burners'.

In 1931, it was noted that: "The 'depression' caused a large influx of amateur prospectors to the Forest, with resulting fire prevention problems" (Cooper 1939: 61). The following year was noted as a particularly bad year for fires on the forest and that "The Gasquet District was especially hard hit by incendiary fires during this period" (Cooper 1939: 63). During the 1932 fire season, a total of 25,000 acres burned on the Gasquet District.

During the late 1920s and early 1930s, mapping of the vegetation zones, compiling fire

statistics, and the use of aerial photography expanded. In addition, visibility mapping of what could be seen from each lookout and potential lookouts were compared with fire occurrence zone maps to determine the effectiveness of each lookout point. Subsequently, conferences were held on each national forest to review placement of lookouts for effective fire detection. Lookouts and points selected for potential lookouts were rated by coverage area. With the creation of the CCC, the Forest Service had the manpower to move forward and during 1934-35 over 200 lookouts were constructed in California (Supernowicz n.d.: 5).

[For a complete listing of Fire lookouts that operated within the Smith River watershed see Table 2 and Maps 1-13.]

In 1933, portable radios were used during fire season for the first time with “some success” and it was determined to be a “very important [and] progressive step” in firefighting and prevention (Cooper 1939: 66). By 1934, radios were widely used on the Forest during fire season.

Table 3***Fire Lookouts
Smith River Basin**

Map Key	Name	Year Const.	Year closed	built by	Reference	Comments
(17)	Baldy Peak	1940			Heffner	On 1939 SNF map-- Cooper (1939:74) notes that a cabin was built on Brushy Bald Peak in 1936 Cooper 1939:82 also notes one built 1938 (mentioned in Del Norte triplicate 9/13/67 on Not on SNF 1939 map is on 1942 map
(18)	Buck Mountain					Lookout cabin constructed 1924. #I434 indicated that it burned down in about 1936. [interviewee who was the lookout there in 1934 thought it was not rebuilt
(1)	Bear Basin	1924		SNF	Cooper 1939:37	“a standard [L.O.] cabin was constructed” (05-10-51-187)
(2)	Camp Six	1923		SNF	Cooper 1939:35	Built about 1 mile west of original (05-10-51-186)
(3)	Camp Six (New location)	1938		CCC	(CCC files)	#I434 noted that it was built same year as Red Mountain L.O. --this was a secondary lookout. Very nice rock work on the base. Not listed on 1937 SNF map. Unknown if or what type of cab was present (05-10-51-147)
(4)	High Dome			CCC		Type R1 cabin. a new lookout was constructed by the CCC in 1935 (Cooper 1939:71)
(5)	High Plateau (Long Ridge)	1930		SNF	Cooper 1939:56	Noted on 1937 SNF map
(6)	Little Rattlesnake	1935		CCC	Cooper 1939:71	10 ft. Round timber tower and cabin. Still open 1942
(7)	Monkey Creek Ridge	1940		CCC	HRM files	#I434 indicated that a “secondary” lookout was constructed here in 1933 or 1934 -
(8)	Red Mountain			CCC	HRM files	On 1937 and 1942 SNF maps Standard L.O. cabin packed 26 miles to Ship Mountain
(9)	Sanger Peak	1926			Cooper 1939:43	40 ft. Creosoted sawn timber tower and cabin. Reduced to emergencies for 1947
(10)	Ship Mountain	1922		SNF	Cooper 1939:32	
(11)	Stone Corral	1940	1948	CCC	HRM files	
	then closed in 1948					
(12)	Summit Valley			CCC		Shows up on 1937 map
<u>Oregon (North Fork Watershed)</u>						
(16)	Bear Wallow				Cooper 1939:92	Mentioned as being manned in 1941
(15)	Chetco	1937		CCC	Cooper 1939:79	
(14)	Cleopatra				Cooper 1939:92	Mentioned as being manned 1941 listed as on Gasquet Ranger District.
(13)	Packsaddle	1915		SNF	Cooper 1939:10	Notes that was “shake type with ceiled interior” total cost Materials \$31.80, packing \$18.00, labor 164.28 total 214.08. a new R1 type cabin was constructed in 1930 (Cooper 1939:56)

* Map Key Numbers are keyed to Maps 1-13 in Appendix 1.

The year 1936 marked the first time that machinery was used in fire suppression on the Siskiyou National Forest. As noted earlier, CCC enrollees were also used to fight fires. Another activity related to fire control this year included the stationing of 30 pack horses at Gasquet for duty on fires in the region and southern Oregon. Plans were also made for dropping supplies to firefighters from airplanes when they were in remote areas (Cooper 1939: 75). The following year, for the first time on the Siskiyou National Forest, planes were used on the Gasquet Ranger District to drop supplies to crews fighting fires in areas that were inaccessible to stock.

Timber Management

During the early years of the Forest Service timber management was not a major emphasis or priority. The earliest record to be located related to timber management on the Gasquet District notes that, in 1915, 4,000 maritime pines (possibly *Pinus contorta*) were planted on the Gasquet Ranger District. Little in the way of timber was sold off of national forest lands during the first several decades of Forest Service administration. The earliest sale activity that could be documented appears to have taken place in the early 1930s. For example, a 1931 entry in Siskiyou Forest records notes that "Timber was sold to Nelson and Sarris on Myrtle Creek in Gasquet District at \$11.25 per M for Port Orford cedar and \$1.00 for Douglas-fir (Cooper 1939: 60). A small sale within the Myrtle Creek watershed was also sold in 1932 (Cooper 1939: 64).

Roads

The Forest Service was also responsible for initiating road construction to improve the transportation infrastructure of the area. In 1922, the first mention is made of road machinery being used by the Forest Service. A two-ton Holt caterpillar and grader were used to make improvements to the Wimer Road---still the principle route connecting Del Norte County to Grants Pass (Cooper 1939: 31).

In 1930, the Forest Service took over maintenance of the old Gasquet Toll Road which had been abandoned by the county in 1924 (Cooper 1939: 55). In 1937 the airport at Gasquet (Ward Field) was started. It was completed in the spring of 1938.

Roads constructed by the CCC included the Bear Basin and Smith River roads (HRM files).

Trails

After creation of the Forest Reserve, numerous trails connecting lookouts and forest administrative sites were constructed. For example, in 1914 the Ship Mountain Trail was

constructed. In 1924 the Boundary trail was completed and further improvements were made to the Ship Mountain Trail and in 1925 the Low Divide Trail, linking Gasquet with the Wimer Road, was completed.

Trail construction accelerated during the 1930s after the CCC camp was opened at Gasquet. One of the major activities of the CCC on the ranger district was trail maintenance and construction. During this era nearly every existing trail on the ranger district was “brushed” and maintained and a number of trails were constructed; including trails leading to the newly constructed lookouts.

Grazing

Some grazing did take place within the Smith River watershed. For example, in 1909, grazing permits were issued for 1,100 cattle and horses, 1400 sheep and goats, and 400 hogs. In 1910, permits were issued for 1,500 cattle and horses, 1,800 for sheep, and 10 for hogs (Theodoratus 1980: 25).

On March 11, 1910, the District Forester (now Regional Forester) sent a letter to all rangers recommending the use of poison to “exterminate” predators on the cattle and sheep ranges. Strychnine was recommended. The letter also contained complete instructions on the use of the poison in preparing baits and where to place them (Bower 1978: 102)

Recreation

At the end of the 1920s and in 1930, surveys were made for summer home lots near Gasquet (Cooper 1939: 57). A review of early Siskiyou National Forest records (Cooper 1939) suggests that little attention was paid to the development of the national forest for tourism until the early 1930s. The first mention of specific improvements related to recreation was in 1932 when records indicate that wash tubs and oil drum incinerators were installed at Patrick Creek Forest Camp (Cooper 1939: 63).

There were also problems during this era with the newly established campgrounds encroaching on traditional mining areas. In 1933 and 1934, it was reported (Cooper 1939:67, 70) that miners were locating claims within areas set aside for campgrounds leading to conflicts with Forest Service Administration of recreation sites.

During this era, fishing and hunting were beginning to attract tourists into the area. With a steady improvement of the state-wide and county transportation systems and the increasing numbers of automobiles a new industry--tourism--began to play an increasingly important role in both the economy of Del Norte County, and in the types of land-use

activities taking place within the Smith River Basin.

Lands along U.S. 199 just to the west of the Forest boundary were acquired by the state of California in June of 1929. Named Hiouchi State Park, additional adjacent lands were acquired over the years in the Mill Creek area. The park was renamed Jedediah Smith State Park in honor of the famous explorer and the river.

Another important development related to tourism during this era was the construction of the Patrick Creek Lodge to serve travelers and visitors to the region. It was originally called the Patrick Creek Stage Station and was built in about 1900 by George Dunn who had been a foreman for Gasquet during construction of the toll road (an article in the *Del Norte Triplicate Parklander* [August 6, 1983] notes that it was originally called Partridge Creek because of the abundance of those birds in the area). The lodge was located where the wagon road crossed Patrick Creek at its confluence with Nine Mile Creek about four miles up from the mouth of the creek and the Middle Fork of the Smith. Dunn was brutally murdered by thieves searching for his stash of gold--they made off with seven and one-half dollars in dust and nuggets. The estate was purchased by Lew Higgins in 1906. The 10 room building burned to the ground in 1910 and was replaced by a larger building. It was again sold in 1910 to the Raymond family. In 1926, along with construction of the new Redwood Highway, the owners built the current Patrick Creek Lodge near the creek's confluence with the Middle Fork of the Smith. Opening day May 8, 1926 was celebrated with a wedding and: "with motion pictures provided by the U.S. Forestry Service" (*Del Norte Triplicate Parklander* August 6, 1983). In 1928, the old Patricks Creek lodge burned to the ground. In 1944, a forest fire swept through the area of the old lodge and old stables and both were destroyed (Del Norte County Historical Society Files).

During 1935, the CCC made improvements to the Forest Service campgrounds along the Redwood Highway (Cooper 1939: 72). In 1936, Cooper (1939: 74) noted that:

The Civilian Conservation Corps program continued, and rapid strides were made in road construction and protective, administrative, and recreation improvement construction.

A trailer camp catering to a new and evolving form of camping was completed by the CCC at Grassy Flat along the Redwood Highway in 1940.

Transportation

It was during the early 1920s when advances in the use heavy duty road construction machinery and the increased use of automobiles by the public resulted in the building of more roads within the Smith River watershed. In 1925, an agreement was made between the Forest Service and Del Norte County to construct a road to Big Flat. Total cost of the

project was estimated to be about 12,000 dollars to be shared 50-50 (Cooper 1939: 41). Records conflict somewhat on when the road was completed. One source indicates that it was completed in 1926 (Cooper 1939: 44). Another entry in the Cooper journal (1939: 489) notes that the Big Flat Road was completed in 1928. It is likely the year 1928 is correct since that same year an entry in the Siskiyou National Forest records (Cooper 1939: 51) notes the following:

The first 'show me' trip of record was staged by the Supervisor on a trip over Big Flat Road accompanied by the County Commissioners, Mayor of Crescent City, City Council, local newspaper men, and influential citizens of Del Norte County.

Also, in 1928, a 120 foot 15 ton capacity bridge was built across Hurdy Gurdy Creek near its confluence with the Smith River (Cooper 1939: 49).

Wildlife/Fisheries

Little data could be located regarding wildlife and fisheries management activities during this era. The following entries were taken from Siskiyou National Forest records.

