

History of Seven Basins Watershed

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CHAPTER 1

PHYSIOGRAPHY OF THE SBW

The Rogue River is located in southwestern Oregon and flows through the SBW on its 215 mile course to the Pacific Ocean. The Rogue River headwaters begin at the foot of Mt. Thielsen and near Crater Lake. The congressionally designated "National Wild and Scenic" portion of the Rogue is 84 miles long. It begins 7 miles west of Grants Pass and ends 11 miles east of Gold Beach. The Rogue was one of the original eight rivers included in the Wild and Scenic Rivers Act of 1968.

As the Rogue River emerges from the Cascade Range, it cuts into Sams Valley, a broad alluvial valley in the Umpqua Formation (Baldwin, 1964). It then cuts through the Eastern Klamath Mountains that house the gold bearing area of the SBW. The Mountains are broken up into valleys, mountain and hill ranges, densely wooded in the 1850s and 1860s. The majority of hill slopes have been disturbed by a century of human use (settlement patterns, forest harvest practices, road systems, mining, and agriculture). Tributary streams of varying size generally follow the northeast to southwest orientation of mountain valley drainages. Within the SBW are a number of direct tributaries to the Rogue River: Snider, Sams, Curry Gulch, Kane, Blackwell and Faults, Galls, Sardine, Colvig Gulch, Miller Gulch, Footh, Birdseye, Schieffelin Gulch, Wards, Evans, and Savage Creeks.

WATERSHED ECOSYSTEM

Natural elements such as wind, water, geologic disturbances, insects, disease, drought and lightning caused fires, are all part of the ecological system that typically shapes a forest and ultimately the watershed. The ecology of many ecosystems is dependent on some of these elements; such as fire to maintain diversity. A number of species are dependent on fire to reproduce.

As forest ecosystems have evolved; the composition, structure, and ecological process of the forest have essentially produced an ongoing physical environment. Nature has not been the only hand in disturbing and shaping

the historical ecosystem. The indigenous people had long interacted with the ecosystem where they lived; changing the landscape to promote the resources important to them.

Later the Euro-Americans, and to some extent the Chinese, would help to shape the SBW by developing the economic resources that were significant to them. The fur trade, game, fish, minerals, water, trees, and the land were all resources that have been derived from this watershed. The method in which these resources were reaped and the affect of natural elements served to create a watershed is a reflection of its historical conditions.

SBW CLIMATE AND WEATHER

The SBW is located in the region of southern Oregon that has been described by many locals as the “Banana Belt.” The region lays in what has been explained as, a transitional area between four very different climate zones: Pacific Maritime to the west, Oregon High Desert to the east, California Mediterranean to the south, and Northern Temperate to the north.

Southern Oregon’s generally mild climate is one of its most attractive features. The regions experience all four distinct seasons. Winters are mild; average temperature can range into the 50s in the daytime. The coldest month is traditionally January; the minimum average around 33 degrees and the maximum temperatures averaging 47 degrees Fahrenheit. Annual snowfall is minimal on the valley floor, but does snow enough at times to close school for a day (Rogue River Chamber of Commerce, 2002).

Precipitation levels averaging between 19 inches on valley floor and up to 47 inches at the higher elevation, of the more mountainous areas, but is generally less than 30 inches annually. The rain station at Modoc Orchard has 21.847 inches for, an average rainfall year for the complete years between 1915 and 1966 (NCDC).

Summers are characteristically dry with warm temperatures and low humidity. July temperatures range from 53 degree lows to 90 degree highs. A maximum temperature has been 115 degrees Fahrenheit in Medford. A welcome aspect of southern Oregon’s dry, hot summer days is the cooling winds that generally begin in the late afternoon. Summer rainfall is less than 2 inches in the valleys (Rogue River Chamber of Commerce, 2002).

HISTORIC FLOODING

The watershed has experienced both periodic flooding, with resulting landscape and channel changes as well as drought. Less than one inch falls during the summer months. Snow accounts for very little of the available moisture in the lower elevations. Major floods occurred in 1853, 1858, 1861, 1866/67, 1880, 1890, 1927, 1945, 1948, 1953, 1955, 1962, 1964, 1974, and 1997.

DROUGHT CYCLES

Recurrent drought cycles have been shown to be influenced by repeated *El nino* and *La nina* cycles. According to Taylor and Southards (1997) “There is increasing evidence that salmon populations in the northeast Pacific are significantly influenced by long-term climate changes. Recently, scientists have found that salmon returns in the Northwest show long-term behavior which closely follows the climate cycles. In the Northwest, temperature and precipitation data go back about 100 years. During that time there have been four relatively distinct climatic periods (Taylor and Southards (1997):

- 1896-1914 – Generally wet (and cool)
- 1915-1946 – Generally dry (and warm)
- 1947-1975 – Generally wet (and cool)
- 1976-1994 – Generally dry (and warm)

They note that “in any given period, not all the years are dry or wet, but that a high percentage follows that pattern.” For example, in 1915-1946, there were 22 dry years and only 10 wet ones. Consecutive dry years were common (indicating drought periods). The wet period immediately following had 21 wet years versus 7 dry ones, and consecutive dry years never occurred. Droughts were nonexistent during the latter period, although there were several major floods. The most severe drought years recorded were the years of 1929–1931. The entire Pacific Northwest experienced an extended drought from 1976 to 1995. 2001 was the driest year since recording began (Taylor and Southards, 1997).

SBW COMMUNITY

The SBW community encompasses the cities of Gold Hill, Rogue River, and historic unincorporated hamlets. During their day, Asbestos, Beagle/Antioch, Dardanelles/Kane Creek, Evans Valley/Wimer, Foots Creek/Draper, Fort

Birdseye, Fort Lane, Rock Point, Sams Valley, Spikenard/The Meadows, Table Rock, and Tolo/Willow Springs/Fort Lane, were distinct autonomous rural communities.

The 1886 list of 19 Voting Districts for Jackson County list six registers and clerks, (in the watershed), that were appointed by the County Commissioners court, in conformity with the registry law passed by the last legislature, who would also act as judges and clerks of elections: District No. 10: Table Rock, District No. 11: Willow Springs, District No. 12: Rock Point, District No. 13: Woodville, District No. 14: Pleasant Creek, and District No. 15: Foots Creek (Ashland Tidings, 1880).

Prior to World War II, the economy of the watershed communities was based on what the land would yield; whether it be mineral, tree, water power, or harvest from the soil. Post World War II saw a shift to a more timber based industry. The heaviest timber extraction taking place in the watershed occurred between the years 1950-1980. Today, mining, agriculture and forest products have seen a decline, influenced to some extent by less available raw product, federal trade agreements and imports, as well as politics and other outside influences. The trend in recent years in the Rogue Valley has been a move from these historic industries to service industries, increased government services, tourism, manufacturing, and processing.

Today's residents living within the watershed are a real smorgasbord of lifestyles, interests, and employment. A typical rural neighborhood may be comprised of someone who is the third or fourth generation living on the same land, a retired California transplant, a medial professional, retail clerk, cattleman, or owner of commercial business. People vary in their knowledge of county ways and live in harmony with their surroundings.

Being on the I-5 corridor is advantageous to the people living up the gulches and creeks as well as in the cities of Gold Hill and Rogue River. A hundred years ago, a trip to Medford by team and wagon took six hours. Today the same trip takes only 20-30 minutes. They can live in a rural or small town setting and have a quick commute to work in the nearby cities and have all the conveniences of modern life.

Urban sprawl has encroached upon some of the best farmlands as housing demands have increased. Jackson County has grown at two percent a year for the past fifteen years. Greater demand is being placed on the land and available water resources. Paved roads convenient for quick travel also absorb the solar rays and radiate the stored heat. One wonders to what effect the blacktop has on the water temperature of the nearby waterways.

CHAPTER 2

INDIGENOUS PEOPLE/NATIVE POPULATIONS

It is estimated that humans have been present in southwest Oregon for at least 10,000-12,000 years, and possibly earlier (LaLande, 1982). Beckham estimated the total of Native population living in southwestern Oregon at the time of Euro-American contact at about 10,000 people (Beckham, 1971).

Though, there is little definite information as to where they came from, archaeological research seems to indicate that the natives of the Rogue, may have migrated into the area from the Plateau. Radiocarbon dating of archaeological sites including Cascadia Cave in the western Cascades, the Marial Site in the Rogue River Valley, and several localities along the Long Tom River west of Eugene is between 6,000-10,000 years old. A long-standing way of life focused on hunting and root crops is indicated by the stone tools and charred plant remains at the sites (Buan and Lewis, 1991).

The “Rogue Rivers,” according to various authorities, called themselves Lo-to-ten, Tutatamy, Totutime, Tootouni, Tootooton, Tutoten, Tototin, Tututna, and Too-too-na; all of which may be regarded as the same word, uttered variously by individuals of different tribes, and reproduced in writing in varying was as well. Tribes of restricted numbers frequently called themselves by the name of the chief (Wailing, 1884). They lived in small, independent villages in semi-subterranean plank houses.

Much has been lost of the primitive history, culture and arts of the native people of the Rogue. There are a few official government reports dealing with their language and a limited account of their life and customs to tell us of this now vanished people. It is a limited history that has been maintained, for the most part by incidental segments of the accounts of their extended and bitter struggles with the Euro-American’s. In the early 1900s linguistics and ethnographers began interviewing the last of the Takelma. From these interviews comes much of our information on the life and customs of this vanished people.

It is believed that they were a relatively friendly and peaceful people; until their home was threatened and their land and women taken from them by Euro-Americans, by whom they were considered fierce and war-like (Jackson County

Extension Office, 1980). According to Morehouse-Genaw, the Indians that lived around the valley could be very aggressive. If a neighboring tribe blocked a stream and prevented salmon from reaching another tribe, it could be a cause for war (Morehouse-Genaw). There also is indication of occasional warring with the Shastas.

The land use of the hunters and gatherers was closely related to their subsistence economy. They followed the food sources and the settlements moved with the seasons, except where staple resources were available most of the year. Meadows and wetlands that provided abundant wildlife were preferred to steeply inclined canyons. Winter settlement was mainly along the river. Summer encampments tended to be in the upper elevations for hunting and gathering seasonal crops.

Villages were usually dispersed to maximize the food sources. The native groups had similar economies, though their environment provided food specialties. Presence of grinding tools indicates subsistence partially based on wild roots, seeds, and vegetables (Follansbee and Pollock, 1978).

Animal husbandry was not part of native agricultural practices, although dogs were apparently used some in hunting. In Ogden's 1827 journal, he reported of his men to have seen a domesticated cat in a rather wild state. Ogden presumed it must have come from the Coast as there were almost a dozen in every village along there (LaLande, 1991).

Before Euro-American contact, horses were evidently unknown to the people west of the Cascade Range of Southern Oregon. From Ogden's 1827 trek along the Rogue River, he deduced that from their awe-struck reaction to his brigade's mounts, that the natives had never before seen such animals. The native people were quick to see their usefulness and soon took advantage of the increased mobility offered by the beast. The native people of southwestern Oregon soon acquired a reputation among Euro-American trappers as accomplished horse thieves. In 1841, a sighting of "three mounted Indians" was recorded, as being seen in the open plains of the Rogue River Valley, during a venture of a U.S. Exploring Expedition through the region (LaLande, 1991).

THE LINGUISTS, ETHNOGRAPHERS, AND ANTROPOLOGISTS

The Takelma, whose name (Da-agelma-an) means "those living alongside the river," lacked a written language which curtails any record of their history. Much of the information we have today is the result of linguists,

ethnographers, and anthropologists. Sapir, Harrington, and Drucker were the primary Ethnographers whom undertook to research the Takelma language (Jackson County Extension Office, 1980).

Edward Sapir's research took place around 1906. His interviews with Mrs. Frances Johnson took place during that time. She was one of his primary sources of information. By that time the Takelma language was spoken by only three or four older women. Frances was one of the last surviving Takelma Indians living on the Siletz Reservation. The results of his study appeared in various journals of the early 1900s (Gray, 1987).

John Peabody Harrington interviewed Mrs. Frances Johnson about twenty-five years after Sapir. She was his primary source of information for the Lowland Takelma. Molly Orton or Orcutt who spoke the Upland or "Table Rock" dialect was his primary informant of that group (Gray, 1987)

Philip Drucker's informant was also Molly Orton for the areas around Table Rock and eastward in the Bear Creek Valley. According to Drucker, Molly was the last member of her people to have any recollection of the old culture (Gray, 1987).

THE TRIBES AND THEIR TERRITORY

Upland Takelma or Lat-ga-wa

In describing the territory of the Upland Takelma, Edward Sapir in his 1907 article on the Takelma noted: "they dwelt further to the east of the Lowland Takelma, occupying the poorer land of the Upper Rogue, east say of Table Rock towards the Cascades and also in the neighborhood of the present town of Jacksonville" (Gray, 1987).

Little Butte Creek drainage formed the approximate northeast boundary at its junction with the Rogue River. The entire Table Rock region extending to Gold Hill was Upland Takelma land, and according to Molly Orton, "...a line goes from Gold Hill to Jacksonville separating the Ashland -Jacksonville-Table Rock language from Frances [i.e., Lowland Takelma] language" (Gray, 1987).

The hunting and gathering of the Upland Takelma relied less on fish than the Lowland Takelma. They would fish for salmon when the water was low near Table Rock. The women split, dried, or pulverized the fish to be put up for later use. Vegetable foods in their diet were acorns, pine nuts, grass seeds, and camas. Deer, rabbits, and other game were hunted or snared. Protein

supplementation in the diet could include caterpillars, yellow jacket larvae, grasshoppers, and snails (Follansbee and Pollock, 1978).