Ranger district and national forest records (Cooper 1939: 39) note that in 1924:

Jack Stone of the Gasquet Ranger District was attacked by a cougar and received a badly lacerated hand. Stone fought the animal off with rocks and a pocket knife and went for help. He secured the help of some of his neighbors and returned to the scene of the accident and with their aid and that of his dogs the animal was treed and shot. It was very poor and in a starving condition. It measured 7 feet 6 inches long.

In 1925, it was estimated that 60 cougar inhabited the Siskiyou National Forest and, in 1927, Cooper (1939: 48) notes that 36 cougar were reported to have been killed in Curry County. During 1928, Siskiyou Forest records (Cooper 1939: 51) indicate that fish were planted in Hurdy Gurdy Creek and other tributaries of the Smith River. The same entry noted that this was a poor year for deer hunting on the ranger district.

District Ranger Lewis named the spot Pigeon Roost on Rattlesnake Mountain because of the large numbers of band-tailed pigeons that were frequently seen in the area.

Records indicate that the year 1929 was profitable for trappers on the Gasquet District and that "quite a number of cougar were killed" (Cooper 1939: 54).

One estimate (Cooper 1949: V-5) in 1940 of the number of various animals inhabiting the Siskiyou National Forest lists:

Black tailed Deer	8,000
Black Bear	1,100
Elk, Roosevelt	35
Bobcat	1,080
Mountain Lion	215
Coyote	545

Mining

Mining continued to play an economic role in the development of the Smith River watershed during this era. With the beginning of World War I, the U.S. Government issued a plea urging prospectors and miners to produce chromite for the war effort as overseas sources were lost (Wells et al 1946: 17), and as noted earlier, chromite was critically needed for use in armament production. A government subsidy made chromite mining more profitable. As a result, many of the prospectors who had been searching for gold began looking for deposits of chromite. In some places, chromite outcrops projected above the ground. For example, at High Plateau, there were massive chromite outcrops standing 6 feet above the ground. Mining began here almost immediately and also at High Divide and other locations (including some mining areas which required construction of new roads to reach the deposits). Over the next 18 months until the Armistice was signed in 1918, over 50 chromium deposits had been worked within the Smith River watershed.

With the end of World War I, chromium production declined to almost nothing for the period 1919 to 1935. The *Report of the State Mineralogist* for 1925 (pp.329) comments on the boom and bust cycle of mining within the Smith River Basin:

The vicissitudes of mining [in Del Norte county] are vividly brought to mind by a visit to the Low Divide District, now deserted except for one resident, [Frank Zaar], and it is difficult to avoid 'romancing' when one realizes that over the same road that 5-ton auto trucks transported chrome ore in 1917-1918 "to save democracy," wagon-loads of high grade copper ore were being hauled out during the Civil War in 1863-64 bound for Swansea and Germany. The once lively copper camp at Altaville, with several hundred inhabitants and some substantial buildings, has completely disappeared. But the mines are still there, and the recent abrupt ending of chrome mining and the cessation of copper mining at an earlier day, have this basis in common; neither operation ceased on account of the mines being worked out. Economic conditions alone have ended mining in the district for the present.

Whenever nearby smelters are available, better transportation facilities are obtained, cheaper methods of recovery developed, or the price of copper advances sufficiently, the copper mines will again become active....

Some minor chromite production continued periodically until the beginning of World War II. Then, in 1940 with the fall of France it became obvious to miners that the price of chromite was again about to rise precipitously. Many of the old mines were reopened. During this period of activity (1940-1945), most of the chromium produced came from previously worked mines. Some new prospecting was initiated and over 20 new deposits were located, but the mines only accounted for about five percent of the chromium produced at this time (Wells et al 1946:17). The *Division of Mines Bulletin* (Wells et al 1946) on chromite mining for 1946 indicated that as of 1944; 71 deposits of chromite had been located and worked within Del Norte County.

Gold mining also saw a resurgence during the Great Depression. Often miners were unemployed men seeking both gold and a place to live and many individuals prospected for gold and filed claims on Forest Service lands in order to have a relatively rent free place to live since jobs and money were scarce. The increase in questionable mining claims resulted in administrative problems for the Forest Service land managers. In the 1933 *Report of the State Mineralogist* (Bradley 1933: 137), it was noted that:

...the years 1930, 1931, 1932 have seen a marked revival of gold mining which has been relatively unimportant since the activities of the 1850's. The high premium placed upon the metal during periods of economic difficulty naturally leads to redoubled efforts in production.

Another mineral, quicksilver (mercury), has also been mined at various times within the Smith River watershed. Quicksilver deposits were first discovered in the early 1850s when gold prospectors mined cinnabar in order to produce quicksilver for use in the amalgamation [with gold] process. Over the years, production fluctuated based upon price but it was never very high. Many of the mines date from the World War I period. These mines are mainly located in the northern portion of the basin within the North Fork watershed (see Maps 1-6). For example, at the Big Boy Cinnabar Mine (Map 3 Key 71), the processing of ore and the production of quicksilver was accomplished right at the mining site. It involved a process whereby the ore is "roasted" in ovens to recover the mineral. (Since quicksilver or mercury is highly toxic this fact has some implications for land management planners.)

North Fork of the Smith River Basin Land-use Activities

Mining

During this period High Plateau area produced what is considered to be the highest grade ore to have ever been mined in Del Norte County and was second only to French Hill in the amount of ore produced (Wells et al 1946: 32). There were numerous mines in this area and the highest periods of mining activity in the area were during the two World Wars. In addition, during the depression era some gold prospecting and mining took place.

Middle Fork of the Smith River Basin Land-use Activities

Mining

Low Divide

In 1917, the American Exploration and Construction Company leased Tyson's rights and reopened mines at Mountain View and Copper Creek. A haul road was constructed down to Copper Creek and production began in 1918. With the end of World War I and the availability of a cheap foreign supply chromite, production again came to an end (Williams, Maniery, and George 1982: 12).

During the 1920s and 1930s, there was little activity in the Low Divide area. Some grazing permits were issued to local residents and a telephone line was strung from Gasquet to Low Divide and on the lookout at Stone Coral. Frank Zaar, a local miner, served as caretaker at Altaville from the 1920s until his death in the mid-1930s. He had a house and shed on the Altaville parcel. He also reopened some of the mines in the area. In 1926, the union mines were reopened by a group of investors from Crescent City. A cookhouse was built at Altaville when the mines reopened. This venture was short-lined and later the cookhouse was dismantled for lumber (Williams, Maniery, George: 1982: 14).

The Cooper Creek and Mountain View mines were again reopened during World War II and operated until 1945. In the early 1950s, with the advent of the Korean War new prospecting activity occurred in the Low Divide area. Bulldozers cut into hillsides prospecting for chromite and a cabin housing several miners was built on the old Altaville site and four shafts were opened up near the town. With the end of the Korean War, mining activity again came to an end (Williams, Maniery, George 1982: 14).

Patrick Creek

Quicksilver is recorded (Jenkins 1952: 280) as having been produced at the Webb (Map 2 Key 73) mine during the World War II era and as late as 1948. There was a large furnace installed in 1946. The Lacey rotary furnace was 30 inches in diameter and 30 feet long and had a rated capacity of 25 tons per day. Cabins were built to house crews of 10 to 15 men. The mine has been closed since 1948 except for a few months operation in 1951 related to the Korean War.

Shelly Creek

Sometime after the Monumental Mine closed in 1906, Gene McPherson operated the former mining building as a stopping place on the stage line between Crescent City and Grants Pass. When the Redwood Highway was completed in 1926, traffic disappeared and the place was deserted. Some prospecting and mining activity--including chromite mining--continued to take place within the watershed during the World War II era.

Myrtle Creek

The 1914 *Report of the State Mineralogist* (1914: 388) indicated that hydraulic mining for gold was still continuing on Myrtle Creek. It noted that

...the gravel benches are washed by water take from a 1½ mile ditch with a head of 75'. Eleven inch pipe, with one No. 2 and one No. 3 giant [hydraulic monitor] is used. The gold assays at \$18.50 to \$19 per ounce.

The report also indicated that the black sands that were mined in the area were "said to assay as high as \$3,562 per ton in gold and platinum" (Bulletin #14:375). The exact date when hydraulic mining within the Myrtle Creek watershed ended could not be located. The 1925 *Report of the State Mineralogist* indicated that the Myrtle Creek Mining Company was defunct and that the mine was no longer in operation. The report continued

The pay gravel is covered with a heavy, nearly barren overburden, forming a high bank and the recovery is said to have been inefficient to pay handling such a quantity of material (Bulletin #25: 293).

Settlement

Pappas Flat

This parcel was sold to Mary Adams Peacock for 200 dollars in 1909. After her death, the

estate was sold in 1943 at an auction for 1,300 dollars to John Pappadopoulos (Pappas) and Pete Stathes. With the death of Pappas his undivided half-interest in the "Gasquet property" was transferred to his heirs in 1950. No information could be located on what the flat was called before the Pappas Family acquired it. It is likely that the parcel was logged during the period of Pappas' ownership. There was not much timber on the flat but there was a significant volume of Douglas-fir directly to the north. Sometime during this era of ownership, prospecting for chromite (see below) took place on the southern edge of the flat adjacent to the Smith River.

In 1962, after the death of Stathes, Leland H. Simonson acquired his interest in the Pappas Flat property. Between 1963 and 1975, Simonson acquired the interest held on the property by the Pappas heirs. In 1979, the Simonson Timber Company deeded the whole property (including the small parcel at the western edge of the flat as discussed below) to Simpco Lands (a Simpson Timber Company partnership). Simpco Lands deeded the property to Kermit and Ramona Miller in 1987. In 1989, the Millers, as part of a land exchange with the U.S. Forest Service, deeded the parcel to the United States.

A small parcel of land near the western edge of the flat was part of a separate homestead claim. This area and the lands directly to the west and northwest of Pappas Flat were homesteaded by George Cooke. Records (BLM office Sacramento Patent No. 714984) indicate that entry was made for the patent on May 16, 1914, and the patent was granted in 1919. Eventually, this parcel of land was combined with the Pappas Flat parcel. Possibly it was purchased by Pappas who was buying up all the timbered parcels in this region for a consortium who were investing in land for the purposes of harvesting commercially viable stands of timber.

Information regarding the mineral history of Pappas Flat is contained in the "*Mineral Report for the Proposed Kermit Exchange on the Six Rivers National Forest*" (by Lester Lubetkin, North Zone Geologist for Region Five). His July 5, 1988, report noted that mineralization in the Pappas Flat area

...consists of chromite pods in the peridotite, cobalt and nickel in the laterite soils,...and gold and platinum in Quaternary placer gravels and alluvium....The parcel is not classified as prospectively valuable for any leasable mineral resources...nor is the geologic setting conducive to their occurrence.

Pappas Flat is located within the Gasquet Area Chromite District. Chromite has been mined within three-fourths of a mile to the north of Pappas Flat and within a half mile to the south. Lubetkin (1988) indicated that:

"This mining occurred during the major World Wars, and was limited to only a few tons of medium grade chromite. Little or no ore reserves still exist at any of these historic mines...an old ditch line provided water from the unnamed creek on the

parcel to an area in the southern portion, where ground sluicing appears to have taken place during the 1930s or earlier, and was prospecting in nature, with no subsequent extensive development...the Pappas Flat parcel has a moderate potential for occurrence of an economic deposit of placer gold and platinum within the terrace gravels and river channel alluvium, based on the geologic setting along with past and present prospecting and mining."