Lowland Takelma

The Lowland Tekelma's nuclear territory extended westward from the Gold Hill-Jacksonville line along the northern bank of the Rogue River to Galice Creek (Gray, 1987). Their diet consisted of fish, meat, berries, acorns, and roots. The men often used snares for elk, deer, and antelope. Important foods derived from the water were salmon and trout species, crawfish, and freshwater mussels. They built fish weirs and dams of interwoven *Ceanothus* or "buckbrush" that helped them trap and harvest the river's abundant salmon and steelhead and to contain the fish for easy spearing. They also speared the salmon by torchlight. Trout were caught by using branches and beating the water driving them into pools where they were scooped out. Clubbing was also a method often used to kill animals or fish, after driving them into a fenced or netted area. The club was also the main weapon used on an enemy (Follansbee and Pollock, 1978).

Carbohydrate for the diet was supplied by acorns, bulbs, and roots while seeds and nuts provided fat. Fruit such as berries was a sweet and condiment to improve palatability. In the Rogue Valley, the acorn of the California Black Oak (*Quercus kelloggii*) was much preferred to that of Oregon white oak (*Quercus garryana*). A staple of the Takelma vegetable diet, the camas bulb, was dug with a sharpened and fire hardened stick of Mountain Mahogany or deer antlers. Manzanita berries were pounded into flour and mixed with pine nuts. The harvesting of tarweed seed required burning of the plants first. Perhaps this was done to prevent skin irritation. Some people find dermal contact with the fresh plant to cause a reaction much like that of poison oak. The women would collect the seed by walking through them, and hitting the seeds off the plant into a basket.

Fire was the main tool of choice in the Takelma groups agricultural practices; it kept meadows clear, and fostered seed and root growth. Journals of early travelers through the Rogue Valley report, a valley often filled with smoke (LaLande, 1987). Controlled burns were usually conducted by women who apparently specialized in this activity.

Twice a year, south facing slopes were burned to maintain grassy areas, and replenish meadows for wildlife and hunting, to clear trails and maintain open areas under the forest canopy, and add fertilizer to new growth in plants and shrubs. The fires were of low intensity and rarely burned more than a few acres, a few hundred acres at the most. The fire reduced overall fuel load of the forests, by removing the combustible underbrush (Agee, 1990). The only

plant cultivated by both of the Takelma groups was tobacco and it was grown on land cleared by burning.

The Lowland Takelma had five basic shelter types: a semi-subterranean winter dwelling, the bark structures of the poor people, the man's sweathouse, the women's sweathouse, and the summer brush shelter. The rectangular winter dwelling was excavated to about one and a half to two feet and had a smooth stamped floor. There were four corner posts with connecting crossbeams. The walls were split sugar pine boards placed vertically between the crossbeams on the floor. Above the cross beams was a ridge post supported by two forked posts. The rectangular door, made of several pieces of lumber, was above the surface of the ground and had a dirt ramp for access. Inside a ladder stretched from the door to the center of the lodge, where the fire was located (Follansbee and Pollock, 1978). Brush fences were planted and used as windbreaks around villages.

Tobacco and bear grass are examples of items used in trade conducted among the tribes. Bear grass was used for basket making and rope making for animal snares.

The Rogue Bands

According to the best evidence, about 600 native people lived along the Rogue River between Table Rock and Evans Creek in the early 1850s. They were broke up into tribal communities of greater or less importance and all owed a quasi allegiance to Joe and Sam, (brothers) co-chiefs of the Table Rock band, the main division of the tribe (Wailing, 1884). They were the most dominant, largest and wealthiest of the seven bands of Rogues living around the Rogue Valley. Sam's winter residence was about where the town of Gold Hill now stands (Morehouse-Genaw).

Walling described the setting of the Table Rock bands being "in the mist of a pleasant country fruitful in game, roots, seeds, and acorns, while in the river, at the proper season, salmon swarmed by the thousand. They derived an easy and abundant living from the advantageous surroundings and were the dominate band of the tribe. Their number probably reached at one time 500 souls, but in addition quite a number of Indians of other tribes were settled within the valley and through some consideration of Indian polity, gave their adhesion to the Table Rock chiefs and were in effect a part of their people. This band was ever regarded with jealousy by the whites until their removal to a distant reservation in 1856, but with little cause (Wailing, 1884).

"The ethno-historic sources for southwest Oregon date from a time period when epidemic diseases may have already substantially altered the traditional lifeway

of the Indiana groups. Therefore we cannot project the 'Ethnohistorical present' very far back into the prehistoric past" (LaLande, 1991). By 1884, it was reported that there were no more than twenty-seven Takelma's.

The Contact Period

"Southwestern Oregon's Contact Period," during the time which the Ethnohistorical observations were made, lasted from the mid-1770s to the mid-1850s" (LaLande, 1991). The most direct Euro-American contact in Oregon began in this period. European contact on America's shores is considered to have begun with Columbus and should be marked as the beginning of the influx of European settlement. Balboa sailed around Cape Horn in 1513 and reached the Pacific Ocean. Other Spanish sea faring explorations were made up until 1603. Then 150 years elapsed before Spain sent out another exploration of the Pacific.

In 1787 American Captain's Robert Gray and John Kendrick of Boston arrived on the Oregon coast with a cargo of buttons, beads, and blue cloth, of which they bargained with the natives for the pelts of sea otters and other items. They in turn sailed to the Orient, where they sold pelts and bought tea and possibly silk and spices. To complete the voyage, they sailed west to Boston, making Gray the first American merchant sailor to circumnavigate the globe.

On Gray's second voyage to the Oregon coast in 1792, he noted a flow of muddy water fanning from the shore. He decided to explore his belief that it was the "Great River of the West." Gray crossed the treacherous sand bar and named the river after his ship, the "Columbia Rediviva." After a week or so of trading with the natives, Gray left without investigating where the river led. He then, once again circumnavigated the globe on a trading voyage.

About 1580, Francis Drake stopped about 30 miles north of San Francisco to repair his ship. Some suggest he perhaps went as far north as the southern Oregon coast. It wasn't until 1792-1794 that British sea voyages by Vancouver and Broughton and the overland expedition by MacKenzie for the Hudson's Bay Company gave Britain a strong foothold in the area. By 1824 they had established Fort Vancouver.

The 33 members of the Lewis and Clark Expedition reached the mouth of the Columbia River in the fall of 1805. They encountered the Clatsop Indians who shared their salmon, berries, and hunting lore. Five years after the Lewis and Clark expedition ended, parties were arriving by land and by sea to the new settlement of Astoria.

A British and American presence was soon entrenched in the Oregon Territory, and it was encouraged by the high demand for fur in Europe. A fierce competition pursued for dominance and ownership of the region. Trappers and explorers chronicled their observations of the land and people.

In 1828, Jedediah S. Smith journeyed through Northern California and Southern Oregon to the Hudson's Bay Company's settlements at Vancouver. Evidence shows that Smith followed the coast line in his trip northward to Cape Arago (Wailing, 1884).

Hudson Bay Company employee, Peter Skene Ogden led a trapping expedition into the Rogue Valley and southern Oregon in 1827. In February of that year, his party camped along the Rogue River and he recorded some of his observations of the native people. Ogden's journal reports that over 1,500 pelts were taken from the Applegate area. As trapping continued over the next decades, the decline of beaver began to alter the stream side and aquatic environment. The result yielded more stream channelization, less channel complexity, and reduced the quality of habitat for fish (LaLande, 1987).

Through the 1830s and 1840s, there was not much Euro-American activity in the Rogue Valley. A reported lack of beaver and hostility of the native people apparently kept many of the trappers out of the area. In 1835 hostilities of the natives were confirmed when a party of eight white trappers (the Turner party), while camped on the south side of the Rogue, down river from Rock Point, were suddenly attacked and several died. In September 1837, the Ewing Young cattle drive from northern California to the Willamette Valley was attacked near this same location (Morehouse-Genaw).

With the opening of the Emigrant Road through the Southern Oregon region in 1846 and the California gold rush of 1849, the Rogue River Valley became a thoroughfare of ever increasing travel. Many of the travelers going south rushing to the gold fields of California, didn't want to waste time by stopping to deal with any difficulty with the natives. The result of inaction was that the native people came to feel that to escape immediate punishment was tantamount to escape from all punishment, and constantly grew bolder in their attacks upon the passing groups.

Robison points out that "One factor often overlooked in explaining the Indians' adjustment to white neighbors is that though they had seen white people pass through their region for twenty years, occupation of the region occurred, figuratively speaking, overnight" (Robison, 1943). There was little time for the native people to make any gradual adjustment to the new basis for relationship with the whites with which they were then faced for the first time.

CIRCA 1830-1856 EXPLORATION, GOLD RUSH AND INDIAN WARS

The Land Act of 1850

A land giveaway of 2,500,000 acres, that brought thousands of settlers to Oregon and the Rogue Valley. Gold was discovered in 1850 on Josephine Creek (a tributary of the Illinois) and in 1851 on Rich Gulch near Jacksonville. By March word had leaked out of the large strike and miners flocked in from every direction increasing the population by mid-summer to around a thousand persons. And lastly the completion of a wagon road connecting the county with California to the south and Douglas County to the north (the Yreka to Umpqua Road) led to an influx of settlers. The flood of outsiders coming to the region, was to lead to the beginning of prolonged period of “Indian troubles,” that would continue through 1851-1856.

Jackson County government began with the appointment of the first county officials in March, 1853. These officers included three county commissioners, a county clerk, a sheriff, a prosecuting attorney, and a treasurer. An assessor and surveyor were added later.

The miners or settlers who flocked to southern Oregon gave little consideration to securing title to the land from the native people. As the farmers cultivated the land, it caused destruction to native people’s sources of plant foods. The miners with operations along every stream of the region, and it began to affect the supply of fish. After the treaty of 1853, the discontent of the Indians was found to be largely among those hill tribes. This discontent was mainly toward the miner in the mountains who regarded his time there as being of a temporary nature, as compared to the farmer in the valleys expected to make a permanent home in the area. This may have been one of the major reasons why, after the treaty of 1853, the discontent of the Indians was found to be largely among those hill tribes, whose associations were usually with the mining population (Robison, 1943).

Euro-American Foray

The hostilities of 1853 lead to the signing of a Treaty near the “Table Rocks” in September of that year. The event was described “As the Indian and volunteer forces moved down into the valley, each keeping strict watch on the other. The ground chosen for the council was on the south side of Rogue River, the Indians making their encampment on an elevation directly opposite the cliffs of

Table Rock, and Lane in the valley one mile distant, on the spot where Fort Lane was soon afterwards established. The camp was selected by Lane and was near the location of present day Bybee Bridge, at the time called Hailey's Ferry.

Treaty With The Rogue River, 1853

“Article 2. It is agreed on the part of the United States that the aforesaid tribe shall be allowed to occupy temporarily that portion of the above described tract of territory bounded as follows, to wit: Commencing on the north side of Rogue River, at the mouth of Evan's Creek; thence up said creek to the upper end of a small prairie bearing in a northwesterly direction from Table Mountain, or Upper Table Rock, thence through the gap to the south side of the cliff of the said mountain, thence in a line to Rogue River, striking the southern base of Lower Table Rock, thence down said river to the place of beginning. It being understood that this described tract of land shall be deemed and considered an Indian reserve, until a suitable selection shall be made by the direction of the President of the United States for their permanent residence and buildings erected thereon, and provision made for their removal” (Treaty, 1953).

The majority of the area in which the SBW encompasses was the area that would be a temporary reservation. A Fort was built across the river from the reservation. It was named for General Joseph Lane.

Fort Lane was built and used by the U.S. military from 1853-1856. The fort served mainly as a protection for the native people from the Euro-American settlers. Chief Sam's tribe sought protection there several times (Wailing, 1884). Its location was in the southern part of the north eastern quadrant of Section 19, Township 36 South, Range 2 West, across the river from Lower Table Rock.

In Walling's opinion, “the Table Rock band, was ever regarded with jealousy by the whites until their removal to a distant reservation in 1856; but with little cause.” The discovery of gold and the Land Act of 1850 brought on an influx of non-native settlers to the Rogue Valley. The flood of outsiders coming to the region, led to the beginning of a prolonged period of “Indian troubles” that would continue through 1851- 1856. There would be a series of treaties (1851, 1853, and 1854) and conflicts until what is know as the Rogue Indian Wars 1855-1856 ended with the removal of the remaining tribal bands to their permanent reservation at Siletz.

CHAPTER 3

AGGREGATE & MINING PRACTICES IN SBW

THE GEOLOGICAL RESOURCES

In the stories of their travels early explorers hinted that experienced miners might find precious metals in the “northwest country.” The writings of Bonneville, Father De Smet, Fremont, and Lewis and Clark describe geological formations favorable to the discovery of precious metals. Reverend Samuel Parker devoted an entire chapter of his journal to describing the geological formations of Oregon country, including a list of minerals already discovered and he expressed his belief that gold and silver would probably be discovered at a future date (Spren, 1939).

The mineral resources of central Jackson County are grouped by Oregon Department of Geology and Mineral Industries into four major headings: Aggregate, Metallic Minerals, Groundwater, and Energy Sources. The materials that can be removed profitably under current technological conditions are considered to be resources. Most of these resources are non-renewable.

Aggregate

Large active quarry operations are generally near major lines of transportation. Construction materials such as sand and gravel, quarry stone, and clay have occurred and been mined within the watershed. Like other minerals these materials can be mined only where they occur naturally. Limitations on production include hauling distance, weathering, thickness of overburden, and necessary specifications of the intended use. Other conflicts and constraints include noise, dust, increased turbidity, and preservation of fish spawning areas (Mason, 1977). Most of the current aggregate mining in the SBW is near the railroad and the river and not far off Interstate 5. Aggregate activities are in operation at sites near the river, off Table Rock Road, Modoc Road, at Tolo, on Kirkland Road, and west of Gold Hill past Rock Point on North River Road.

Minerals: Metallic and Nonmetallic

The history of most of the metallic and nonmetallic minerals shows a piecemeal production under a variety of economic and technological conditions. The experience of miners has shown that the gold veins of Jackson County are “spotted.” Gold and silver have had a history of ongoing mining and there are probably quantities and grades still present and able to be mined. Coal, oil, and uranium are considered by the Oregon Department of Geology and Minerals to have a possibly high potential for future development in Jackson County. Though commercial quantities of uranium have not been discovered, “the bedrock geology, ground water conditions, and sediment source areas, of the Eocene bedrock units in the northern Bear Creek Valley and Sams Valley are consistent, however, with the development of economic uranium deposits in other areas of the United States.” “Minerals with moderate potential of future development based on past production include clay, chromite, copper, lead, zinc, and tungsten. Generally, however known deposits are not large enough to compete with outside sources” (Mason, 1977). The Oregon Department of Geology and Mineral Industries, included mercury with molybdenum, nickel, platinum, manganese, and cobalt as having low probability of future development; due to outside completion and poor record of discovery (Mason, 1977). However, mercury has a history of being mined in the SBW on Evans Creek, at Spikenard, on Cinnabar Mountain and Ramsey Canyon.

Prominent resource developer, Dr. C. R. Ray held over 7,000 assorted acres of land, much within the SBW. “Getting old and wishing to retire” he wrote an ad to sell these properties. Along with his quartz and placer mines, he made claim of “Copper, Quicksilver, Iron, Coal, and some lands with good oil indications, there being two oil rigs operating nearby with good oil and gas showing. A granite quarry (similar to Barre Vermont Granite) marble, lime, and sandstone quarries adjoining the railroad were also present (Parks, 1916).

Groundwater

When we talk about ground water we are basically referring to wells and natural springs. Ground water begins as precipitation and soaks into the ground where it is found at various depths at any location on the Earth’s surface. It is the water that fills the natural open spaces (e.g., fractures or pore spaces between grains) in soil and rocks beneath the land surface. It is comparable to the way water fills a sponge. Ground water is accumulated in underground geological water systems called aquifers. An aquifer is geologic material that is filled with water and will yield that water to the well. Ground water has the capability of moving sideways as well as up or down in response to gravity, differences in elevation, and differences in pressure. The movement

is usually quite slow, frequently as little as a few feet per year, although it can move as much as several feet per day in more permeable zones. Ground water does not occur as underground lakes or streams.

Two factors that affect water quality in Jackson County are pollution and natural mineral content. When rainwater comes in contact with any source of contamination at the surface or in the soil, it dissolves some of that contaminant and carries it to the aquifer. Ground water moves from areas where the water table is high to where the water table is low. Consequently, a contaminant may enter the aquifer some distance up gradient of a public or private drinking water and move towards the well.

Approximately 95 percent of Oregonians in rural areas are dependent on ground water. In many areas, ground water is the only source of household water. The majority of the households in the SBW are dependent on a well with the exception of the two cities of Rogue River and Gold Hill, and several private associations that have their own water systems and take their household water from the Rogue River.

“Because of local and regional variations in geological conditions, groundwater quality and availability vary considerably.” The sedimentary rocks of the Sams Valley area are generally high in sodium carbonate. Many wells in southeast Sams Valley and Beagle have a high boron content” (Mason, 1977). Landfills, gas stations, industry, or agriculture, are more highly visible potential contaminates, but common everyday activities have the potential to contaminate and are widespread. These include septic systems, lawn and garden chemicals, pesticides applied to highway right-of-ways, storm water runoff, auto repair shops, beauty shops, dry cleaners, medical institutions, photo processing labs, etc. One of the properties of water is that it is an excellent solvent. It can contain lots of dissolved chemicals and, it takes only a very small amount of some chemicals in drinking water to raise health concerns.

The native populations found areas of natural springs a favorite place to camp or for settlement. Traditional Sam’s Valley history is that Chief Sam’s tribe had a camp or settlement at the springs along Sams Creek off Holcomb Springs Road. This site was referred to at an earlier date as the Eddington place and for the past fifty years as the Hilkey place. The property has recently changed ownership. In the early days of Euro-American settlement, springs were often developed into shallow wells.

Two resorts based on their mineral water springs were developed within the SBW. Bybee Springs Resort was constructed in 1892 (Liles and Boulter, 1992). Holcomb Mineral Springs Resort was operating in the 1930s (Outdoors Guide, 1930). Neither was near easy access to major transportation and tourist routes nor received the acclaim of the mineral springs of Ashland. Little

to nothing has been written of their use and history, but there are still a few locals who remember their parents using the waters to “cure” an ailment. The Holcomb Mineral Springs gave the water analysis of “grains per gallon;” Magnesia 28 grs., Lithia 6 grs., Sod. Chloride 6 grs., Sod. Bicarbonate 4 grs., Silica 4 grs., and about .06 of 1% Mercury. Although Holcomb Mineral Springs advertised hot mineral baths they must have heated the water as neighboring resident report there is no hot spring (Fitzgerald Collection, Circa 1930s).

Energy Resources

Jackson County has owned the now defunct power plant at the Gold Ray Dam since about 1971. Astute developers, the Ray brothers, harnessed the Rogue to produce electrical power at Gold Ray. There is no evidence of geothermic activity within the watershed. Solar and wind power are not being generated at a commercial level.

THE GEOGRAPHY OF THE GOLD PRODUCING AREAS

The region of western Oregon of which we are concerned are the Klamath Mountains. They are broken up into valleys, mountain and hill ranges, densely wooded in the 1850s and 1860s, with numerous streams of varying sizes, all or most all of which flow into the Rogue River. The river begins in the Cascade Range, and flows in a westerly and northwesterly direction to the sea and its mouth at Gold Beach. The Gold Hill mining district is located in the Klamath mountains between latitude 42°23' north and 42°43' north and longitude 122°47' west and 123°15' west, in northwestern Jackson County. Placers were worked in the district as early as 1853, but the big strike occurred in 1859 when lode gold was discovered. The state of Oregon Department of Geology and Mineral Industries officially recorded the amount taken from the Gold Hill pocket as \$700,000 of which \$400,000 was taken out in the first year. At 1990 prices that same amount of gold would be worth \$15,312,500.00 (DOGAMI, 1943).

Christian August Spreen described how the gold was carried and deposited in the streams. “The streams having the Rogue River as the parent stream, with their generally rapid current were responsible for the presence of gold at the spots where the prospectors and packers found it. The currents, with their eroding action, wore away the parent rock, broke it up and carried the fragments down their courses until compelled by a change to a less steep gradient to drop this material. In the passage of years it was often covered by sedimentary deposits brought down by floods, perhaps to be uncovered again

by a later flood. The gold deposits in southwestern Oregon were the results of ages of weathering of rock, floods, and sedimentary deposit which often reached a considerable thickness” (Spreen, 1939).

THE HISTORY OF GOLD MINING IN SBW

Apparently for the native people, gold was of no value. Stories have been recorded of their attacking miners, taking the gold, and pouring it into the stream. The Takelma and others tribes used strung shells called Dentalia as their currency.

During the fall of 1852, gold was discovered on Foot’s creek, fifteen miles west of Jacksonville, at Willow Springs, five miles north of Jacksonville, and at Pleasant creek in the northern part of the county. Hostilities with the native people caused some curtailment of mining activities in these areas until after 1856.

The miners or settlers who flocked to southern Oregon gave little consideration to securing title to the land from the native people. The miners with operations along nearly every stream of the region began to affect the supply of fish. After the treaty of 1853, the discontent of the Indians was found to be largely among those hill tribes, where the attitude of the miner in the mountains regarded his time there as being of a temporary nature (Robison, 1943).

Josephine County is placed as the first in the Northwest to furnish a mining code. These laws help to understand what constituted a mining claim.

“Know all men by these present, that the miners in council assembled on this the 1st day of April AD, 1852 do ordain and adopt the following rules and regulations to govern this camp. Resolved, first that 50 yards shall constitute a claim in the bed of the creek extending to hip high water on each side. Resolved, second that 40 feet shall constitute a bank or bar claim on the face extending back to the hill or mountain. Resolved, third, that all claims to be worked when workable, after five days be forfeited or jumpable. Resolved, fourth, that all disputes arising from mining claims shall be settled by arbitration and the decision shall be final. E. J. Northcutt, chairman. attest: Philip Althouse, clerk” (Spreen, 1939).

The first gold was found in streams where the early miners of southern Oregon operated small placer mines using the simpler mining devices. One person operating with a pick, shovel, and pan could pay well in a rich area. This type of small operation would leave less of an impact on water quality than what was to follow. When rockers and long-toms were used, the streams were often diverted for a short distance. The rocker or cradle took two people to operate.

It was a box like device mounted on rockers with one open end. It handled from three to five cubic yards of earth in ten hours. A lot of fine gold was lost with this method. This accounts for the Chinese miners being able to profit from reworking the abandoned claims (Wailing, 1884).

A placer is an alluvial deposit of sand and gravel containing gold in particles large enough to be obtained through washing. Placer mining requires the use of water to extract the gold from the gravel. This method is based on the fact that gold is heavier than the accompanying rock debris and will work downward with agitation. Running water is needed to wash away the debris, thus a prime factor in the method and length of an operation. The early water rights laws were closely connected with water for mining.

Between 8 Oct 1856 to 30 June 1880, 5,438 mining locations were made in Jackson county. Of these 16 were copper, one tin, 124 cinnabar, and the rest gold and silver. There were 1,221 conveyances of mining claims and 133 transfers of water ditches and rights during the same time. Claims in the SBW were as follows: Willow Springs, 785; Gold Hill, 361; Gall's Creek, 95; Foot's Creek, 288; Evans Creek, 115; and Sardine Creek, 132 (Wailing, 1884).

By the 1860s, hydraulic mining had been introduced in southern Oregon. This form of mining greatly increased the amount of gravel that could be worked at any given time. Up to 1,500 cubic yards of tailings were dumped into the watercourse daily. This type of mining also required a great deal of water, capital, skill and much labor. Long flumes to span deep gulches had to be built; many miles of ditches had to be constructed, reservoirs were erected, thousands of feet of piping lain, and giants and other machinery set.

Companies were organized about 1870 that hired groups of Chinese labors to build the long ditches and flumes necessary to operate the large hydraulic placers mines. This method allowed larger volumes of lower valued gravels to be worked at a profit. Pressurized water from a pipe or hose was used to expose gold deposits by scouring away hundreds of cubic yards of earth per day. The water washed the sediments into sluice boxes where the gold amalgamates were collected with the use of Quicksilver (mercury). The miners were able to remove the soil and uncover the gold faster with these methods; yet they had a more drastic effect on the land, waterways, and water quality than the small placer mines of the earlier decade (McKinley and Frank, 1996).

Water, so important to the placer miner could at times be an adversary. Some of the winter floods carried away their flumes and washed away reservoirs. These floods did offer some compensation to the miners in that the accumulated deposits of tailings were also swept away, and it cleaned out some old channels to bedrock.

By 1865, all the placer deposits known today had been discovered. The cost of freight and supplies determined whether a placer was worked. At least one half ounce of gold per day needed to be recovered from a placer to cover expenses. So only the coarse gold was removed leaving the finely powered gold (Mayo, 1994). During the early years in our history, placer mining in southwestern Oregon produced millions of dollars, this gold helped to bolster the nation's economy, which was mightily needed (Potter, 1977).

As the richer placers were being exhausted, some miners began to search for the sources of the gold placer deposits. Many rich deposits of gold ore were discovered. Prospecting for the lode began as early as 1859 on the Gold Hill. Five quartz claims were filed at 3 p.m. on 13 January 1860, called the "Emigrant Lead" situated on the North side of the divide running towards Big Bar on Rogue River southwest quarter of the northeast quarter of section 14, Township 36 south, Range 3 west. It was situated at the 2,000 foot elevation. "The outcropping rock was so full of gold that it could scarcely be broken by sledging" (Libbey, 1976). People began to file claims until 10 p.m. that night. Soon there were about 150 claims taking up the whole side of the mountain (Morehouse-Genaw, 1988).

The process to recover gold from its ore depends primarily on the mineralogical character of the ore. Initially the ore needs to be crushed and finely ground. Water or horse/mule powered arrastras were built in the early days to grind the ores. From the initial step to free gold and gold-bearing sulfide minerals may be removed from the finely ground ore by: amalgamation, flotation, cyanidation, jigging, table concentration, or a combination of these processes. Free gold recovered by amalgamation or cyanidation is sold as bullion. Sulfide concentrates are usually shipped to a smelter (Brooks and Ramp, 1968).

The Rogue River and its tributaries have produced a large amount of placer gold from a short distance up stream from Gold Hill to its mouth, but after a time the gold mining industry in southwest Oregon saw a decrease in production. Until the early 1900s when bucket line dredges were developed and came into use, placer mining had been mainly done with hand-operated equipment.

These dredges worked the deeper stream gravels. The machines were able to open large areas of very rich ground as well as make a profit working the lower grade deep stream placers. Foots Creek was dredged in 1903 and Kane Creek was dredged in 1908. Dredges also operated on parts of Sardine, Sykes, and Pleasant Creeks. Dredging operations continued to some extent in southern Oregon until the 1940s (Mayo, 1994).

Oregon's gold mining and production declined sharply under the general prosperity that the 1920s economic climate provided (Mayo, 1994). Southwest

Oregon saw a steady decline in gold production between the years 1906 to 1934 except for a small increase after World War I.

The Great Depression brought renewed interest in mining activity to southern Oregon. Labor and material costs were back in line with gold prices (Mayo, 1994). Job opportunities in the 1930s were few and far between and many took to the streams in search of gold. The small scale mining became a means of economic survival for many. Federal money was used by the Jackson County court to provide a three-day class in "gold mining techniques" for indigent families, in hopes of easing the pressure on the county relief funds (LaLande, 1980).