Other Copper Mines-Middle Fork

Copper was also prospected or mined in small amounts at High Dome, Patrick Creek, Shelly Creek and French Hill. Most of these locations had deposits of copper but economic factors including distance to make and price precluded their further development although in most case some assay activity continued in order to maintained the mining claim.

South Fork of the Smith River Land-use Activities

Transportation

Historically, Big Flat was always isolated reached only by pack trails. A road was not constructed into the area until the late 1920s. During World War I, the California Chrome Company constructed a road to its mines on Gordon Mountain from French Hill (Maxon 1933: 154). In October of 1925, the county agreed to cooperate with the Forest Service to construct a road from Camp 8 to Big Flat. Using portions of the abandoned road to the Gordon Mountain mining area, the county with Forest Service cooperation, constructed the last portion of the road. There were at that time only 4 settlers living in the Big Flat area but the Forest Service desired a road for fire protection and administration. It was completed in about 1927 and was closed during the winter in the early years of its existence to conserve the condition of the road bed (Theodoratus 1980: 44).

Settlement

Big Flat continued to be the principle area where homesteading and stock raising took place within the South Fork Smith River watershed. It is likely (but not documented at this time) that farm products would have had a ready market in the nearby mining camps during periods of mining activity.

Mining

French Hill

After about 30 years of inactivity, the Tyson mines at French Hill were reopened in 1917 under lease from Tyson to the American Exploration and Construction Company. The mine operated during World War I and closed down with the end of the war. It was reopened in 1941 with the beginning of World War II and at that time additional claims in the area were located. The mine operated until the end of the war in 1945.

There were actually a number of mines active in what can be considered the French Hill mining District during World War I and World War II. [For a comprehensive overview of this operation see U.S. Department of the Interior report of Investigations: *Investigation of the French Hill Chromite Mine, Del Norte California*. 1948. Report: 4365.]

Craigs Creek

During the 1920s and 1930s, a new ditch was constructed from the headwaters of Craigs Creek to the French Hill mining area.

Gordon Creek/Coon Creek

During the years from 1902 to 1909 a man named Marlow rebuilt the original canal and flume used by the Haines Flat operations from the 19th century and also constructed an additional three to four miles of ditch to get water from Coon Creek. To do this it was necessary to tunnel through a place in one of the ridges. A small sawmill was constructed on Coon Creek (in Section 12, T.16N., R.2E.) to provide lumber for the new flume. It was later moved to the mining area. The original 1870s monitors were used in this operation (HRM: District File).

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Hurdy Gurdy Creek

Mining continued in this era at Big Flat. During the 1910s and 1920s the mining activities were small in scale and rather sporadic. With the beginning of the Depression during the

early 1930s there was renewed interest in mining in Del Norte County. This renewed interest was directly related to economic conditions. On May 12, 1932, Lloyd Root, former head of the State Mineralogy Division, spoke in Crescent City on the subject of mining opportunities in Del Norte County. He noted that the “[p]resent depression period is especially conducive to development of new sources of mineral wealth...as more men than ever before have taken to prospecting” (*Del Norte Triplicate*, May 13, 1932: 5).

The *Del Norte Triplicate* (June 3, 1932:1) noted “Important Mining Deal Involves Big Flat Placer Group.” The article provides the first indication of renewed mining activity at Big Flat. The article indicates that 16 placer claims, totaling over 640 acres, were sold by a number of local miners to W. Denver Hill and Harry T. Wilkerson, of Idaho and Nevada. Both men were experienced mining engineers. Their goal was to install a water system, supplied by Hurdy Gurdy Creek, to provide a “huge” hydraulic outfit at Big Flat (*Del Norte Triplicate* June 3, 1932: 1).

The 1933 *Report of the State Mineralogist* noted that attempts were in progress to work the bench gravels lying up to about 50 feet above Hurdy Gurdy Creek at a location about two miles upstream from its mouth. During this time, the old Big Flat Gravel Mining Ditch on the west side of the creek was completely rebuilt using power shovels and tractors. This ditch (the Ora Grade Ditch and Flume site # 05-10-51-16) was much deeper and wider (and included sections of flume). It carried water south to a point above the mining site where the water was transferred to penstock pipes and transported downhill and across the creek to the mining site (Peacock 1984).

During this period of mining activity, a number of buildings were constructed for the Ora Grande Mine including: a large cookhouse, a bunkhouse, an office, a residence for the foreman, a water tank, and storage sheds. There was also a lumber mill located just to the west of where the bridge on the County Road crosses the creek. It was powered by a Pelton wheel using water from the Ora Grande Ditch (Peacock 1984). During its heyday, there were as many as 10 Hydraulic monitors working here with 25-30 men employed.

As the Great Depression ended mining activities in the area ceased and 1939 marks the last year of active mining on the claim (ARR 05-10-5). One interviewee (#1366) indicated that the Ora Grande Mining Company was actually a stock and bond venture and that more money was made by selling stock in the company to speculators than was taken out of the mine.

In 1945, there was an attempt to reopen the Ora Grande Mine. The ditch and flume were repaired but the mine remained idle for the most part. The California Department of Fish and Game closed the operation down in 1947 because of silt in the Smith River (Theodoratus 1980: 35). During the 1960s Fred Fisher owned the claim (Hayden Gulch Placer Mining Claim). He gave up the rights to this claim in exchange for a Lifetime Occupancy Lease on a 1.4 acre site in 1968. After his death in 1971 the lease was

terminated.

As late as the late 1960s a number of buildings dating to the 1930s remained at this location. At least one building (Ora Grande Cookhouse) was preserved with the help of the Del Norte County Historical Society when a number of other buildings were demolished in 1969 and 1970. In 1971, the Del Norte County Historical Society indicated by letter to the Forest Service that they could not obtain the needed funds to preserve the building and, in 1972, the structure was removed as it was in an advanced state of decay (ARR 05-10-05). The cabins, buildings, and other structures were burned down by employees of Six Rivers National Forest in 1972 for health and safety reasons. In addition, during the 1970s, most of the artifacts, including the monitors, were removed from the flat by artifact collectors. Today all that remains of the many gold mining ventures along Hurdy Gurdy Creek are the ditches, pits, and tailings.

[The mining area is now (2015) overgrown with invading Douglas firs and a dense understory.]

Rowdy Creek Land-use Activities

Mining

At the time of the *State Mineralogist Report* in 1946, it was noted that the Copper Creek Chromite Mine was active (Mining Map 1905-1947: #1). Two miles of rough truck trail connected the mines with the Wimer Road at Low Divide. From here, the ore was hauled 102 miles to Grants Pass for processing.

Chapter 5

Smith River Watershed 1947 to the Present

[See Keter 2011: *Pilot Ridge Country 1947 -1996: The End of History and the Rest of the Story*, PDF at solararch.org, for further information on the subject of timber harvesting and management of national forest lands during the last half of the 20th century.]

Beginning in the late 1940s, land-use activities within the watershed began to intensify. Historically, mining had been the most important economic land-use activity. It was also, quite possibly, the most important variable affecting the basin's ecosystem. After World

War II, timber production, tourism, and recreation began to drive development of the region. Again the Forest Service played a major role in developing the infrastructure of the watershed. Hundreds of miles of roads were built, thousands of acres of timber harvested, and numerous recreation and administrative facilities were constructed by the Forest Service. Many of the private lands within the basin have also undergone some form of development including--most importantly road building and timber harvesting.

Early in 1947, preparations began for moving the Gasquet Ranger District to Region 5. On June 3, President Truman issued a proclamation creating a new Six Rivers National Forest from existing portions of the Siskiyou, Trinity, and Klamath National Forests. Many names were suggested for the new Forest. The final name selected was suggested by noted author and lecturer Peter B. Kyne who noted that the area of the new National Forest contained the watersheds of six rivers within its boundaries (HRM: Files).

Recreation

During the first year following the creation of Six Rivers National Forest, recreational use on the Gasquet Ranger District increased to record levels. The ranger district recorded that 158,224 out of state visitors passed from north to south during the year (along Highway 199) and that: "a sizeable number occupied the Camp Grounds" (HRM: District Files). In September of 1947 Ranger Quackenbush and other employees constructed a shelter at Elkhorn Bar. It was noted in District Files that "'Quack' and his trail shelters are rapidly becoming famous on the Six Rivers."

[This was Quackenbush's personal design for an Adirondack shelter rather than the standard Region 6 Forest Service designed shelter and was unique to this district. There should be a site record on file for a similar shelter [still in existence in the early 1990s] situated along the Kelsey Trail in the Heritage Resources Files, SRNF].

Timber Management

During the first year (1947) of Six Rivers National Forest existence only one timber sale was active; the 15 acre Carlton Bosch Timber Sale (HRM: District Files).

Lookouts/improvements

In 1947, the California-Oregon Power Company constructed a building adjacent to the Camp Six Lookout to house a radio relay station (HRM : District Files). The old telephone line between the Ranger Station and the Redwood Ranger Station was torn down the same year.

Wildlife Management

During 1947 attempts were made to reintroduce elk in the upper reaches of the Smith River watershed. This area was known, historically, to have been excellent elk habitat and it was thought that elk would thrive in this area. In cooperation with the State Game Commission, 13 elk were transported to the junction of the Bear Basin Lookout with the Doe Camp road where they were released (one died during transport). Later in the year, an additional five elk were released in the area.

[They do not appear to have become established in this area perhaps due to changing environmental conditions.]

Mining

Anthropologist Dorothea Theodoratus (1980: 53) noted that by the time the Six Rivers National Forest was created, one of the most difficult management problems on the Forest was the regulation of mining claims. The 1872 Mining Law permits a prospector to stake a claim without having to prove economic value. At this time the national forests were filled with claims by individuals who had no intention of mining. It was estimated that of the 237 claims occupying 6,280 acres, 206 claims on 5,580 acres were fraudulent (Theodoratus 1980: 53).

In 1952, the State Mineralogist listed gold mines at Craigs Creek, Haines Flat, and Myrtle Creek (Guide 1975: 87,149,233, in Theodoratus 1980: 55). Forest Files indicate that, in 1964, there were the following active claims within the Smith River basin:

Smith River---9 persons had 22 claims
Hurdy Gurdy Creek--1 person had 1 claim
Baldy Peak--2 persons had 9 claims
High Plateau---9 persons had 63 claims

The last period when chromite mining was active within the basin was during the Korean War in the early 1950s. At that time, several of the mines were reopened and some prospecting took place. Little in the way of production took place.

Grazing

It was estimated in 1947 that there were 35,000 acres of rangeland on the Gasquet Ranger District with a carrying capacity of 1,200 Animal Unit Months (AUM). Much of this land was inaccessible and it was estimated that 600 AUMs were available for actual use. Two permits were issued in 1946 for about 367 AUMs (Theodoratus 1980: 50).

Chapter 6

Heritage Resources within the Smith River Watershed

The prehistorical and historical heritage resources recorded to date within the Smith River watershed are discussed in this section. An overview is also provided discussing the amount and kinds of archaeological survey work that has been accomplished within each watershed.

North Fork Smith River Watershed

Within the greater Smith River Basin the North Fork watershed has had the least amount of archaeological survey work accomplished and has the fewest number of recorded sites. To date, only six sites (05-10-51-2, 153, 154, 155, 161, and 169) have been recorded on Forest Service lands. All of these sites are historical and all but one are reflective of the dominant land-use activity in this area during the historic era--mining. The one exception is an historic telephone line (05-10-51-161) which roughly follows the western divide between the North Fork and Hardscrabble Creek. Two additional sites near the confluence of the North and Middle Forks have been recorded on private property. One of these sites (CA-DNO-294) is a prehistoric site containing obsidian and chert flakes and possible handstone artifacts. The other site is a small historic cemetery (CA-DNO-293H) located north of the confluence on the east side of the river. Of interest is the fact that Madam Gasquet is buried in this cemetery.

Survey work within the watershed is minimal. To date, within the California portion of the watershed only approximately 450 acres have been surveyed. Thus, from a heritage resources perspective more archaeological survey work needs to be done in this area to provide a better understanding of potential number and kinds of sites likely to exist. Sensitive areas needing to be surveyed include the High Plateau region and the main river corridor.

Middle Fork Smith River Watershed

A fairly substantial amount of archaeological survey work and numerous historical and prehistoric sites have been recorded within the Middle Fork watershed. Approximately 7,600 acres have been surveyed. Most of these surveys have been initiated as a result of timber harvest activities that took place during the late 1970s and 1980s. For that reason,

the surveys to date are biased towards areas with mature conifer stands. Further, many of these areas are on relatively steep slopes as opposed to more archaeologically sensitive areas such as river or creek terraces or along trending ridge lines.

To date, approximately 75 sites have been recorded on Forest Service lands within the watershed. The main concentration of sites is located in the High Divide/Low Divide region and consists of historic properties related to the mining of copper (see the section on mining). Other kinds of properties include the Camp Six Lookout (determined eligible for the National Register of Historic Places) and numerous mines, cabins, and ditches in the French Hill area. A number of mining features including a ditch and sections of flume are associated with the Myrtle Creek Mining District (05-10-51-15). This site has been determined eligible for the National Register.

Only a few prehistoric properties have been recorded in this watershed. The principle prehistoric sites recorded are 05-10-51-32 near the confluence of the Middle and South Forks of the Smith and *Mus-yeh sait-neh* (05-10-51-142) near Gasquet. Both are likely to have been Tolowa seasonal village sites. *Mus-yeh sait-neh* has been listed on the National Register of Historic Places as a cultural landscape property.

[*Mus-yeh sait-neh* was the first Native American cultural landscape property to be placed on the National Register in California and quite possibly in the United States. The National Register nomination form is on file SRNF Heritage Resources (Keter 1993). Also Keter 1993; *Mus-yeh sait-ne:h* A Tolowa village on the Smith River, also on file SRNF Heritage Resources.

[For an overview on the cultural and archaeological significance of this site see Keter (1993).]

South Fork Smith River Watershed

The South Fork watershed has also been surveyed primarily in areas of proposed timber harvest units and road construction with approximately 7,600 acres surveyed to date. Approximately 65 sites have been recorded. A large number of these sites are located along the upper reaches of the drainage and were recorded during timber sale surveys in the late 1970s. A number of sites important for both traditional and contemporary spiritual use by the Tolowa, Yurok, and Karuk are located in the headwaters region of this watershed. Portions of this area have been determined eligible for the National Register of Historic Places as the *Helkau* District-- as a traditional cultural property [TCP].

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The following maps and database are scanned jpg images of the originals that were then copied into a WRD document.






Appendix 1

The Location of Mines and Lookouts
within the Smith River Basin

Note: The following maps are keyed to the attached data base.

Maps 1-13 USGS 7.5'

Map Legend:

-  Chromite Production
-  Copper Production
-  Gold Production
-  Cinnabar Production
-  Forest Service Lookout (not listed on data base refer to table 3)

Data Base fields: Watershed: MF--Middle Fork
RC--Rowdy Creek
NF--North Fork
SF--South Fork

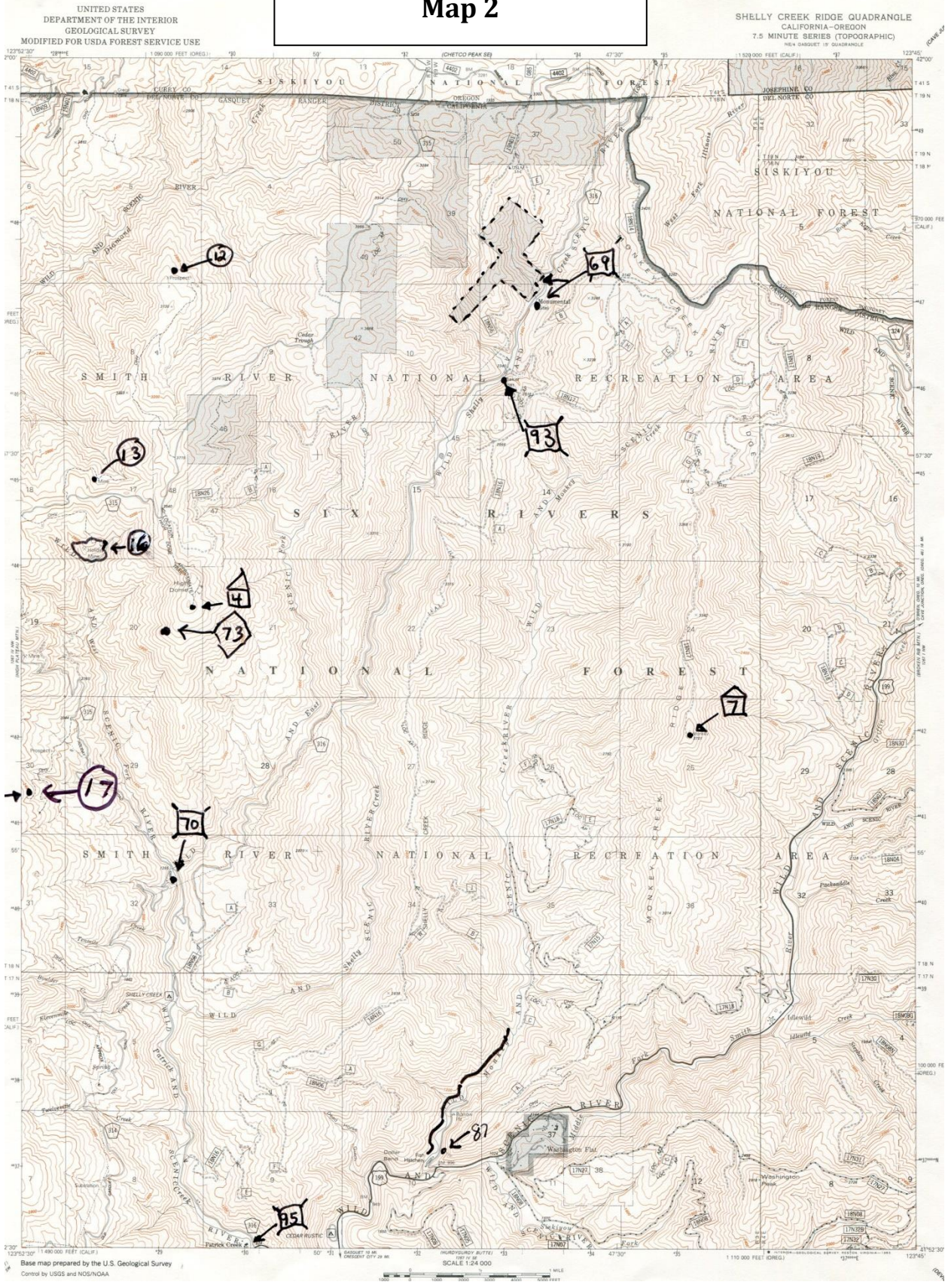
Mineral: G--Gold
Ch--Chromite
C--Copper
Q--Cinnabar (quicksilver)

[Note: data compiled in ACCESS data base. On file Heritage Resources, Six Rivers National Forest, Eureka, CA.]