More efficient dredges and improved methods in quartz mining plus and increase in the price of gold from \$29 per fine ounce to \$35 in 1934 were factors that lead to a steady increase in the regions gold production, and by 1940, gold yield in dollars was \$1,053,395 for a single year. It was during this era that the Oregon Department of Geology required miners to construct settling ponds, which greatly reduced downstream sedimentation (Rivers, 1963).

Placer and lode mining have both seen rise and fall patterns. As mining and milling methods improved the production of lode gold increased until 1942. With World War II, the U. S. government put a stop to all gold mining as non-essential to the war effort. Some mining equipment was even shipped to the Soviet Union (Mayo, 1994). The cost of running a mine had increased after the war. Material and labor cost prohibited many mines from reopening. Because of the span of time that the mines were left abandoned and neglected, many operating plants deteriorated. Mining in Oregon continued to decrease from 1942 to practically nothing by 1965, except for a peak in 1947, which was comparable to 1907-08 production (Brooks and Ramp, 1968).

During the period of lean years, a few miners eked out a living working both lode and placer mines. An interest in gold mining was revived as mining laws changed. Private ownership of gold bullion was allowed and the price of gold was allowed to follow market demands as it rose and fell.

Technology opened up a new form of gold mining. Skin and scuba diving was combined with a suction type gold dredge. Like a vacuum cleaner, sand, gravel, and gold were suctioned up from the steam bottom. Some of these dredges have a suction hose up to twenty-four inches in diameter and are capable of working many feet under the water surface. A floating sluice box is used to process the sand and gravel (Mayo, 1994).

The first gold boom in Oregon expired about 1870, but it had been strong enough to attract people with diversified talents so that other industries such as farming and raising cattle cushioned the shock. In addition, the gold rush

was responsible for the early entry of railroads into the state, and this hastened the growth of cities and provided a more stable economy.

The impact of mining can be found across the SBW. Placer mining, dredging, and hard rock mining took place along nearly all the creeks, surrounding hillsides from Sams Creek west. Mine shafts, tailings, residence sites, and water ditches remain from mining activity.

Cinnabar was found in the “Meadows” area of the Gold Hill district in 1878. Local production was made with retorts and was sold locally to the placer-gold miners in the vicinity. No record of the amount produced was kept. However, a record of quicksilver production for Oregon for certain years was kept, they are: 1887-65 flasks, 1888-32 flasks, 1889-20 flasks (Schuete, 1981).

Then there seems to have been a long interval of time in which no quicksilver whatever was produced here. The fact that the ground was cinnabar bearing was well known however, and transfers of parcels of land around 1900 describe the land as “valuable cinnabar mines.” This area now comprises the War Eagle, Chisholm, and Dave Force mines (Schuete, 1981).

The Depression era also saw resurgence in mercury production. Redevelopment of the region’s quicksilver industry was apparently stimulated by the high prices which followed the formation of the Spanish-Italian Mercury Cartel in 1927. In that year, the State of Oregon produced over 2,000 flasks of quicksilver, an amount nearly equal to the state’s total previous production. A flask is 76 pounds of mercury, which is shipped in a special iron container or flask (LaLande, 1980).

Other minerals that were mined were copper at the Cartinell Mine. It was discovered in 1902 in Section 9, Township 34 South, Range 4 West. Chrome was mined on a tributary of Pleasant Creek, Boulder Creek, Section 3, Township 34 South, Range 3 West. Manganese was found in Section 6, Township 35 South, Range 3 West (DOGAMI, 1943). Foster and Grunnells Mining Map shows several coal deposits northwest of Asbestos, in Township 33 South, Range 2 West (Foster and Grunnells, 1904). “The dams on Evans Creek by and large were built in the 1930s or before, the sediment behind these dams was building at the same time the mining operations were going on full speed. This caused the filling in behind the dams in the thirties and forties bringing with the sediment and aggregates, gold, mercury and other materials stirred up, dumped or lost by the early miners.

“Mercury as a liquid metal, with a heavy specific gravity comparable to gold, moves through gravel and sand downward with very slight disturbance or vibration. Sampling for this metal and having an accurate test made is very difficult and expensive. Mercury on bed rock and in the cracks of bedrock can be very hard to sample although high volume and velocity water may move this

material quickly downstream when high water exposes bed rock. Exposure to low water flows and summer time water temperatures could cause added problems to the environment and community from materials from past mining activities being introduced to the stream waters in summer and pumped onto fields where animals may ingest them” (Howell, 2003).

CHAPTER 4

AGRICULTURE

The native people of the watershed used agricultural methods that are not as apparent when looked through the eyes of the Euro-American of the same period. Fire played a big part; it was used to keep meadows clear, and fostered seed and root growth. It was also used in the harvest process of tarweed seed. After the area where the plant grew was burned, it was harvested by walking through and hitting the seed heads, with a stick, into a basket. Tobacco was the only plant grown by the native people of the area. A piece of land was also burned before cultivation and planting of tobacco (Follansbee and Pollock, 1978).

Alonzo A. Skinner, government Indian agent, was among the first to select a donation land claim in the Rogue Valley. His was southeast of Table Rock, where he constructed a log home. James Kennedy and Nathaniel Dean settled at Willow Springs. Enoch Pelton and James Bruce selected donation land claims along Snider Creek and began cultivating grain and raising hogs. Others selected the fertile land close to the river near Table Rock to farm (Government Land Office). Further west on the south bank of the Rogue, the Birdseye and Savage families began farming on the fertile river bottom soil. The basic food supply was provided by dairy cattle, and newly planted potatoes, corn, cabbage, and other vegetables grown in the gardens. Wheat, oats, and barley were planted as soon as possible and would feed people as well as livestock.

The winter of 1852-53 brought harsh weather and the summer was a dry one, bringing only a small yield of the planted crops. That winter, many were struggling to survive, living mainly on game. The snow had blocked the passes into the valley, preventing the pack trains from getting through with supplies. Grain was crudely ground in coffee grinders and used to make pancakes. By 1855, flour mills were operating in Ashland along Bear Creek, and Phoenix and the valley became less dependent on outside sources for flour.

With the population of the Rogue River Valley swelling with prospectors and opportunist, the need to feed that population became important. Raising stock animals was important to the local economy. Hogs were raised in large numbers. They were fed on the abundance of fish that the Rogue River offered

for protein, and acorns from the many oaks, fattened them and helped to remove any fishy taste. Pork was a prime source of meat and it was made into sausage, hams, and bacon. The smoked meats were more desirable as they were less perishable. Hog drives to Happy Camp began in the 1850s, with William Bybee being one of the leading organizers (Leavitt).

The family farm was usually diverse and fairly self sufficient. They raised their own chickens which supplied them with eggs and meat and a family cow furnished their milk and butter. Corn, wheat, rye, oats, barley, potatoes, and hay were probably their best income crops. Nearly everyone raised a garden. Family orchards were planted and made up of many varieties of apples, pears, peaches, plums, cherries, grapes, and berries. The Alta California commented on the fruit trees and lands of the Rogue Valley in April 1860: "The climate is remarkably mild, fruit trees being in full bloom. The lands are well fenced, many with fine broad fences, such as we see in the East, and the houses are invariably fine large two story dwellings and all painted white" (Alta California, 1860).

Enoch Pelton bought 162 acres closer to the Rogue River, where he also operated a ferry, near the present day Bybee Bridge. During the flood of 1861, Enoch Pelton suffered severe losses. His ferry boat was lost and all his buildings with their contents were destroyed. His grain, hay, and a few hogs and some other stock were all swept away, plus all but about 500 fence rails around his farm. Other farmers along the waterways suffered similar losses (Morehouse-Genaw, 1998).

Water posed a problem to the farmer, not only if there was too much but, also if there was too little. The July 3, 1869 Democrat News reported on the dry weather: "Dry weather-This summer has proven a little the driest of the many dry summers we have ever witnessed in Southern Oregon. Streams that were never know to dry up before have quite failed this season, and as a consequence, farms and gardeners complain of a deficiency of water for irrigation. All kinds of vegetation are burning up for want of water, and even the fruit crop is destined to suffer greatly from the same cause. We understand that the plum crop is 'gone up' in some parts of the valley" (Democrat News, 1869).

Willow Springs, the Sams Valley area, including Beagle and Table Rock become noted farming communities. The farmers were becoming fairly prosperous, commanding a good price for their grain. Most communities were close knit and many were often related at least by marriage. Farming was often a cooperative effort among neighbors. Harvest often became a community project. What one farmer didn't raise another did. Barter and trade of a skill or product was often exchanged in lieu of cash.

A farmer would own a horse drawn binder and cut the grain for him and the neighbors. This could often be quite an experience as the grain had to be cut just at the right time and everyone's grain seemed to ripen at once. When the binder broke down it necessitated a fast trip to town with a horse and wagon to get some new part, or to the blacksmith to make the part. It was important to return as quickly as possible so the harvest could be resumed. Nearly all farmers owned their own mowing machine, drawn by two horses, and hay rakes drawn by one horse. The threshing was usually hired out to someone with a thresher (Leavitt).

By the 1860s there were eight large flour mills in the Rogue Valley and the processed grain was even transported out by pack animals and wagons (Follansbee and Pollock, 1978). In northwest Jackson County there was the Daily's mill in Eagle Point (Butte Creek Mill), the Houck mill at Gold Hill, or the Welch Mill in Central Point where farmers took grain to have it ground into flour. The farmer usually ran the grain through a fanning mill to remove the chaff before taking it to the flour mill.

Many early farmers raised sheep, mostly for the wool which they sheared from the sheep in the spring. Ashland had woolen mills that ran successfully until the price of wool dropped in the 1930s (Follansbee and Pollock, 1978). Coyotes were a serious menace to the sheep and they reacquired being penned at night. The coyotes were known to kill sheep in the fields even during the day. The Table Rocks harbored many coyote dens. In the early 1920s, a Coyote Club was formed by the people of Sams Valley and Table Rock, and they were quite successful in chasing the coyotes out of their dens with dogs and guns. Later there were government trackers that helped keep the coyote population under control. Lack of range and pasture land was not favorable for raising many sheep (Leavitt).

The early agricultural effort of the Rogue Valley farmers was very important. Thousands of miners depended on the wheat raised locally. Local farming was very lucrative during this period. Transportation of produce and commodities into the area was costly, being brought in via packers and freight wagons. This gave the local growers an edge over wheat imported from other areas. Wheat was grown as a favorite crop along with barley, rye, and oats. In the 1880s, two factors effecting local agriculture would be the coming of the rail and the decrease in mining. Many prospectors moved on to the gold strikes in Alaska and other areas.

Those who stayed continued to mine the south bank tributaries of the Rogue, Sardine Creek, and Evans and Pleasant Valleys where they often combined mining and farming. The same ditches that were used in the winter for placer mining were sometimes used in the summer for irrigation.

In 1887 the railroad was completed. Within the SBW area there were depots at Tolo, Gold Hill, Ray Gold, and Woodville, to handle passage and freight, going both north and south. The first fruit and nut trees in the Rogue Valley were grown from a few seeds of Black Walnut and pears brought to Ashland by the Billings family. The seeds were planted in 1854 in the Valley View area of Ashland (Cordy, 1977). Fruit orchards that had been planted in the 1850s were producing and local newspapers would make reference to Rogue River Valleys "fine fruit crop" (The Oregon Sentinel, 1863). Up until this time the producing orchards had provided fruit for the owners and small transactions within the area.

With the railroad came the opportunity to export agricultural products, yet on the reverse, competition came from the outside as crops were shipped in at a lower price. Most early farmers had planted a small orchard, but some were quite large. They found the hard fruits such as apples and pears were well suited to the hills and mountainsides. Grapes and berries were found to grow well in the lowland valleys (Follansbee and Pollock, 1978).

In Jackson County a period of economic expansion had begun by 1910. The development of the pear orchard industry in the Bear Creek Valley had much to do with the boom. "Donation Land Claims were subdivided into tracts of newly planted orchards and many new homes were built. This posed a need for additional water for both domestic and agricultural purposes" (LaLande, 1991).

The new orchards were being planted, some with irrigation, others without. Fruit such as; pears, apples, cherries, and peaches were planted at Rogue River, Rock Point, Table Rock, Sams Valley and of course other areas of the Rogue River Valley. Mrs. Amelia Frierson left a diary that made mention of an irrigation ditch, indicating that they probably had water at Table Rock, as early as 1896. The project that brought irrigation water from the Rogue River is credited Mr. R. E. Drum for having promoted it (Leavitt).

The new orchard industry was heavily promoted by the Medford Commercial Club and many easterners were induced to invest in the growing industry. One such venture was the ill fated promotion of the Western Orchard Company. It was organized in Chicago by a John A. Westerlund, who had taken options on about 2,000 acres on Roxy Ann Butte. Many lost everything when the speculation failed. Even the Ray brothers organized the Orchard Home Company that planted, subdivided, and sold inexpensive land to moderate income people from the east (Atwood, 1980).

The Bear Creek Valley began receiving water from the Cascade lakes as early as 1902. Orchard owners and farmers without irrigation found it challenging to compete. Enlargement of the irrigation system took place over a thirty year span and others water systems were developed. But it wasn't until 1923 that

the Rogue Valley saw widespread orchard irrigation. With irrigation came the need for drainage of the relatively shallow soils underlain with layers imperious to water. Government assistance was sought and drainage districts were organized. The depression and low pear prices made it cost prohibitive to many to install the drain tiles (Cordy, 1977).

As producing orchards increased so did the need for packing houses, these were mainly built at the larger orchards. Transportation from the orchard to market was the limiting factor. Horse drawn wagons had to transport the fruit over rough, dirt roads. The shift to larger centralized packing houses with cold storage facilities along the railroad came when the roads improved and trucks became more widespread. A better quality product that could command a premium price in the market was the result. A professionally packed product was needed, and in 1909 the first packing school was conducted. A standardized grading system for the fruit soon followed (Cordy, 1977).