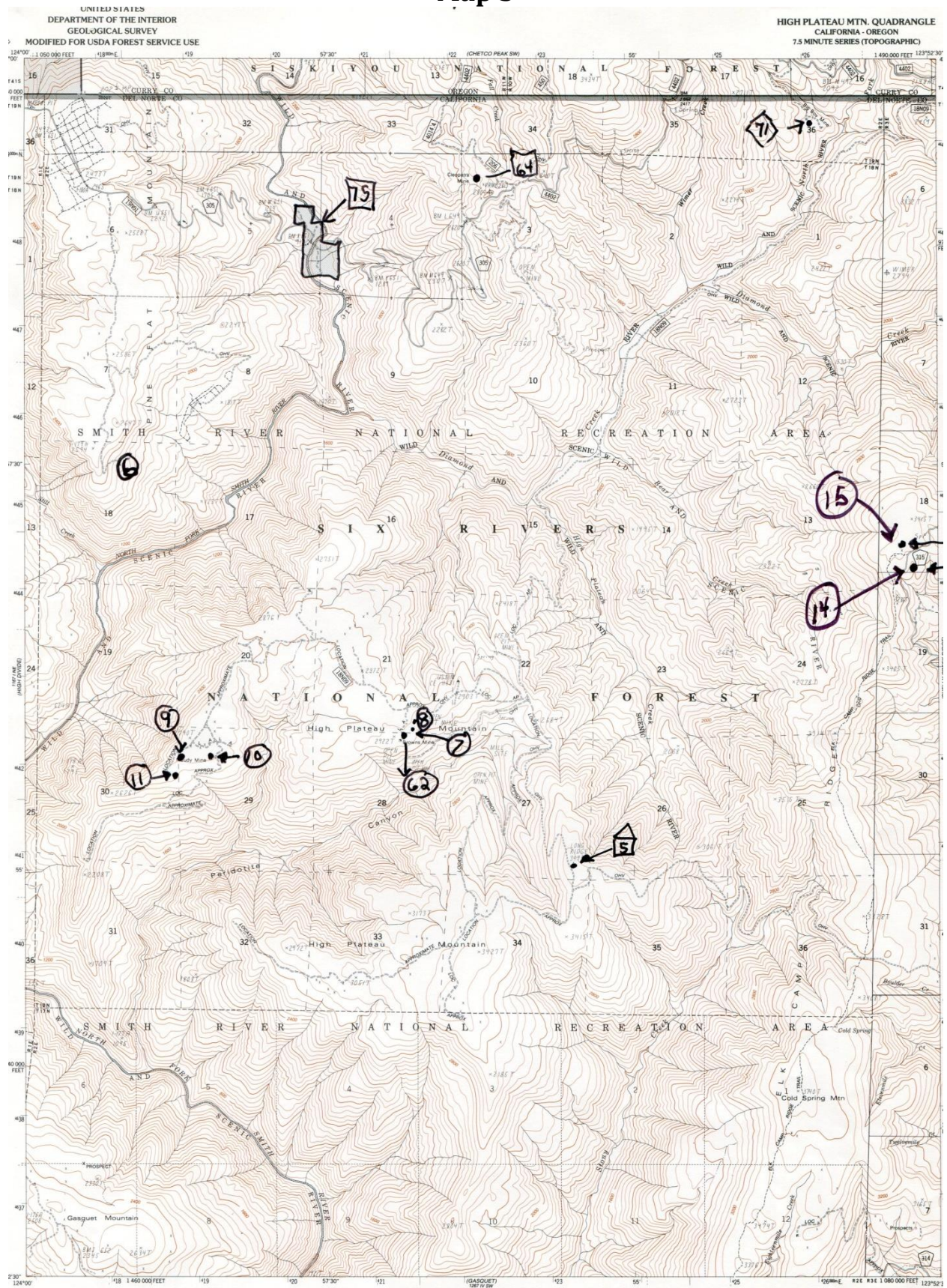
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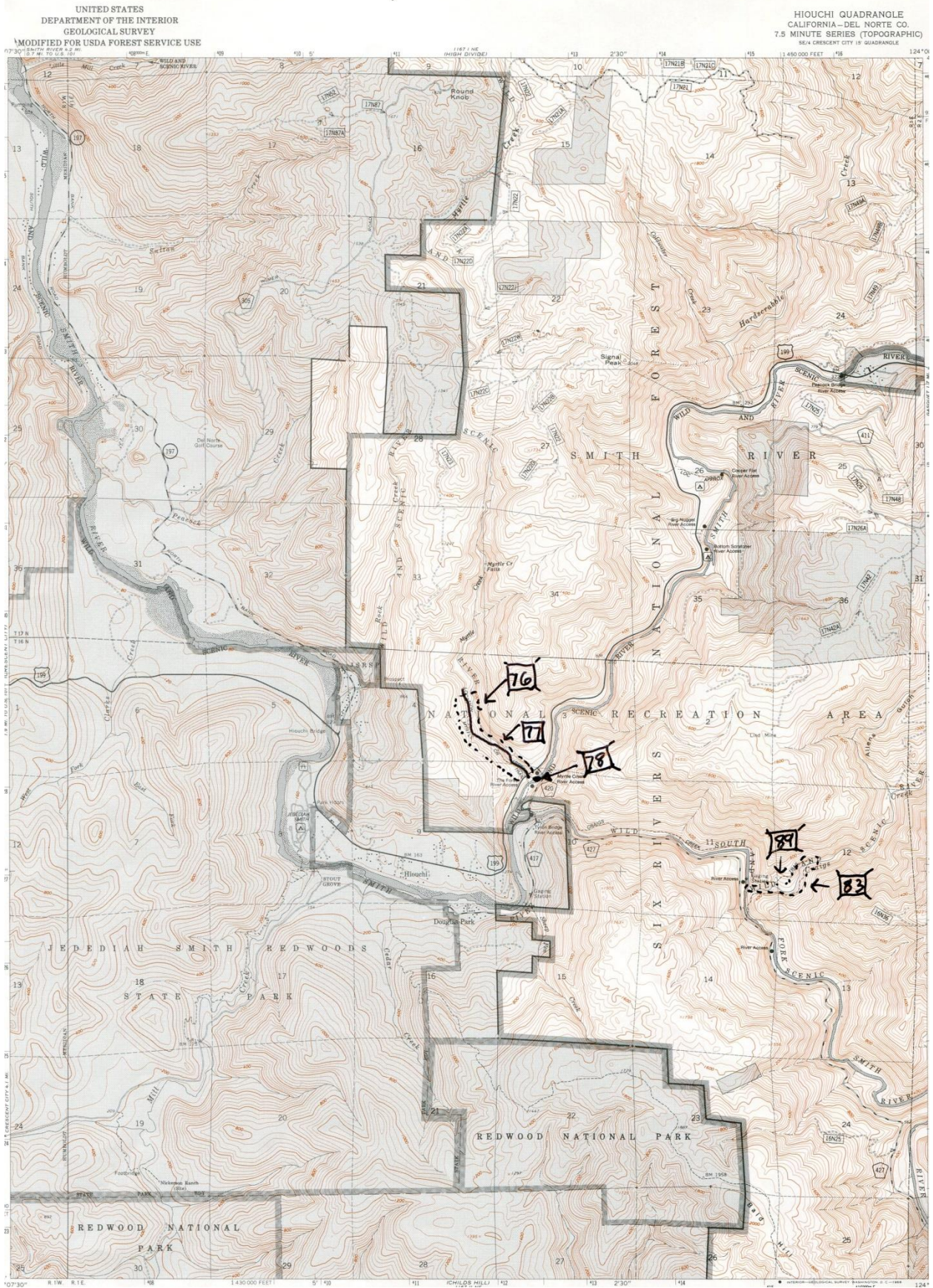
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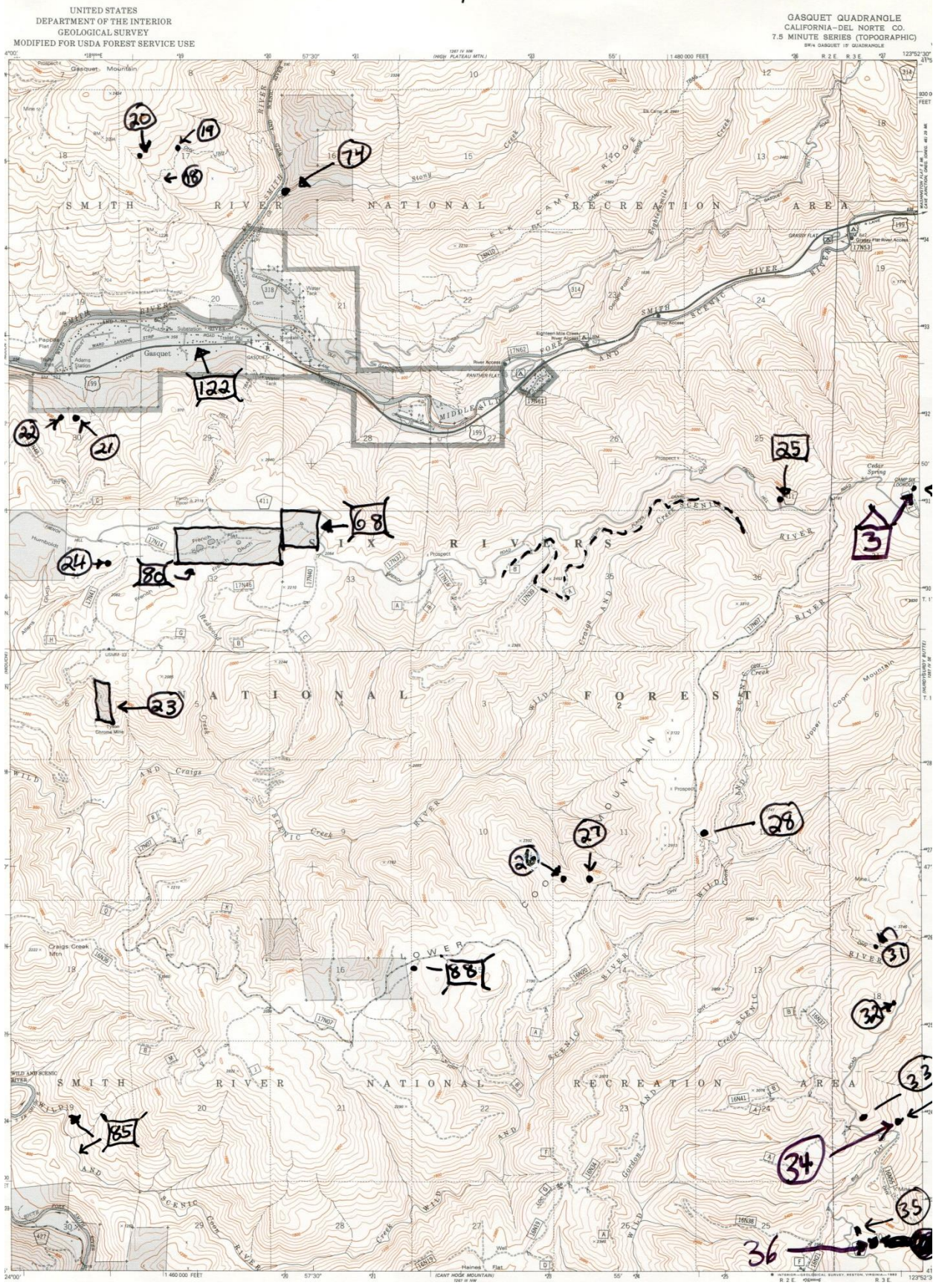
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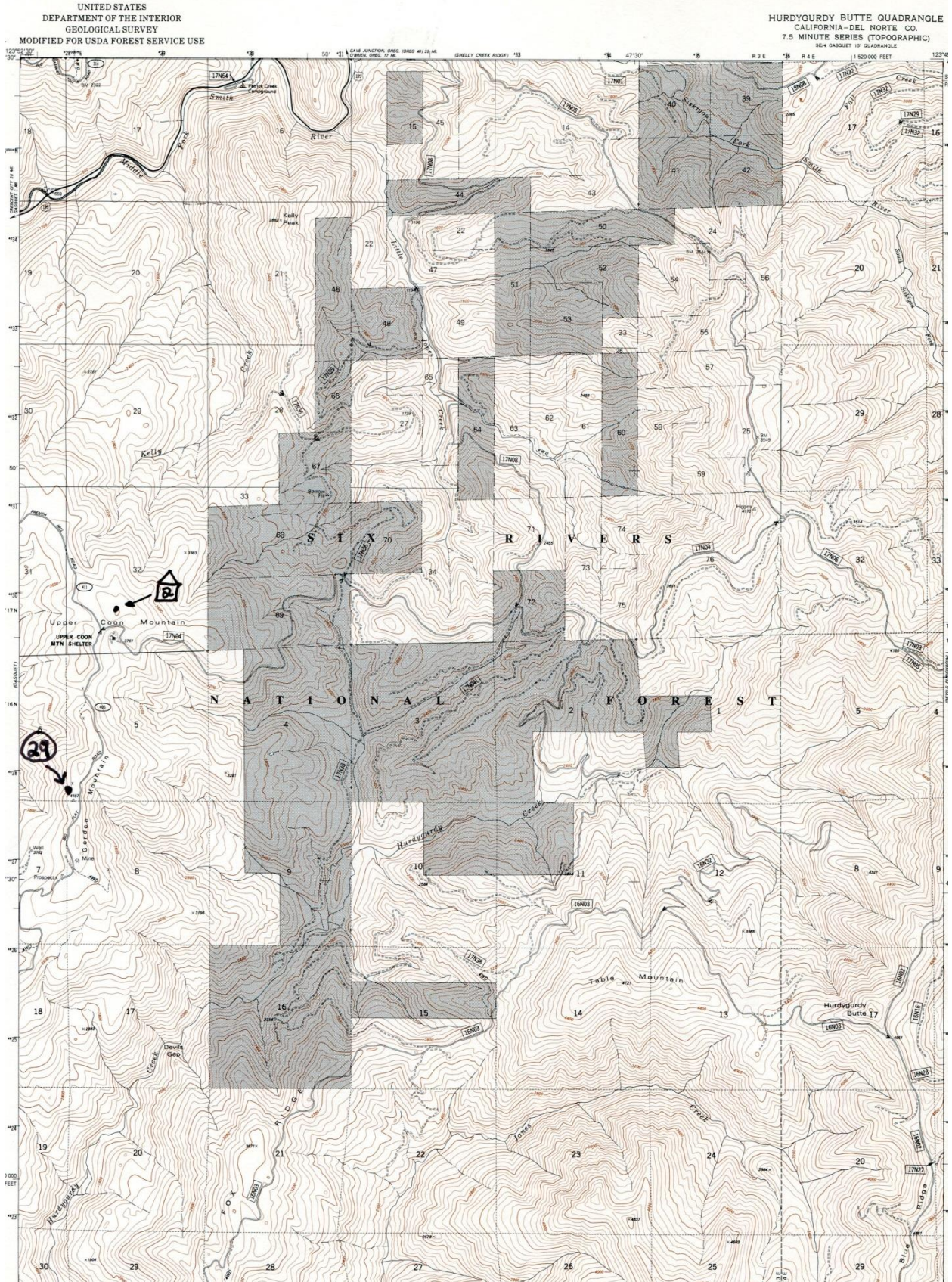
Map 5



Map 6



Map 7



Map 9

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
MODIFIED FOR USDA FOREST SERVICE USE

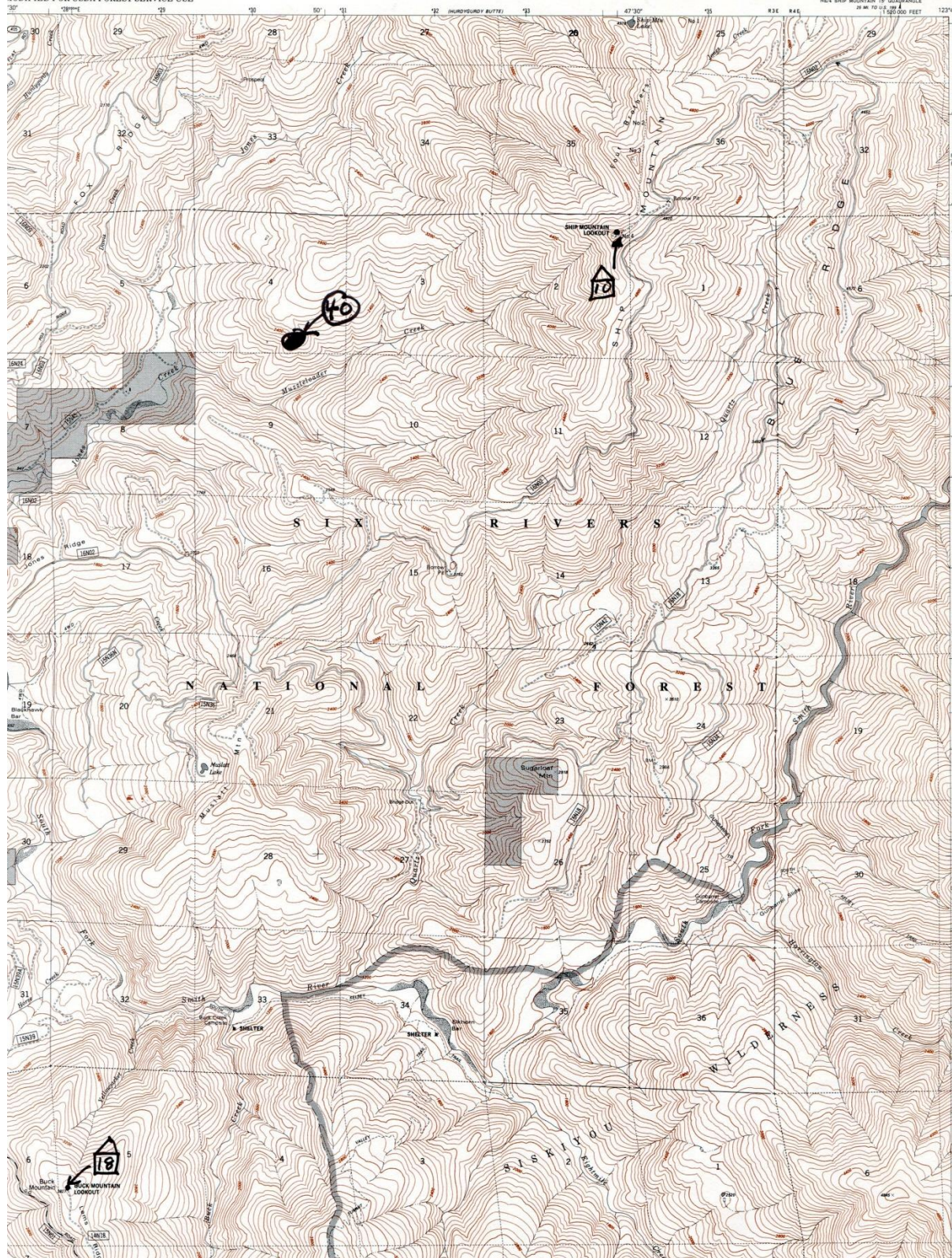
PRESCOTT MTN. QUADRANGLE
CALIFORNIA
7.5 MINUTE SERIES (TOPOGRAPHIC
WWW.DILLON.WITH.USDA/QUADRANGLE



Map 10

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
MODIFIED FOR USDA FOREST SERVICE USE

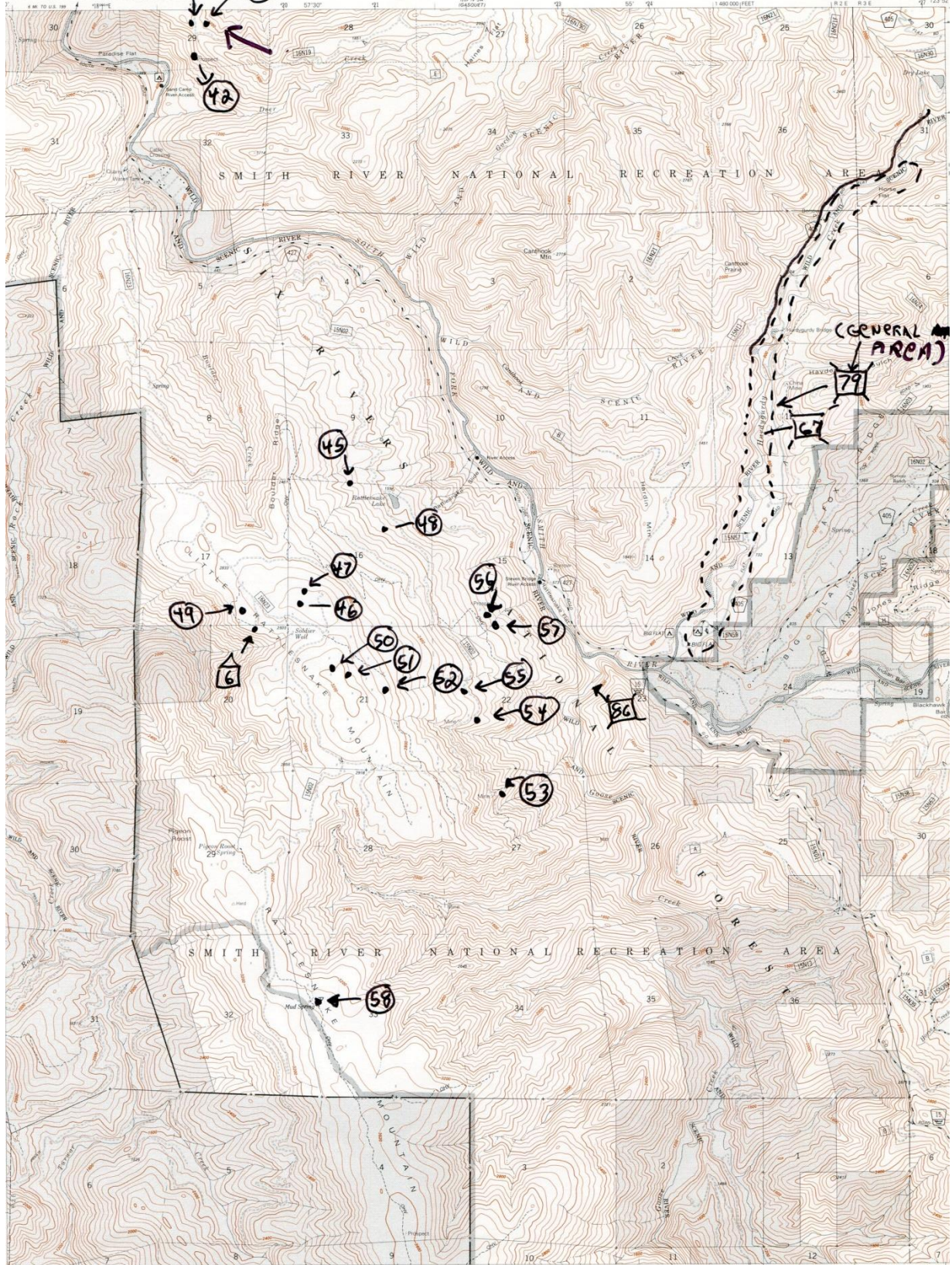
SHIP MOUNTAIN QUADRANGLE
CALIFORNIA-DEL NORTE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
NEXT SHIP MOUNTAIN QUADRANGLE
IS NW 1014.004



Map 11

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
MODIFIED FOR USDA FOREST SERVICE USE

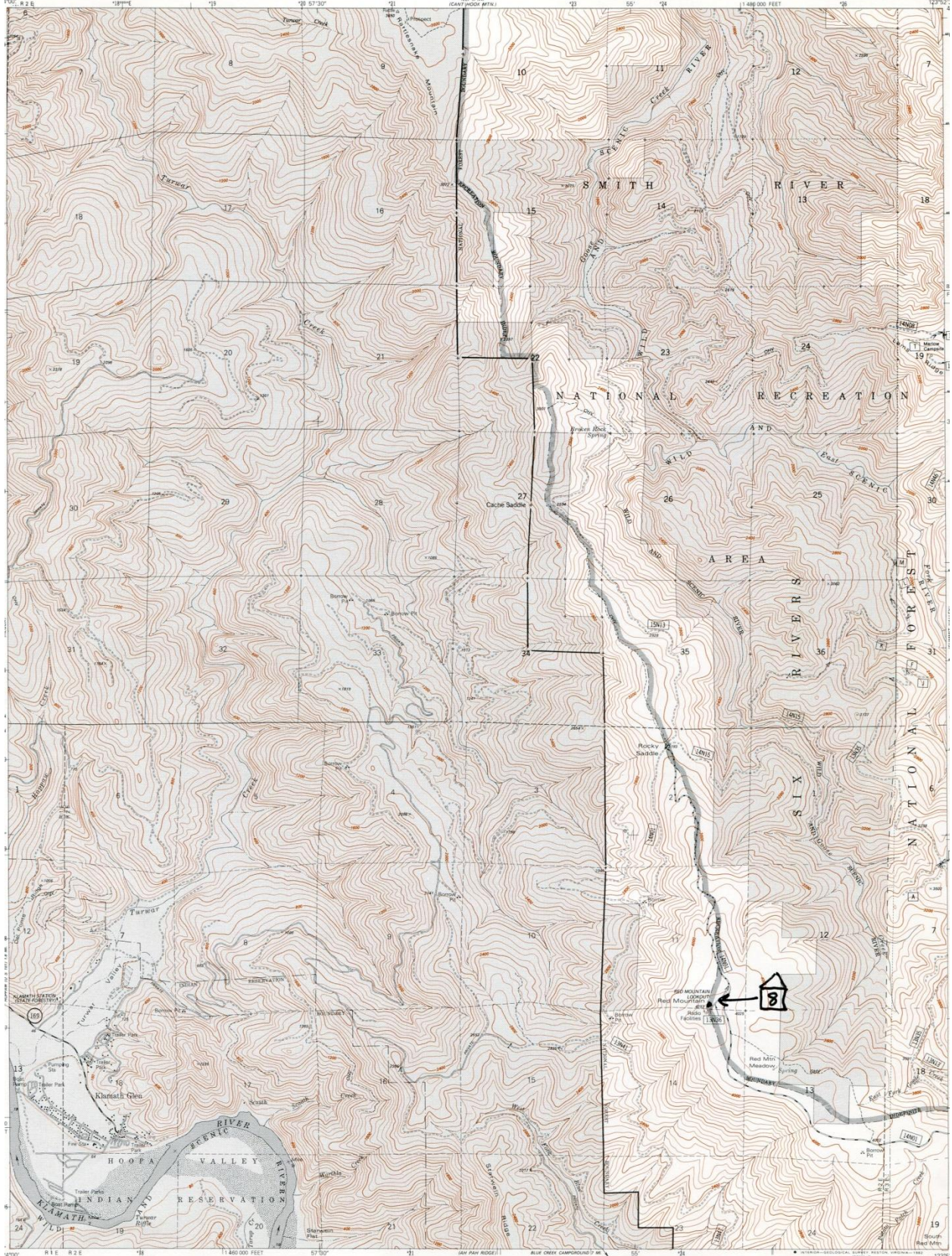
CANT HOOK MTN. QUADRANGLE
CALIFORNIA-DEL NORTE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)
1:62,500