The fruit crops presented their own set of problems, though there weren't as many in the early days. For the most part it took experimenting and learning what worked and what didn't. For many it meant working with the extension agents from Oregon State College, who worked with plant diseases and insect problems.

In 1905, local orchards were attacked by Blight, a bacteria that spreads when the tree is cut and also by insects (mainly bees). It feeds on the plant through the sap and eventually kills the tree. Disinfecting the tools after each cut with either cyanide or mercury or bichloride of mercury, helped to prevent the spread of the Blight. The Blight also is worse in the hotter pear districts. This can be a bit of a "double edge sword," as the hotter districts also produced the best quality of the fruit (Atwood, 1980).

Hard hit by the Blight were the apple orchards, which also suffered from poor soils and low prices. It is estimated that 10,000 acres of apples had been planted at its peak in 1910. Within a few years pear trees had replaced most of the apple orchard as they grew better on the same soil and commanded a higher price on the market (O'Harra, 1993).

Pear psylla, certain aphids, spider mites, and codling moths were some of the pest that plagued the industry. Pear scab is a fungus disease that affects the fruit. Various chemical sprays have been used in the orchard industry over the years. Lime and sulfur dormant sprays were used, then Bordeaux. Arsenate of lead was used for codling moths for years, then guthion was used, but it tended to kill off the predators for pear psylla and spider mites. Tobacco was tried on aphids. In 1958 they were using DDT extensively on the pear orchards with good control (Atwood, 1980).

Spring frost, the frozen dew, has been the bane of the Rogue Valley orchards because of the measures necessary to save developing fruit crops. Temperatures vary widely within the valley, but frost damage is usually confined to the lowest elevations, hillside orchards often escape the lowest temperatures. The valley's climate has apparently changed during the past four decades, however, and some locations at one time not endangered now experience frost. In the decade from 1930-39, for example, the average number of officially cold spring nights each year was 18; during the 1960-69 decade, this number jumped to 27 a 50% increase. "From 1926-1971 the average number of cold nights (32 degrees or lower) was: March-5.1, April-12.4, May-4.6. For the same period the average number of nights actually requiring firing was March-2.8, April-9.9, May-2.8" (Harry and David, 1972).

When the orchards started loosing crops to frost, they attempted to control the frost. In the early day of learning and experimentation it was commonly believed that a heavy smudge would prevent the loss of heat, thereby preventing frost damage. It was also thought that smoke would help to prevent the morning sun from thawing the frozen fruit too rapidly, as the rapid thawing was thought to cause more frost damage. Wet straw, manure and leaves were kindled to produce smoke, thus the terminology "smudging" became popularized. The growers figured out the need to add heat to keep the fruit warm and the term "heating" was used (Cordy, 1977).

The three most commonly used methods of frost prevention are heating (the most widely used throughout the world), overhead sprinkling and wind machines. Almost all current methods utilize heat, either natural or artificially generated (Harry and David, 1972).

Wood burning heaters were used originally, until oil became readily available (Cordy, 1977). The original oil heaters, effective but smoky, were simply lard buckets filled with oil. These evolved into so-called "side lids" or "bread boxes" – metal containers that resembled square cake pans with lids that slid back and forth, permitting the regulation of heat intensity by adjusting the opening. Because of poor air circulation and incomplete combustion, side lids spewed large quantities of smoke (Harry and David, 1972). By 1972 three types of heaters were being used that conformed most to "clean air" regulations. The Return Stack and the Lazy Flame were the most widely used along with the Jumbo Cone (Harry and David, 1972).

For many of the Rogue Valley's young men, "smudging" (as lighting the smoky oil heaters referred to), was a first job. Smudging continued into the 1970s. Some orchards have converted over to sprinklers or wind machines, but there are still a few scattered spots where you can see the smudge pots sitting among the trees.

About 1917 the orchard boom and local economy began to crumble due to lost harvest from frost, drought, disease, pest, and a poor market as World War I prevented the export of fruit to many countries. Many were forced to sell everything. Others got through the tough times by creating organizations to pool resources and were able to revive the industry after World War I.

The sugar beet industry lasted only a brief two seasons in the Rogue Valley during the years 1916 and 1917. Sorghum has been grown and manufacture locally several times. Post World War II, there was a shift from the farm to the timber industry. The 1960s and 1970s experienced the back to the land movement. More roads were improved because of the logging industry. With more dependable transportation, more people found the valleys and gulches to their liking. These people were not farmers to make their living from the land. They worked off the land, some raising their own meat and fruit and garden, others were hobbyists, enjoying the county life style.

Traditionally, timber production and grazing were the primary natural resource industries within the upper reaches of the watershed. The valleys having deeper soils and were able to support a wider diversity of agriculture. Orchards in the valley are close to irrigation and to transportation routes. Livestock production is currently the predominant form of agriculture. Commercial crops include wheat, barley, hay, oats, and corn. During the last decade, however, vineyards have been established while specialty crops such as cut-flowers, herbs, and organic fruits and vegetables are also being produced. Growers markets in Medford and Grants Pass have a showing from several producers within the watershed. For several years, Wimer has had a weekly growers market during the growing season.

CHAPTER 5

THE ROGUE WATER WAY

The source of the Rogue River is near Crater Lake and Mt. Thielsen. The river drops 6,000 feet as it runs a 215 mile course to the mouth at Gold Beach on the Pacific Ocean. The river runs through three counties, each with its own needs and thoughts on the river's use. The waterways are not as they were two hundred years ago. Change to the channels, politics, removal of riparian coverage, roads built near the streams, introduction of non-native fish species and other aquatics, as well as fish hatcheries all have played a role in shaping the Rogue River and tributaries that we have today.

Two early descriptions of the Rogue paint two different pictures of the river, one by an engineer and the other by a historian. During an 1872 visit to the Rogue, writer/historian Frances Fuller Victor extolled its summer flow, "The waters are as blue as a clear sky, and banks overhung in some places with wild trees, shaggy cliffs, and in others by thickets of grapevines and blossoming shrubbery" (Victor, 1993).

In December 1878, Philip Eastwick of the U.S. Army Corps of Engineers was dispatched to scrutinize the Rogue River for navigability between what is now Gold Hill and the ocean. He wrote of the river; "During the presence of these freshets, all the rapids and falls of the river are lost sight of and the river assumes the character of a boiling, surging mountain torrent filled with strong eddies and whirlpools, and carry down with it immense quantities of driftwood to the ocean." In 1910 the magazine published by the Medford Commercial Club, reported the warmth of the Rogue's waters as "bath water qualities" (Victor, 1993).

NATIVE PEOPLE FISHING PRACTICES AND RITUALS

We have no written record of what the salmon runs were like on the Rogue River two hundred years ago. We do know that the river provided the native people with salmon and trout species, crawfish, and freshwater mussels. Clubbing was the method often used to kill the fish after driving them into a netted area (Follansbee and Pollock, 1978).

Most of the native people who obtained fish from the waterways had some type of ceremony to help insure a bountiful salmon run. The ritual was usually based on the arrival of the first salmon and may have served a conservational or management purpose. In allowing the salmon to run free during the initial period of ritual restriction, they would have maintained a productive inventory of spawning salmon each spring, thus ensure successful reproduction and return of the salmon runs in following years (Winthrop, 1993).

MINING CHANGES WATERWAYS

Euro-Americans and Chinese were lured to the Rogue Valley to mine the gold rich placer streams. The small placers operations of the 1850-60s, probably had minimal impact upon stream water quality, because of the small size and limited operation. According to LaLande, “early miners sometimes found more salmon in their sluice boxes than gold, often harvesting the fish for sale to finance continued mining” (LaLande, 1995).

The 1860s brought changes to the waterways as long flumes to span deep gulches were built. Many miles of ditch constructed, reservoirs erected, thousands of feet of piping laid, and giants and other machinery set. Water was the key to a hydraulic placer operation. Pressurized water from a pipe or hose was used to expose gold deposits by scouring away hundreds of cubic yards of earth per day. Thus riparian areas were removed and the course of waterways changed. Ditches were built throughout the gold bearing areas of the watershed. Many of these ditches would serve another purpose, by bringing irrigation water to the farmer.

POLITICAL INFLUENCES

The native peoples along the Rogue had their own politics and ways in dealing with fishing the river and streams. Their fishing rituals provided for taking only small portions of the fish run for any particular day, so that upstream tribes would also have fish to harvest. According to Genaw, the native people could be very aggressive. If a neighboring tribe blocked a stream and prevented salmon from reaching another tribe, it could be a cause for war (LaLande, 1995).

Ballot initiatives have allowed citizen majorities to initiate and implement governmental policy. Natural resource issues appearing on Oregon voter ballots, allowing citizen majorities to initiate and implement governmental policy, occurred as early as 1908 and 1910 (Beard and Schultz, 1912).

The Rogue runs through the three counties of Jackson, Josephine, and Curry. Each county has had its own needs and interests. As early as 1876, the Hume Company in Curry County controlled the fisheries on the Rogue. Robert Hume owned both sides the river at the mouth for twelve miles up stream. His fleet would stretch their nets across the river at the mouth, and haul in Chinooks and silvers. Up river fishermen claimed they also hauled in the big steelhead as well (Arman and Wooldridge, 1982).

Hume was also responsible for hatchery projects. The Rogue Elk Hatchery, on the upper Rogue, was controlled by Hume. Fry were released from Rogue Elk in the upper Rogue. Surplus eggs were shipped and released at the mouth of the Rogue, and even taken to the Clackamas hatchery and fry released into the Columbia (Arman and Wooldridge, 1982).

In Josephine County, the gillnetters organized in 1906 as the Rogue River Fishermen's Union. The purpose in organizing was to promote building a fish hatchery for the middle section of the Rogue. They were also concerned over the diminishing migration of big steelhead. They offered to discontinue commercial fishing during the steelhead season, but defended their own industry, which was said to bring in \$20,000 annually to the Grants Pass merchants (Arman and Wooldridge, 1982).

In Jackson County, it wasn't the working man trying to make a living from the land and river, but a totally new sector, the sports fisherman, who flexed a political arm. The turn of the century had brought to Jackson County, a period of economic expansion, and people with money to invest. The railroad offered ease of travel to the area. Tourism and recreation were just starting to gain a hold. Lodges were starting to be built along the river and wealthy sportsmen came from afar to angle for the Rogue's steelhead and trout.

The sportsman group organized in 1910, as the Rogue River Fish Protection Association. Their purpose was to propose a legislation to close the Rogue River to all fishing but hook and line. They circulated an initiative petition and got eleven thousand signatures. The measure was put on the ballot in the 1910 general election (Arman and Wooldridge, 1982).

In Josephine County there arose a complaint that over half the signatures were from Portland, and shouldn't have a say in local matters. The sportsman group had the money to spend on the promotion of their cause. The ballot passed, closing all fishing but hook and line to the Rogue (Arman and Wooldridge, 1982).

For at least a twenty year period these groups lobbied their cause in the state initiatives system, making treaties and alliances that changed over the years. The river reopened to gillnetting in 1913. According to Glen Wooldridge, "The gillnetters fished at night unless the water was muddy; as you couldn't catch a

salmon if it was clear enough to see the net. The hydraulic giants didn't muddy the water enough, but once in a while a storm would muddy it enough for daylight fishing" (Arman and Wooldridge, 1982).

Over the past twenty years, there has been an increase in ballot initiative outcomes for wildlife management policy. Often paid circulators work from lists of voters, known to support or oppose certain issues (Cronin, 1989). Voters may not fully understand the issues when they sign a petition. Voters are not necessarily well informed on the issues or lack the education to understand the technical issues. Strong, financially backed lobbies have money to influence voters via media campaigns and influence initiative outcome (Eule, 1990).

Besides setting policy for natural resources, funding initiatives have created special taxes or bonds, increased taxes for specific purposes or reserved tax revenues for specific purposes. Prohibitory initiatives have generally banned certain practices (Beard and Schultz, 1912).

CREATION OF A U.S. COMMISSIONER OF FISH AND FISHERIES

Spencer Fullerton Baird, Assistant Secretary of the Smithsonian Institution, wrote to Congress in January 1871 calling attention to the problem of depletion of food fishes of the seacoasts and lakes of the United States and offering suggestions for remediation (Guinan and Curtis, 1971).

As a result of Baird's efforts, the National Fish Hatchery System was established in 1871 by Congress through the creation of a U.S. Commissioner of Fish and Fisheries. According to the National Fish Hatchery System, "The original purpose of National Fish Hatchery System was to provide additional domestic food fish to replace declining native fish populations. Cultured fish were used to replace fish that were lost from natural (drought, flood, habitat destruction) or human (over-harvest, pollution, habitat loss due to development and dam construction) influences, to establish fish populations to meet specific management needs, and to provide for the creation of new and expanded recreational fisheries opportunities" (National Fish Hatchery System, 2003).

Fish Hatcheries

The new Commissioner's primary interest was in biological research. However, his policies did reflect other areas of interest and reportedly his vision was broad for the period. In 1872, with support from the American Fish Culturists Association, he established a marine hatchery at Woods Hole for artificial propagation of fish. In 1879, Baird's staff worked with the Census Office on the first comprehensive statistical survey of the U.S. fishing industry. For many years, fish culture was foremost in the federal fishery program (Guinan and Curtis, 1971).

Cannery owner R. D. Hume had hatcheries at the mouth of the Rogue and in the upper Rogue near Trail. In 1878 he built his first hatchery at "Hatchery Gulch," located about a quarter mile south of Indian Creek. He had a second hatchery next to Mill Rock. A fire burned the Gold Beach hatcheries and in 1909, another was built at Indian Creek. This hatchery was run by the state of Oregon from 1926 until the mid 1930s, when the state closed the hatchery (Rogue River Salmon, 2003).