Map 12 MAP 12

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
MODIFIED FOR USDA FOREST SERVICE USE

KLAMATH GLEN QUADRANGLE
CALIFORNIA - DEL NORTE CO
7.5 MINUTE SERIES (TOPOGRAPHIC)
SIX MOUNTAIN IS QUADRANGLE



Map 13

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY
MODIFIED FOR USDA FOREST SERVICE USE

SUMMIT VALLEY QUADRANGLE
CALIFORNIA—DEL NORTE CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



TABLE 1(scanned from the originals)

Mines of the Smith River Basin by Watershed

14-Sep-95

Watershed	mine name	Map key	mineral	began	closed	Comments	Reference
MF	Old Crow (not mapped)		0 C			Location info not provided--in Monumental Mining district--4 claims Bowman, Morgan #1 and #2, Juniper	SMR 1913/1914.385
	Cooke Mine (not mapped)		0 G			said to be located 3 miles "below" Gasquet. 2 mile long ditch on Cooke's Creek was dug in 1895. Monitor was under 75' of pressure.	SMR 1894/96
	Hunter's Luck (not mapped)		0 C			location in in T18N, R3E at 3100' el in "monumental Mining District"	SMR 1913/1914.384
	Britton No. 1 and No. 2		0 C			located "monumental Mining District" on Patrick's Creek at 1950' el. --6 claims	SMR 1913/1914.385
	Eastman Mine (not mapped)		0 G			located on Siskiyou Fork 40 acres at 2,760'. worked with rockers--exact location not indicated	SMR 1894/96
	Lady Boy and Rosebush		0 C			location not known in Monumental district T18N, R3E.	SMR 1913/1914.385
	Frank B. Edwards (Frank)		0 C			tunnel 30-40 ft. long	SMR 1913/1914.386
	Richy Property		12 CH	1943		Production probably ended with WWII. First prospected during WWI. 2 adits and a glory hole. Over 13 long tons shipped.	Wells:41

1

Watershed	mine name	Map key	mineral	began	closed	Comments	Reference
MF	Logan Claim		13 CH	1942		Production during WWII. One adit. shipped 9 long tons to Grants Pass Metals reserve stockpile.	Wells:1941
	Toujours Gai (Elk Ca)		14 CH	1942		Discovered in 1942 by Dave Webb. leased in 42-43 to Harry Messenger. Production to the end of 1943--264 long tons. In 1945 sold and renamed. camp building const. to house 10-12 men. idle 1951.	Wells:43 Jenkins 275
	Tangerine Claim		15 CH			Dave Webb claim--appears to be WWII era. No production recorded.	Wells:43
	High Dome (Holiday)		16 CH			WWII era open cut 120' long 10' deep also an adit. produced 126 long tons. In 1951 a new road was built and camp buildings were erected to house 10 men. Pit was 130' long,40' wide, 12' deep.	Wells:45
	Chrome Hill No. 1		17 CH			Production during WWII to the end of 1943--20 long tons. Still active in 1951 with a truck road 3/4 miles long connecting with Patrick's Creek Road. 12 tons shipped to stockpile in Grant's Pass in Oct 1951.	Wells:45, Jenkins:270
	Margy Claim		21 CH			Not worked WWII but appears to have been worked earlier	Wells:47
	Fairview Claim		22 CH			Not worked during WWII possibly worked in earlier era.	Wells:1947
	Zinc Saddle Claim		25 CH			Operated during WWI by CA. Chrome Co. located on steep N. slope.	Wells:53
	White Feather Claim		60 CH	1917		Active during WWI In 1942 Baker Brothers and the Jones Mining Company shipped 65 long tons.	Wells:73

2

Watershed	mine name	Map key	mineral	began	closed	Comments	Reference
WF	Ebon Claim	61	CH			Active during WWII. 5 long tons shipped in 1943.	Wells.73
	Monumental Consolid	69	G	c1901	1946	Includes 165 acres of patented land. Quartz vien. 2 compartment vert. shaft 240' deep 3/4 mile drifts. Idle for many yrs until 1946 no production since. Many shafts and tunnels.	Jenkins.278, SMR 19
	Oak Flat (and East F	70	G			Water obtained from 9 Mile Creek through 1,200' of ditch. Small scale work here.	Jenkins.278
	Webb (Patrick C., Sh	73	Q		1951	Major production large rotary furnace installed, houses built to house 10-15 men. last major production 1948. minor after to 1951.	Jenkins.281
	Larsen Mine (vicinity)	76	G			20 acres at 760' elevation. water taken from Cooke's gulch by 1/2 mile long ditch.	SMR 1894/96:129
	Waganer Mine (vicinit	76	G			Exacr Location unknown--60 acra at 370' altitude. water supplied by M.C. ditch. 500' of 11" pipe--2 1/2" nozzle and 80' of head.	SMR 1894/96:130
	Myrtle Creek (general	76	G	1853		Site of early day gold mining--ditch built in 1890s.	
	Casey Mine	76	G			Exact location unknown--40 acre claim. Ditch furnishes water for ground slucing.	State Mineralogist Re
	Cliff/Excelsior/Excelsi	77	C	1860s		These mines were worked during the Civil War era--they are listed on the county surveyor map for 1863 (see Williams et al 1982:Map 3)	

3

Watershed	mine name	Map key	mineral	began	closed	Comments	Reference
MF	Christensen Mine	78	G			Owned by Neils Christensen. Included a mining ditch--water was taken from Sheep Pen gulch by 2' x2' ditch 1/2 mile in lenght..	13th annual reprot St.
	Washington Mine (Vic	87	G			160 acres at 2,620' el. "A 2' x2' ditch, 2 miles long was, in 1895, being dug to convey water from Monkey Creek to the Claim.	SMR 1894/96:130
	Coleman Mine (gener	87	G			Exact location unknown---adjacent to Monkey Creek. Ditch (05-10-51-174) took water from Temple Gulch ---ditch was approximately 2 miles in lenght	State Minerologists Re
	Frank Zoar Copper Mi	91	C			Zoar worked former Standard (Old Hanscom), Nome (Copper Queen), Discovery (Lady Bell) and A Beauty (Copper Hill) mine claims--one tunnel on the standard is 500' long--a number of tunnels and vertical shafts.	SMR 1913/1914:383
	Oriental Copper Mine	92	C			One claimn located at Low Divide at 1900' el. 15' vertical shaft on 4' vein.	SMR 1913/1914:384
	Klondike (vicinity)	93	C			7 claims located about 1 mile south of Monumental	SMR 1913/1914:385
	Eikhorn Hydraulic Min	95	G			Sec 16-2560 acres--mostly bonded--controlled by Smith R. Mining Co. 3 miles of flume for 3 giants, two camps accomodating 25-30 men--active 1914.	SMR 1913/1914:387
	Gasquet Flat (general	122	G	c1852		Mining started here very early. There are numerous claims on or adjacent to Gasquet Flat.	

1614

4

Watershed	mine name	Map key	mineral	began	closed	Comments	Reference
MFJ	Hard luck mine (not m	0	G			located somewhere on Monkey Creek Quartz mine--vien also carried arsenical sulphides	SMR 1913/1914.389
NF	One Eyed Jack	3	CH			Nos. 1,2,3 inactive by 1942.	Wells:31
	Gooch Claim	4	CH			Claimed by Gooch in 1944. Worked during WWI by unknown. Rough truck road lead 3 miles to Wimer Road. Caved in shaft near low Divide Trail.	Wells:31
	Pine Flat Mountain	6	CH			8 long tons mined WW II era.	Wells:32
	High Plateau	7	CH	1917		This mine "produced the highest-grade ore that has come out of DNC second only to French Hill in the amount of CH produced. Located in 1917---1334 long tons shipped in 1918. Closed Armistice Day 1918. reopened 1933. Active Little production---1,800' NE of High Plateau Mine. Production ended by end of WWII.	Wells:37 Jenkins:272
	Bonanza Mine	8	Ch	1941			Wells:33
	Judy Mine (Hicks, vict	9	CH	1942	1943	Production during WWII. Closed by 1943.	Wells:38
	Bluebird Prospect (Hi	10	CH	1943		ended WWII era. 3 claims 1/3 mile S of Judy Mine. Shipments up to August 1944 amounted to 75 long tons. Idle in 1952.	Wells:38, Jenkins 269

5

Watershed	mine name	Map key	mineral	began	closed	Comments	Reference
NF	Skyline Mine	11	CH	1944		9/10 mile SW of Judy Mine. Shippments to Oct. 1944 were 165 long tons. Production probably ended 1945 or 46.	Wells:39
	N. Claim	18	CH			Mined about 1 long ton of chromite	Wells:47
	BlackJack Chromite	19	CH			Mine active during WWI and also worked during WWII	Wells:46
	Angela Chromite Min	20	CH			No info on when or what amount of CH was mined--probably during WWI and WWII.	Wells:46
	Dipper Extension	62	CH	1942	1951	Located 1942 by Eugene Brown and Charles Johnson. Low grade ore about 10 tons mined. Trench 25' long 30" wide 15' deep. Idle 1943 to 1951 when about 3 tons were mined.	Jenkins:270
	Cleopatra (Dedrick, D	64	C	1894		in 1951 had been in 'active for many years and building on site had colapsed. One reprot prior to WWI indicated mining ended in 1911. Two tunnels.	Jenkins:276, SMR 19
	Big Boy Cinnabar Gro	71	Q		1933	Located by John Griffin sometime after WWI. unsuccessful at extraction--not active since 1933.	Jenkins:281
	Sunnybrook (Diamon	72	Q		1917	Original discovery of cinnabar was made at this location in 1850. relocated by Diamond C. Cin. Co. in 1916/17. 1 flask of C. produced with 3" pipe. no prod. since	Jenkins:281
	Mandot	74	C	1860s		cited in literatutre copper mine located on E. side of North Fork just above Gasquet's parcel.	Williams, Maniery, Ge