In 1958, beginning with a group called Salmon Unlimited; volunteer groups have worked in cooperation with the Oregon Game Department to improve salmon production in the lower Rogue system. Small hatcheries and "hatch boxes" along the tributaries, have been maintained by volunteers (Rogue River Salmon, 2003).

In 1890, Hume built a hatchery at Trail on the upper reaches of the Rogue. Fry were released from Rogue Elk in the Upper Rogue. Surplus eggs were shipped and released at the mouth of the Rogue, and even taken to the Clackamas hatchery and fry released into the Columbia. In 1897, an area near Gold Hill was considered for a hatchery but was built instead at the mouth of Elk Creek. The gillnetters at Grants Pass were never happy about not having a hatchery in the middle Rogue (Arman and Wooldridge, 1982).

In 1897, fish hatcheries were built on several of Oregon's waterways, the Salmon River, Little White Salmon River, Rogue River, and Siuslaw River. The Rogue River's hatchery was built at the mouth of Elk Creek. A rack was built across the river to capture the fish and furnish eyed eggs to the Commission. There was a hatching house built on the banks of the river, equipped with 8 hatching troughs, 35 feet long, 12 inches wide, and 10 inches deep, and a filtering-tank 12 feet long, 4 feet wide, and 3 feet deep. "The water supply was taken from Elk Creek, its temperature being considerably warmer than that of Rogue River." A dam, 10 feet high and 100 feet long, was built about 1,800 feet from the hatchery, the water being conveyed in a 2-foot flume. The dam was needed in order to raise the water in the creek to a sufficient height (Smith, 1898).

The presence of many salmon below the rack afforded a fair prospect for good collections. During October and November, 2,027,000 eyed eggs were delivered. "The results were not satisfactory, as it is believed that there was a sufficient number of salmon in the river to have yielded at least 5,000,000 more if the fishing had been properly managed" (Smith, 1898).

During the incubation, heavy losses occurred and apparently the shells were so tough that the fry could not burst through the egg. When the Rogue River eggs were compared with ones collected from the tributaries of the Clackamas, it was observed the Rogue River salmon eggs were much larger (Smith, 1898).

The November rains raised the water in Elk Creek and carried away about 30 feet off the top of the dam. As the winter progressed it became colder, with ice and slush forming in the flume to such an extent that it was decided to liberate all of the fry rather than risk losing them. Almost two million small fry were deposited on the spawning-grounds in Rogue River near Trail (Smith, 1898).

The genetic composition of Rogue salmonids is thought to have been altered through propagation of salmonids beginning about 1875. Cole Rivers collected anecdotal information and records, indicating that in 1880, cannery managers released up to 250,000 chinook fry into coastal streams. The eggs did not necessarily come from the streams into which the fry were released, but may have come from various streams in Oregon as well as California and Washington (Rivers, 1963). This practice continued until 1931 when state legislation was enacted to protect native fish.

It is now thought that the early artificial propagation programs were unsuccessful and that prior to 1960, few of the salmon fry actually survived when released from the hatcheries. There was no monitoring or evaluation to verify the survival of the fry (Lichatowich, et al., 1996).

Hume fed his hatchery fry blood, horse meat, herring, salmon, and beef. Industry research began in the 1930s, and in 1960 a program of nutritious diets, disease treatments, and improved hatchery practices had been achieved. Since then there have been advances in hatchery technology and science, combined with improving ocean conditions. The survival of salmon to the adult stage dramatically increased. By the mid-1970s, coho salmon harvests were approaching and even exceeding historical harvest levels with most of the fish being of hatchery origin (Lichatowich, et al., 1996).

In today's hatchery, technologic advances bring increased nutritional value of feed, development and treatment of disease, and improved tagging technology has allowed more effective monitoring of survival. Control of the hatchery environment, such as water temperature and pathogens has improved, and geneticists have improved animal husbandry practices. Many of the problems

that once plagued early hatchery operations have now been either resolved or controlled (Lichatowich, et al., 1996).

Hatchery management is a different matter, it involves: brood stock selection, mixed stock fisheries, and inter-basin transfers. These practices have been found to be detrimental to wild stocks of salmon and have failed to conserve salmon biodiversity (Lichatowich, et al., 1996).

Hatchery management is partly responsible for the decline of wild salmon stocks. Recommendations were made to the Oregon Plan in 1998 by the Independent Multidisciplinary Science Team, Forrest Sciences Laboratory, and Oregon State University for fundamental changes in the hatchery programs. "Those changes are to reflect a stronger emphasis on ecosystem management. For example, hatchery operations using local stocks need to take into consideration the life history responses of the native stock to the environmental conditions in the watershed. This will influence rearing practices and the timing of or manner of release of juveniles. Other ecological considerations include differential predation and competition between hatchery and wild fish" (Lichatowich, et al., 1996).

There are 11 hatcheries operated by the state of Oregon are located in coastal watersheds. In 1995, 11.7 million salmon and steelhead were released (Lichatowich, et al., 1996).

Fish Farming

Salmon farming began throughout the world in the 1970s and has since grown rapidly. It may have seemed to be an answer to demands on declining wild salmon. "Before the 1980s, almost 100% of the world's supply of salmon came from wild stocks. By 1999, the majority of the world's salmon supply came from salmon farms" (Gross, 1998). The fish are selected and bred for performance traits that will do well in farm pen conditions, much like the "poultry factories" where the fowl are bred for such traits as large breasts.

Much like poultry, the fish production objective is to maximize the conversion of feed into growth while minimizing loss of fish due to disease, parasitism, and escapes. Traits such as high food conversion rate, rapid growth, delayed age of maturity, and resistance to diseases and parasites are looked for when selecting breeding stock. The genetic selection and the rearing they experience alter the behavior, physiology, and morphology of the farmed fish from those of wild fish (Gross, 1998).

The potential impact of escaped farm and hatchery-raised fish upon wild salmon is already being seen through out the world in the genetic effects, ecological effects, and effects of diseases and parasites.

Farmed fish interbreeding with wild fish, could disrupt wild population's genetic adaptability, by replacing naturally occurring genetic adaptations and/or reducing wild genetic variability, thus their future evolutionary capacity.

Ecologically, the escaped farm fish, compete for food and space and alter habitat and predation. These concerns are particularly strong in the freshwater environment (Gross, 1998). Food harvested to feed farm fish removes food sources from the ocean feeding fish.

Two diseases are of special concern. A highly contagious and lethal viral disease, ISA, is spread by horizontal transmission (adult to adult) in both freshwater and seawater. Up until 1984, the disease was unknown. It first appeared in Norway as an epidemic in the Norwegian salmon farming industry (Gross, 1998).

A parasitic sea louse, *Lepeophtheirus salmonis*, is a problem in the Atlantic waters. The lice have been contracted by wild smolts migrating to the ocean and passing through farming areas. The infestations have had stronger immediate impacts than the ecological and genetic concerns mentioned above, as they have rapidly exterminated some wild stocks (Gross, 1998).

CHANNEL MODIFICATION, FLOODING

Although high water events wreak havoc with man's work, flooding is a natural phenomenon that cycles water, nutrients, and sediment through river systems. Flood waters will scour away organic materials that accumulate on river bottoms and deposit sediment onto stream banks, encouraging growth of riparian vegetation. Flooding is also beneficial to streams because it serves in both local and regional environmental balance, affecting water quality and aquatic life. Many species of fish and macroinvertebrates require high water events to complete their life cycle. Large amounts of water are suspended and river sediment is distributed over vast areas. In many areas, this sediment helps replenish valuable topsoil. Water tables are raised and ground water is recharged from high water events.

When combined with increased human activity, a high water event can possibly spread pollutants and invasive organisms by disrupting normal drainage systems in cities and overwhelming sewer systems.

Floods have been recorded since Euro-American settlement. Records show fifteen high water events in the past one hundred fifty years: 1853, 1858, 1861, 1866/67, 1880, 1890, 1927, 1945, 1948, 1953, 1955, 1962, 1964, 1974, and 1997 (Fattig, 1993).

The flood of 1861 has been called the “mother of all floods.” According to the U.S. Army Corps Engineers’ records, the Rogue River rose to 43 feet at Grants Pass. The flood levels at Grants Pass for 1890-36 feet, 1964-35.15 feet, 1955-36.2 feet, 1927-32 feet, with the normal stage at 24.45 feet (Fattig, 1993).

Truly major floods are caused by a combination of a heavy snow pack in the mountains and warm torrential rain melting the snow (Victor, 1993). Over the years, flooding has taken out homes, bridges, and ferries as trees and logs with the power the water behind them, ram the man made structures until they give. The rushing waters have changed the course of the rivers and streams. The 1890 flood changed the course of the Rogue River at Shady Cove (Fattig, 1993).

The waterways have always attracted man, with water and other resources readily available. When a high water event occurs, much damage can be caused to man’s projects and habitation. A sever flood in 1927 led the Bureau of Reclamation to propose a flood-control dam on the Rogue, called ‘Plan A.’ It included a major dam near Trail as well as several on the river’s principle tributaries (Fattig, 1993).

It was the flood of 1955 that led to the organizing of Rogue Basin Flood Control and Water Resources Association. The organization was dedicated to taming the Rogue and its tributaries. The flood waters had carried away homes, furniture, and appliances. More people were living in the flood plain, so the high water events were wiping out neighborhoods and threatening lives. The 1955 flood caused \$8.8 million in damages to Jackson and Josephine Counties, and the 1964 flood caused \$16 million in damage in Jackson County alone. Rogue Basin Flood Control and Water Resources Association agreed that a dam should have other purposes such as irrigation, electrical generation, and recreation. Fishery enhancement was added later. The association lobbied Washington D. C., and in the fall of 1962 Congress authorized the Rogue Basin Project, including Lost Creek, Applegate, and Elk Creek dams (Fattig, 1993).

CHANNEL MODIFICATION, DAMS

Dams were first built on the Rogue River of logs and lumber. Diversion dams and small dams on creeks and feeder streams were built for mining purposes. Around 1889, just below Fifth Street, a small water power dam was built in

Grants Pass. Made of cribbed fir poles and filled with rocks, the dam furnished electricity and water to the town. The dam had two fish ways so it didn't prevent the fish from getting up river to spawn. The little lake offered the town recreation opportunities in swimming and boating (Arman and Wooldridge, 1982).

It was early in 1900 that commercial salmon fishing started below the dam. The gillnetters would take their turn on the river at night. First, one boat, then another would row up toward the dam, cast their nets, drift back and pull up their nets. Commercial fishing took place in the Middle Rogue for only about thirty years. When commercial fishing was reopened, they could fish 400 feet down river from Ament Dam to Jump off Joe Creek, from the first week in June until the end of July. Commercial fishing ended in 1935 (Arman and Wooldridge, 1982).

In 1902 The Golden Drift Mining Company bought eight acres of land with river frontage, three miles up stream from Grants Pass. There was apparently enough timber on site for construction and a mill ran two extra shifts to cut the wood. Two and half million board feet of lumber was milled for the dam. M. C. Ament built a large steam shovel that he designed to dig to the bedrock. Boulders were blasted out. The structure was called Ament Dam, after the builder. Some of the buildings were washed out during a flood not long after construction, but the dam held (Arman and Wooldridge, 1982).

Below Ament Dam, fish would pool up, not wanting to go through the fish way's dark tunnel. Around 1919 the fish warden dynamited a wing dam on the Ament structure. About this same time, a fire burned the dam down to the water line (Arman and Wooldridge, 1982).

Construction began on Savage Rapids Dam in 1920, six miles up stream from Grants Pass, located at Township 36 South, Range 4 West, Section 19. It was completed in 1933. Dam length was 400 feet, dam height was 34 feet, maximum discharge in cubic feet per second (CFS) was 8,000, normal storage in acre per foot (ac/ft) was 1,500, surface area (acres) was 150, and drainage area (square miles) was 2,459. The dam was built by Shattuck Company and E. J. Carillo did the engineering (Arman and Wooldridge, 1982).

Savage Rapids Dam was built for irrigation. When they started to use the water, one of the problems to arise were small fish being pumped into the farmland. Screens were added but there was a problem with algae and moss clogging them. Screens were designed to be revolving to prevent and remove the growth. A ten foot wide fish way was built on the north side and was rebuilt several times. A fish way was built on the south side at a latter date (Arman and Wooldridge, 1982).

A diversion dam was built up river from Gold Hill, near river mile 121 in NW ¼, NE ¼, Section 15, Township 26 South, Range 3 West, of the Willamette Meridian. There is a grated concrete head works structure on the right abutment of the dam that regulates diversions into the 2,000-foot-long diversion canal (OWEB, 2003).

Gold Ray Dam is located a mile north of Tolo and construction took place in 1903-1904. Even at that date there was some controversy over the building of the dam, as some believed it would obstruct fish passage. The Rogue was diverted around the dam site to expose the basalt river bed. Logs came from Prospect and were floated down the river, to be bolted into the riverbed, and strengthened by cement to provide extra strength. Utility contracts were signed with many local municipalities as well as mines and orchards of the area. In 1941 the original dam was replaced with a concrete dam that includes a concrete chamber to house a fish counter at the fish ladders (Thorne, 1968).

Lost Creek Dam on the Upper Rogue was built primarily for flood control. It was finished in 1977. Applegate Dam was finished in 1980. However, in 1987, construction on the dam at Elk creek was stopped by a federal court injunction, citing the potential for fishery damage (Fattig, 1993).

CHANNEL MODIFICATION, BLASTING

In 1878, the U.S. Army Corps of Engineers dispatched Philip Eastwick to scrutinize the Rogue River for navigability between what is now Gold Hill and the ocean. In 1892, Captain Thomas W. Symons of the Corps investigated the possibility of making the river navigable for commercial ships from the mouth to the Rogue Valley. It would have required 52 locks and dams with an average lift of 15 feet (Fattig, 1993).

The Rogue was historically much wilder than today. During the 1930s and 1940s, the early river runners, such as Glen Wooldridge, blasted boulders in the river. They cleared a channel from Dunn Riffle to Agnes, using dynamite and blasting powder that was often furnished by the Forest Service. The rapids on this section on the Rogue are now big and glassy, dropping into haystacks and standing waves (Tice, 1995).

CHAPTER 6

EVANS VALLEY/WIMER

THE WATERSHED

Situated in the north western corner of Jackson County is the Evans Valley. The narrow southern entrance to the valley begins at the outskirts of the city of Rogue River and widens out to a valley surface varying from one to three miles in width. The valley is encircled by mountains, some named, others remain unnamed except by local lore. Near the Josephine County border; Fielder Mountain (3,747 foot elevation), Old Baldy (3,999 foot elevation), and Elk Mountain (4,434 foot elevation) rise from the west at a steeper and higher elevation than the eastern slopes; Starvation Heights, Wilcox Peak, and Hillis Peak. V-shaped valleys and sharp ridges mark the topographical makeup of the surrounding area. The highest elevation is Round Top Mountain, with the height summit at 4,555 feet. A dirt road to the top, leads to an ODF fire lookout and helipad. Winding through the valley is Evans Creek, it makes an exit at the town of Rogue River, where it empties into the Rogue River (Jackson County, 2003).

Leaving the city of Rogue River and traveling north, the Evans Valley is entered by two perpendicular roads, named for the creek, West Evans Creek Road and East Evans Creek Road. West Evans Creek Road ends where it connects to Pleasant Creek Road, that leads into the mountains. Pleasant Creek Road meets East Evans Creek Road at Wimer, where East Evans Creek Road makes a sharp right angle and heads east following Evans Creek. Following the creeks with the same name; Sykes Creek Road, Mays Creek Road, and West Fork Evans Creek Road each connect with East Evans Creek Road and the mouth of the creeks empty into Evans Creek. These roads all lead north into the mountain canyons often following the creeks (Jackson County, 2003).

In the lower Evans Valley Fielder Creek, Trimble Creek and Bear Branch are tributary streams to Evans Creek (Jackson County, 2003).

Evans Creek itself begins as two forks: the East Fork and the West Fork, both originate near the Douglas County line. The East Fork travels for about 14 miles and the West Fork for about 12 miles before the two converge. After the

confluence, Evans Creek travels another 14 miles before discharging into the Rogue River. West Fork Evans Creek headwaters begins near Goolaway Gap. East Evans Creek headwaters near Richter mountain and Cleveland Ridge (Jackson County, 2003).

Migratory fish found in Evans Creek include native steelhead trout and coho and chinook salmon. The coho salmon is a federally-threatened species, and the steelhead trout is being considered for listing as threatened. Resident fish found in the creek include cutthroat trout and sculpin (Jackson County, 2003).

Native People

The native people were apparently peaceful unless their access to the salmon was blocked (Morehouse-Genaw). But there is evidence of the people along the Rogue showing some hostility near Rock Point and Foots Creek in the early days of late 1830s and 1840s. Conflict did not arise with the Euro Americans, in the Evans Valley until 1853 when a war broke out and General Lane's volunteers pursued the warring tribes into the area. The resulting treaty included Evans Valley, as part of the Table Rock Reservation.

It was from this "war" that several features in this locale of the watershed received their names. Pleasant Creek was named for Pleasant Armstrong, who was killed near there, in the battle of August 1853 (Tucker, 1951). Battle Mountain and Little Battle Mountain, also received their name for where this battle took place. The War of 1853 ended with the signing of a treaty at Table Rock and the temporary reservation setting aside the north side of the Rogue river.

Before the conflict, sometime in the mid 1840s, there was a Euro-American, named William Peck Hillis, living peacefully with and among the Takelma near Evans and Sykes creeks. He apparently came in search of gold and he lived quietly with the natives, without promoting the area to others. Eventually he found gold and built himself a cabin on a "grassy flat" near the native encampment. He continued living among the natives, planting a few crops and looking for gold (Liles and Boulter, 1992). Other know native camps were near Neathamers Gulch and adjacent to both Mays and Evans Creeks. The Wakemans found, what early settlers called "wigwam pole holes" on Pleasant Creek (Liles and Boulter, 1992).

Wailing (1884) commented that "Evans Creek was prospected for gold before the Indian war of 1853, it was then abandoned by whites from fear of the Indians, and on the final settlement of these difficulties in 1856, the Chinese, then coming in large numbers, took possession of the ground, and mined successfully. They were driven out by whites when their good fortune became

known, and the latter took the claims and made good wages. Various other mineral substances of value are found upon this stream.”

Hostilities flared again in 1855-56 and ultimately the surviving native people were taken on foot to the Grande Ronde and Siletz . Mr. Hillis obtained a Donation Land Claim that encompassed an area from what is now called Wimer to Mays Creek and included both sides of Evans Creek (RVCOG, 1997). About 1856, Mr. Hillis struck a deal with some Chinese laborers to work for a percentage on his mining operations at Sykes Creek. There was a bunk house for them on the opposite side of Evans Creek from Hillis cabin. Remains of large underground dugouts, and caved in tunnels along with various artifacts remain in the area (Liles and Boulter, 1992).

Gold Seekers and Early Settlement

With the removal of the native people, the miners were free to enter the north side of the river and between 8 Oct 1856 to 30 Jun 1880. Evans Creek had 115 mining claim locations (Wailing, 1884). Mines were claimed for both gold and quicksilver. Soon there were rich strikes on McConnel and Murphy Gulches, and Mays, Pleasant, and Sykes Creeks. Mr. M. H. Chapin found a 10¾ ounce nugget on his Pleasant Creek claim in 1868 (Oregon Sentinel, 1868). Dixie Gulch, Sypfer’s Gulch, Bear Branch, and Ditch Creek were also prospected.

Davis Evan’s ferry, on the mouth of Evans Creek, was the beginning of “civilization” for the area. There Evans had a cabin on each side the river. The Ferry was the starting point for pack trains of mules to bring supplies to the gold miners on Evans creek. A freighter named John Breeding used both mules and two wheeled charts. The trail followed along Evans Creek and cut across to Ditch Creek to supply the settlers and miners near Jump-Off Joe Creek (Liles and Boulter, 1992).

Davis Evans built a water-powered saw mill located about four miles up West Evans Creek and south of Fielder Creek. He later sold it to Martin A. Steckel. It was known as the Steckel Sawmill. It was of the old circular-saw type and it would cut a maximum of four thousand board feet of lumber a day. The mill was operated by Mr. Seckel and his eldest daughter (Nesheim, 1977). Steckel’s Mill was powered by a water wheel. Steckel milled the lumber for the first homes to be built from cut lumber, such as the John Woods home. A settlement grew up around the Wood’s home known as Woodville, later the city of Rogue River (Liles and Boulter, 1992).

By the 1860s, the simpler mining techniques gave way to hydraulic mining and all that goes with it. This type of mining required a great deal of water, capital,

skill, and labor. Long flumes to span deep gulches had to be built; ditches had to be constructed, reservoirs erected, thousands of feet of piping laid, and giants and other machinery set. Pressurized water from a pipe or hose was used to expose gold deposits by scouring away hundreds of cubic yards of earth per day. The water washed the sediments into sluice boxes where the gold amalgamates were collected with the use of Quicksilver (mercury). A high water event would wash away their flumes and reservoirs.

The hydraulic “giants” rapidly altered the landscape. Stream riparian areas disappeared. Trees were cleared, ditches and channels changed, and stream beds widened. Large expanses of rock tailings were left as gravel and rock were processed on Pleasant and Sykes Creeks. Later the ditches were used to carry irrigation water.

Miners had been in and out of the Evans Valley for twenty some years, but nothing of a community had been established. Most miners were of a temporary nature, setting up a quick tent, shack, or small cabin. They used the resources at hand; developing the water and building ditches to run their placers. Wood was cut for shelter, and fuel for warmth and to cook their food. The miner could be gone overnight if they hear rich strike elsewhere.

As mining began to wane, some began to look at the Evans Valley from another perspective. They saw the potential of the rich farm land and a new sector began to enter the Evans Valley. The homestead act of 1862 encouraged settlement and improvement of agricultural properties.

WIMER

Permanent Settlement

In the 1870s, Evans Valley began it’s growth into a small thriving community as people began to settle on the rich farm land. Family groups came, got married, and settled in the area. Soon homesteads with families were established. What would come to be called; Wimer, and Neathamer Gulch were seeing settlement. A cemetery was established at Mays Creek. Murphy Gulch had Chinese miners living there.

By this time, Mr. Hillis had married and had children in need of an education. In he 1870, agreed to room, board, and give a little pay to a teacher. This first school was held in an old log cabin. In 1879 the Jacksonville Democratic Times reported thirty-seven voters and fifty-six school age children in Evans Valley. In 1889 a school was opened at Wimer (#68). It was located a couple of miles up Pleasant Creek Road from Wimer. Other schools soon followed; Pine

Grove school was half way up Pine Grove Road, Mays Creek (#79) was believed to be built in 1896, Bybee Springs (#101) was open from 1913-1918, and Upper Pleasant Creek school was near Fry's Gulch. They were all consolidated in 1923 (Nesheim, 1977; Liles and Boulter, 1992).

In 1923, the one room schools consolidated to become Evans Valley Union School District # 62. Privately owned buses transported the children to school. At that time the roads were poor, even wagons had a hard time traversing them. Sometimes the older boys would have to push the bus through the muddy ruts, and when fording a stream. In 1923 work was begun on a new school building. It had four classrooms, an auditorium with stage, modern plumbing, a well with adequate water, and electricity from a 110 volt power plant with batteries. When electrical power was brought to the Evans Valley around 1929, the school converted over from the 110 volt system. A wood burning furnace supplied heat to the building. In the 1950s, a gymnasium was built, followed by more class rooms a few years later. They have been a part of the Rogue River School system since 1965 (Nesheim, 1977; Sheffield and Miller).

It wasn't until 1886 and 1887 that the community began to be called by the name Wimer. William Wimer, editor of the Grants Pass Courier, was influential in having a post office established at this place. He also had a relative in the Evans's Creek neighborhood, for which the post office was named (Tucker, 1951). Wimer had a postmaster appointment from 1887-1908 (Kidd, 1998).

The Wimer Market was built in the early 1900s. The covered bridge was originally built in 1892 and rebuilt in 1927. There have been repeated attempts to remove the bridge, but valley residents have consistently protected it (RVCOG, 1997). On July 6, 2003, the bridge collapsed with three pedestrians standing near its center. The bridge was scheduled for a \$660,000 restoration through the National Historic Covered Bridge Preservation Program.

The bridge was the Evans Valley and Wimer's most famous historical site and has been closely tied to the community's identity. It was featured in books, websites, and tourist literature. It drew tourist off of Interstate 5 to view, take pictures, enjoy the scenery, and perhaps spend money in the community. Over 130 people turn out in support of rebuilding a covered bridge as a replacement.

Cindy Blankenship, of the Rogue River Press, interviewed, Don Worthington Sr., who owned and ran the Wimer Market at the bridge for several years. Worthington recalled he would have his morning coffee every day on the bridge. Worthington said, "I'd look up and down the stream and monitor the creek. I could look through a drainage crack in the deck and watch the steelhead and salmon spawning or coming upstream. I remember one time when the creek froze over watching the mink scooting around on the ice. They'd try to play

with each other and lose control, slipping and sliding on the ice and trying to understand what was happening.”

In a Mail Tribune interview, County Engineer Dale Petrasek, said, “The Wimer Bridge was the only covered bridge in Jackson County that still allowed vehicle traffic. He said the most likely cause of failure was a weakened truss that had been identified in an earlier inspection.”

The citizens of Wimer and the Evans Valley want the replacement bridge to be covered as well. The Citizens for Rebuilding the Wimer Covered Bridge Committee has been organized.

The Enterprise Grange #489 was formed in 1912 and has continued to this day. This is believed to be the oldest grange organization in Jackson County (RVCOG, 1997). The Grange is the meeting hall for the Wimer community.

In the early 1930s, a Civilian Conservation Corps (C.C.C.) camp was attached to the Oregon state forestry Department; Camp Wimer was located near the Pleasant Creek Guard Station. The young men of the C.C.C. built 44 miles of mountain roads. The roads for Savage Creek, Battle Creek, King Mountain, Daisy Mine, Jack Creek and Evans Creek were constructed and over 60 miles of telephone poles set and line strung. They built the state forestry headquarters in Grants Pass, the McCloud guard station, and worked on the Medford Forestry Headquarters. The C.C.C.s also cleared hundreds of acres of brush and snags and fought forest fires. The C.C.C. end when the U.S. entered World War II and young men required for military service. Nothing remains of Camp Wimer (Liles and Boulter, 1992).

Homesteaders prior to 1900 spent decades removing trees and brush to clear land for cultivation of crops and range for livestock. They also claimed water, dug ditches, and built dams for irrigation. Wheat, hay, rye, barley, and oats were raised for family use as well as supplement for grazing livestock. The Gold Hill News reported the Wimer vicinities agricultural production for the year 1900 as: “wheat, 78,000 bushels; corn, 18,000 bushels; beans 62,000 bushels; onions, 56,000 pounds.”

Several businesses once resided at Wimer, a saw mill, dairy, restaurants, and even a mercantile (that burned in the late 1930s). Although the business section is smaller, the area in general has more people living there. In recent years many of the large farms have been cut into smaller 5 and 10 acre plots to satisfy the need for housing in a fast growing community. The small dairies and many of the hay fields have disappeared as well as commercial crops of beans, onions, and cabbage (Liles and Boulter, 1992).