6

Watershed	mine name	Map key	mineral	began	closed	Comments	Reference
NF	Grukshank/Diamond/	75	C	1860s		These four mines are recorded as within the NF watershed in 1863 Map by County Curvayor R.B. Randal (See ARR 05-10-107) Cal nickel report	
RC	Cooper Creek Mine	533 1	CH	1886	1943	Also known as Low Divide or Rowdy Creek Mine. Patented in 1886 as Mineral lot 39. During WWII 239 long tons of ore shipped. Operations ceased in 1943 when C. A. Gillis was fatally injured in a rock fall in the underground workings.	Wells:21, Jenkins:270
	Hole in the Ground	5				Mined prior to 1935. In Oct. 1943 43.13 tons of ore were delivered to the Strategic Metals Reserve stockpile in Grants Pass. possibly active early 1951 after a new road was built from the Wimer Rd. near stone coral to mine.	Wells:32 Jenkins:273
	Salt Lake-California	66	C			Several claims and adits (union claim 1, 2,3) Mammoth Mne also discussed as a clima in this vicinity. a number pf tunnels	Jemkins:277, SMR 19
	Superior Copper Mine	90	C	c1860		Formerly Atlantic Pacific Mine covers Mammoth Group of 14 claims	SMR 1913/1914:383
RC?	Mountain View (High	162 2	CH	c1869		Tyson began mining ore here in about 1869 activity ceased by about 1890. AKA as High Divide Mine. In 1918 Am Exploration and Construction Co. leased from Tyson. Active during WWII. 6 additional Claims filed in 1951. 4	Wells:28 Jenkins:274
SF	Doctor Young Hydrau	2	G			Section 32--1 mile of ditch to giant with 50' head.	SMR 1913/1914:387
	Lambert Mine (not m	0	G			Big Flat area--20 acres at 2,100' elevation. water used for ground sluicing.	SMR 1894/96

7

Watershed	mine name	Map key	mineral	began	closed	Comments	Reference
SF	Rice & Murray Mine (l	0	G			Located on SF about 11 mi. SE of CC. 40 acres at 420' el. water supplied from tributary in 1 mile ditch. giant has 50' head.	SMR 1894/96:129
	Baumgarten Mine	0	G			exact location not given--located somewhere in Big Flat azrea at 2,100' elevation	State mineralogist Re
	Dave Savoy Claim (n	0	G			2 claims--ground sluicing from water collected in small reservoir	SMR 1913/1914:387
	Aurora (not Mapped F	0	G			Hydraulic mining using water from nearby gulches in winter.	SMR 1913/1914:387
	Hendrix and Howe (Fr	0	C			5 claims located in 1911	SMR 1913/1914:385
	Hendrix Howe and M	0	C			5 claims located in 1911	SMR 1913/1914:385
	French Hill (Tyson) C	23	CH	1886		Mining began in 1880s by Tyson Mining Co. Worked under lease from Tyson to Am> Exploration and Construction Comapny during WWI. Idle until WWII when it was leased. 8,030 long tons shipped in 1944. Includes Chrome Prospectings and several pits. Several claims in this vicinity	Wells:49
	Star and Rough and	24	CH				Wells:52
	Coon Mountian Group	26	CH			Operating in 1942. In 1943 12long tons were shipped--several open pits in the area.	Wells:55

8

Watershed	mine name	Map key	mineral	began	closed	Comments	Reference
SF	Coon Creek No. 1 Cla	27	CH	1942		Located by Christensen, Nelson, and Viemann in 1942. Purchased by C.H. McClendon 1943. Bulldozer cut 125 ft. long and 10' deep. 31 long tons shipped in 1943.	Wells:55
	Cooncan Claim	28	CH			Mined prior to WWII probalby WWI era.	Wells:56
	Sunset (Darnell) Clai	29	CH			Mined during WWI as the Darnel Cliam. Mined in 41/42 by C.H. Bennett. Total shipments estimated to be 379 long tons. Operations reopened in 1936.	Wells:57
	Apex (Goose Egg) Cl	30	CH			Active during WWII. In 1943 10.19 long tons shipped	Wells:57
	Big Dipper (Camp Se	31	CH		1943	Active during WWII. in 1943 shipped 150 long tons. Active during WWI as part of the Gordon Mountain Chrome Mines. Also Active in 1930s--150 long tons shipped 1937.	Wells:58, Jenkins:269
	Patterson No. 1 Clai	32	CH			Operated during WWII by C.H. Bennett. over 200 long Tons shipped during this time.	Wells:58
	Camp Eight (St. Patri	33	CH		1944	Active during WWI by Gordon Mt. Chrome mines. 100 long tons shipped 1918. 4 aditis. Also active during WWII.	Wells:59, Jenkins:269
	Sunrise Claim	34	CH			Active during WWI By gordon Mtn. Chrome Mines. Also worked during WWII. Bulldozer work and tunnels.	Wells:60
	Gilmore Mine	35	CH			Mining began during WWI. Active during WWII some ore shipped 1942,43.	Wells:60

9

Watershed	mine name	Map key	mineral	began	closed	Comments	Reference
SF	Grumpy Claim	36	CH			First discovered WWI but not mined at that time. During WWII about 150 tons of ore were shipped. Open bulldozer cut and two adits.	Wells:61
	Lone Grave No. 1	37	CH	1942		two shallow trenches little activity.	Wells:61
	Loner Grave No. 2	38	CH	1942		opened 1942. Only 7-8 tons mined at this location.	Wells:61
	Stevens No. 2 claim	39	CH	1942		Located by Stevens brothers at same time as lone Grave mines. Active WWII only 10-12 short tons mined.	Wells:62
	Muzzle Loader (Steve	40	CH	1942		Worked during WWII a number of adits. Idle in 1951	Wells:63 Jenkins:274
	Fourth of July claim	41	CH	1942	1945	Located in 1942 by C.H. McClendon. Ore shipped in 1944. Mined by dozer in open cut 125 feet long 70 feet wide 20 feet deep. Total produced from mine about 101 long tons. 3 men employed at mine.	Wells:65, Jenkins:271
	Hawkins (Billy Boy, Di	42	CH		1945	Appears to have beenactive during WWI. Worked during WWII when in 1943 200 long tons of ore were produced.	Wells:65, Jenkins:269
	Contact Claim	43	CH			2 pits-- each 4' square and 3 ft. deep. About 3 short tons mined from each pit.	Wells:67
	Carla Claim	44	CH	1944		Discovered spring of 1944 by C. Stevens and J. Wilson. 28 long tons shipped.	Wells:67

10

Watershed	mine name	Map key	mineral	began	closed	Comments	Reference
SF	Rattlesnake Mountain	45	CH			Active during WWI. During WWII in 1943 47.32 long tons shipped to metals reserve.	Wells 67
	Section Sixteen Claim	46	CH			Worked mainly during WWI	Wells 68
	Delray and Rogers Cl	47	Ch			Worked during WWI.	Wells 68
	Conso (Inman No. 1)	48	CH			Possibly worked WWI. During WWII leased from Hammond Lumber Co. by Leland Conso. 280 long tons shipped from 1941-43.	Wells 68
	Soldier's Well	49	CH			Active during WWI. Idle in 1951	Wells 69 Jenkins.275
	Pigeon Roost Spring	50	CH			Active in 1942	Wells 69
	Inman No. 2 Claim	51	Ch			Active WWII era.	Wells 69
	Crescent Claim	52	CH			Active WWII about 10 long tons mined.	Wells 69
	Big Five Mine	53	CH			Active during WWII. 700 long tons shipped in 1943-44.	Wells 69

11

Watershed	mine name	Map key	mineral	began	closed	Comments	Reference
SF	Old Doe Mine	54	CH			Owned by the Inman Brothers. Bulldozer cut 80' long, 50' wide, 90' deep. Active during WWII when nearly 1000 long tons of ore were shipped to the Metals Reserve Company Stock pile at Grants Pass. Idle as of 1951.	Wells:70 Jenkins 274
	Big Buck Claim	55	CH			Owned by the Inman Brothers--appears to only have been prospected.	Wells:70
	Midnight Claim	56	CH			prospecting only	Wells:70
	Goose Creek Claim	57	CH			prospecting only	Wells:70
	Claim Southeast of M	58	CH			Inactive--prospecting only. Owner McClendon	Wells:71
	Red Mountain Claims	59	CH			Poor transportation access has limited mining. Active during WWI when about 72 long tons were shipped. Not active during WWII.	Wells:72
	Alta (Alta California)	63	C			One of the 1st Copper mines in CA. Shut down in 1867 for 1st time. In 1951 2 cabins built and some activity present. 1860s mine had an incline shaft 455' deep--shaft was served with steam hoist and air compressor.	Jenkins:276, SMR 19
	Occidental	65	C			Idle in 1951	Jenkins:277
	Big Flat (Oro Grande)	67	G	????		An attempt was made to reopen in 1945. Ditch/flume was repaired. In Oct. 1947 still idle but had operated for a short time in the spring that year. Closed then due to silt discharged in S.R. by CF&G.	Jenkins:278

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Watershed	mine name	Map key	mineral	began	closed	Comments	Reference
SF	French Hill (vicinity)	68	G			In Nov 1945 there was small scale hand shoveling into sluice boxes---it has been essentially idle for many years. Appears to have been an active hydraulic operation in 1890s.	Jenkins 278
	Condon Copper Mine	79	C			Active in 1880s inactive in 1890s. Exact location not known at this time.	Bledsoe 1881:141
	Winsch Mine (vicinity)	80	G			20 acres at 2,200' el. water brought from Bear Camp Gulch by 2' x 2' ditch 2 miles long--one #1 Giant in use.	SMR 1894/96:130
	French Hill (general a	80	G	c1860		General area where mining took place in 1860 and 70s--5 mile ditch to the area from near the headwaters of Craigs Creek	Jenkins 278
	Torreon Mine (vicinity)	80	G			located in Redwood Gulch area of French Hill at 2,180' . worked by Ground sluicing.	smr 1894/96:130
	Whitney Mine (Vicinit	80	G			French Hill Vicinity--at 2,160' el. 20 acres--water for ground sluicing taken from gulches;	SMR 1894/96:130
	French Hill Mine (vici	80	G			383 acres water taken from Coon and Thompson creeks by 4' x 3' ditch 9 miles long.	SMR 1894/96
	Frank mine (vicinity)	80	G			In French hill area--20 acres at 2,175' altitude. Worked by Ground Sluicing.	SMR 1894/96:128
	Haines Flat (vicinity)	81	G	1878		Armand Gold and silver mining company. Haines Flat had a relatively large number of miners and those who worked for the mining company.	Jenkins:278

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Watershed	mine name	Map key	mineral	began	closed	Comments	Reference
IF	Hayne's flat Mines (H	81	G			180 acres--water taken from Coon and Garden Creek by 2 ditches 7 abd 3 miles long respectively	SMR 1894/96:129
	Thrusday Evening	82	C			No info cited on this mine but identified on map (Wells.Map)	Wells.Map
	Craig's Creek (Gnner	83	G	1850s		Placer mining took place at Craigs Creek as early as the 1850s. There may have been a ditch here at one time. Most activity was adjacent to the Creek. Men were still making a living placer mining here in the 1890s.	Report of the State Mi
	Mill Creek (General vi	84	G			Some gold mining activity in the late 1800s---specific location was not given so this location was NOT mapped.]	St. Mineralogists Rep
	Coon Creek (Gneral	85	G			Noted as having produced some gold by miners who worked placer deposits in the creek and tributaries.	St. Mineralogists Rep
	Goose Creek (Gener	86	G			Some placer prospecting took place along Goose Creek. there were some extensive deposits of gravel but it appears no hydraulic mining took place	State Mineralogists R
	Coon Flat Mine (locati	88	G			located on Coon Ridge 100 acres at 2,100' altitude. Water from C. Creek transported in 5 m. ditch.	SMR 1894/96
	Hueniche Mine (vicinit	89	G			on Crag's Creek 60 acres at 260' elevation. Owner blasting out obstructions near mouth for construction of tail-race	SMR 1894/96:129
	Kaus Mine (vicinity)	89	G			on Craigs Creek at 340' elevation water obtained from ditch	SMR 1894/96:129

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