Today, the main agriculture activity is the raising of livestock or feed for livestock. In the non-timbered areas, if the ground is flat enough to till, dry land alfalfa is grown; where there is irrigation, the land is in pasture. Some

produce is grown for local growers markets. Beef cattle, pigs, sheep, goats and llamas, and fowl are raised for the family larder, as pets, as 4-H projects, or to sale. Horses of various calibers from the children's pet, to a valued show or work horse can be seen on ranches ranging from many acres to small operations covering only a few acres.

Though the post office, the store and restaurant have since gone, there has been resurgence in the population of the valley in the recent decade. Most of the household supplies and services are purchased in the cities of Rogue River, Grants Pass, or Medford. Wimer itself has an active Grange, Fire Station, market, hair salon, real estate office, elementary school, and a few other businesses. The local residents have indicated through community meetings that there is a need to provide for the future population and local employment needs with the addition of other service areas (RVCOG, 1997).

EVANS CREEK FARMING AND MINING

As farming and agricultural interest increased in the area so did the need for a source of dependable water for crops. Most of the early water rights were filed and joined to mining interest. Some water rights were filed to co-mingle farming/mining use. William Peck Hillis owned one of the oldest water rights in the Evans Valley. He started a small ditch system on the south side of Evans Creek in the late 1800s. This water was most likely used in his mining operation to blast the placer gravels with a "giant." Hillis had water rights on both Evans Creek and on Sykes creek. He had a priority date of 1875; 0.15 seconds foot; for irrigation of 6 acres, and Domestic use at Sykes Creek, from Hull ditch; SW $\frac{1}{4}$ SE $\frac{1}{4}$; Sec 1, T. 35S., R. 4 W.

Mining partners John C. Williams and Josphe Whalen purchased right of way for a mining ditch in February 1896. They enlarged and improved the existing Thoss and Smith ditch T. 35 S R. 4 W, Sec. 11, 12. In 1896, John Hillis and eight others claimed water rights for the "Williams-Whalen Ditch," and diversion branches. Mr. C. Vroman was contracted on September 8, 1902 to build an irrigation ditch seven feet wide and two feet deep within two years. After securing and filing all the necessary legal work, Vroman started the project. The water was to be taken out of Evans Creek, about one mile above Wimer.

The ditch was mainly dug by hand with pick and shovel, although horse teams were used for some of the work. The ditch was completed and the project was recorded in Jackson County on May 23, 1903. In 1904 a log dam was erected and the original water rights were issued by the state (Liles and Boulter, 1992).

The next part of the project was to erect a log trestle and wooden flumes to span the creek about one hundred feet or more up the creek from the Wimer Covered Bridge. The farmers had the same problem as the miners; a high water event could take out the piers and flumes. At the end of each growing season, the piers and flume boxes were taken down and stacked on higher ground. Each spring the structures were erected for summer irrigation. If an unexpected high water event occurred in the spring; there was always the chance that the structures would be washed away, causing a severe drain on the farmers operating funds and could put him out of business (Liles and Boulter, 1992).

The wooden flumes were replaced with half rounds of three foot galvanized pipe in 1912. The galvanized flumes were found to only last about three years. They also had to be taken down and stacked on higher ground and each spring the structures erected. It is interesting to note that during this time cinnabar was being mined on the West Fork of Evans Creek. It is believed that the minerals washing down the creek caused corrosion to galvanized pipe. Further examination found these minerals also cause the lily bulbs that were raised in the valley to disintegrate after harvest. The farmers went back to using the wood flumes, but they would wash out three times. A high water event in 1955 washed out 15 feet of bank. In 1963 the trestle and flume system was replaced by laying steel pipe under the creek bed (Liles and Boulter, 1992).

Around 1923, the farmers organized an irrigation district under Oregon corporation laws as "The Pleasant Valley District Improvement Company" (Liles and Boulter, 1992).

In 1999-2000 the Oregon Water Trust, with cooperation from the now defunct Evans Creek Watershed Council, was a major participant in the closure of the Williams-Whalen Ditch. The conservation project involved conversion of gravity flood irrigation to sprinklers with individual pumps located downstream of the old ditch diversion. An allocation of conserved water was approved for the project to establish an instream water right in Evans Creek with an 1896 priority date (OPSW, 2000).

In early 1996, two landowners on the Williams-Whalen Ditch converted from flood to sprinkler irrigation. They became the first water right holders in Oregon to create an in-stream water right by using an innovative law passed in 1987, The Conserved Water Statute. According to Oregon Water Trust, all the remaining landowners on the Williams-Whalen ditch approached OWT and the Evans Creek Watershed Council to develop a conservation project that would allow each landowner to switch from flood to sprinkler irrigation. The landowners now divert water directly from Evans Creek, thereby eliminating the need for the ditch system (Fish Flow News, 1997).

Quoted in the Fish Flow News Fall/Winter 1997 “We will have a more efficient and reliable irrigation system and will no longer have to spend all that time trying to maintain the ditch,” said Irene Loper, who owns land at the end of the ditch. “Since we’ll use less water than our original right, we’ll be able to return some water to the creek” (Fish Flow News, 1997).

Looking back at about five years from the closing down of the Williams-Whalen ditch; community observation finds large dead trees, dried up wetlands where wildlife frequented and warmer water in the creek. The water from the “leaky ditch” had helped to cool the creek as the wetlands it created leaked back into the creek, cooling itself through the gravels as the water returned to the creek (Howell, 2003). Another problem for the water users is people pumping water from the creek without a water right. This is found especially among the more recent property purchases.

The original log dam was replaced with another log structure in 1916. A ten foot high concrete dam with a corkscrew-style fish ladder, under regulations of the State Game Commission, was built to replace the log structure in the 1930s.

The Wimer Dam was featured in the August 31, 2003 issue of the Mail Tribune. The article reported, Special Agent Jim Houseman of NOAA-Fisheries, declared “the dam as an impediment to fish swimming upstream to spawn, including coho salmon, listed as threatened under the federal Endangered Species Act.” He said, “It’s in the best interest of the salmon, nobody is maintaining the dam, nobody has water rights off the dam and it is delaying or injuring fish.”

Apparently, a near by property owner purchased all the assets of the Evans Valley Irrigation District, and that apparently includes the dam. This potential ownership of the dam has been brought to the attention of Larry Menteer, Jackson County Watermaster. When recently interviewed by Sanne Specht, of the Mail Tribune, Menteer said “this person was not listed in a recent title search on the dam or the properties, and the dam’s ownership is currently unresolved.”

Current owners of the properties that abut the dam, say they have been “pressured” by NOAA Fisheries and the Bureau of Land Management to remove the dam for over a year. “BLM mentioned horrendous fines of (up to) \$10,000 per fish for harming or harassing the fish.”. The abutting landowners say they don’t own the dam. The BLM, who would be the agency involved in removal of the dam, was apparently seeking to gain ingress and egress for the removal project by using the land abutting the dam. The owners of the properties were asked to sign a document, which it is not believed to protect them from some potential liabilities (Mail Tribune, 2003; Kewish, 2003).

A concern for many nearby residents is mercury. Mercury, besides being used in the process of extracting gold, was also mined in the form of cinnabar in the Evans Creek watershed. Mercury, heavy like gold, will sink to the bottom, where it will stay if left undisturbed. Extracting core samples from sediment to test for mercury requires a special auger with a suction to keep the mercury held in place in the sample (Howell, 2003).

Wimer resident, Paul Howell, lives down stream from the dam. He reports that he has found mercury in sediment behind the dam. Howell said he dredged small test holes with a five-inch suction dredge behind the sediment-filled, 10-foot dam. "Most all the fine or coarse gold we found had mercury on it."

Mercury waste is found at mines and various industries including; municipal sewage plants, cement plants, auto wreckers and repair shops, and the printing industry, even the dentist office. When mercury is released into the environment, it can recycle through the air indefinitely or can bind with bacteria in water to create such compounds as methylmercury. It works its way through the food chain when the fish eats the organisms with these bacterial methylmercury, and on to the humans who eat the fish (Washington State Department of Ecology).

The Wimer Dam and other dams on Evans Creek, by and large were built prior to or in the 1930s. The sediment behind these dams was building, at the same time the mining operations were going on full speed. This caused the filling in behind the dams in the thirties and forties, bringing with the sediment and aggregates, gold, mercury, and other materials stirred up, dumped, or lost by the early miners (Howell, 2003).

Mercury is a liquid metal, with a heavy specific gravity comparable to gold, moves through gravel and sand downward with very slight disturbance or vibration. Sampling for this metal and having an accurate test made is very difficult and expensive. Mercury on bed rock and in the cracks of bedrock can be very hard to sample (Howell, 2003).

High water volume and velocity may move this material quickly downstream when high water exposes bed rock. Exposure to low water flows and summer time water temperatures could cause added problems to the environment and community from materials from past mining activities being introduced to the stream waters in summer and pumped onto fields where animals may ingest them (Howell, 2003).

According to USGS (2000), bacteria that process sulfate (SO_4^{2-}) in the environment take up mercury in its inorganic form and convert it to methylmercury through metabolic processes. The conversion of inorganic mercury to methylmercury is important because its toxicity is greater and because organisms require considerably longer to eliminate methylmercury.

These methylmercury-containing bacteria may be consumed by the next higher level in the food chain, or the bacteria may excrete the methylmercury to the water where it can quickly adsorb to plankton, which are also consumed by the next level in the food chain.

Because animals accumulate methylmercury faster than they eliminate it, animals consume higher concentrations of mercury at each successive level of the food chain. Small environmental concentrations of methyl-mercury can thus readily accumulate to potentially harmful concentrations in fish, fish-eating wildlife, and people. Even at very low atmospheric deposition rates in locations remote from point sources, mercury biomagnification can result in toxic effects in consumers at the top of these aquatic food chains (USGS, 2000).

Special Agent Houseman admitted to Mail Tribune, reporter, Sanne Specht, that there is heavy metal contamination along Evans Creek; “There are mercury and other heavy metals above and below Wimer Dam.” Houseman said there would be federal funds to help defray costs of hazard removal or containment if the dam were removed. “We always approach these issues as one of collaboration first,” he said. “NOAA-Fisheries, recognize the landowners inherited this issue.” However, while determining ownership of the dam proves to be challenging for them; the dam remains on the block for removal.

PLEASANT CREEK

Pleasant Creek an affluent of Evans Creek was named for Pleasant Armstrong, who was killed near there in hostilities of 1853 (Tucker, 1951). Some of its tributaries are Ditch Creek, Queens Branch, Fry Gulch, and Jamison Gulch. In the fall of 1852, gold was discovered at Pleasant Creek. Pleasant Creek afforded pay-dirt to quite a number of miners about the year 1860 (Wailing, 1884).

The Pleasant Creek School was far up Pleasant Creek near Fry’s Gulch. Major roads, are Pleasant Creek Road, West Evans Creek Road, and Ditch Creek Road. The higher reaches of the Pleasant Creek drainage were mainly trails; professional road construction into these areas didn’t take place until after World War II.

Places of historic interest include the Pleasant Creek Guard Station, the site of C.C.C. Camp Wimer, dredge mine tailings on Pleasant Creek, and Wakeman Mine at the head of Pleasant Creek.

Miles S. Wakeman appropriated water for mining and irrigation in 1865 for both irrigation and mining via Lower Wakeman ditch, (34S. 4W. sec.34) near Pleasant Creek (Jackson County Planning, 1992). In 1877 Charles Williams in

partnership with Robert Montgomery, filed for water rights on Pleasant Creek for mining. (Williams Ditch, 34S 4W Sec. 29, 30). On Pleasant Creek there were the Upper Wakeman ditch, Collins ditch, Highline ditch, and Leason ditch and on the right fork was the Moore ditch (Jackson County Circuit Court, 1919).

On tributaries of Pleasant Creek; Brown Gulch had the Manning ditch, Queens Branch had the Calvin ditch, Neathammer ditch, and Ingladue ditch, Ditch Creek had Owens ditch, Dixie Gulch and Brush Gulch had Smith ditch, Collins Gulch had the Smith and Collins ditches. A. K. Gulch had Leason ditch, and Frys Gulch had Oden ditch. Most rights were filed for mining but some for irrigation (Jackson County Circuit Court, 1919).

In the early 1900s, the most important hydraulic mine operating in the Evans Creek area was the Lone Star Mining Company. Mr. C. E. Wicksrom was the principal stockholder, having acquired it from Calvert Brothers, Lister and Company. It was located on Pleasant Creek, about six miles from the confluence with Evans Creek. The holdings were of 305 acres, 200 of which were deeded land (SOHS, 1978).

Below the Lone Star Mine on Pleasant Creek was the Cameron Mine, it was a hydraulic; operated by its owner Mr. D. Cameron. A lack of pressure and dumping facilities considerably handicapped operations. Several parallel channels ran through the ground, from twelve to sixteen feet deep. Three short ditches furnished good pressure, but was over ground that been pretty much worked over (SOHS, 1978).

Pleasant Creek and its tributaries were heavily mined prior to 1914. Diller wrote at that time "For over three miles the bed of Pleasant Creek was almost completely mined out years ago" (Diller, 1914). The hydraulic "giants" rapidly altered the landscape. Stream riparian areas disappeared. Trees were cleared, ditches and channels changed, and stream beds widened. Large expanses of rock tailings were left; as gravel and rock were processed.

Pleasant Creek has been worked by a bucket line, numerous hard rock operations, and many types of placer mining from sluicing to hydraulic mining. From 1939 to 1942 the Pleasant Creek Mining Corp. operated a dredge, in sections 22 and 27, T. S., R. 4 W. It was a steel-hulled, three cubic-foot connected bucket-line, diesel-powered, flume type. Values tested at about 17 cents per yard. This dredge was shut down in 1942 as were all gold mining operations (Brooks and Ramp, 1968).

In 1981, Wimer bid farewell to an old familiar landmark, the "Wimer dredge." It was the dredge that Joe Most, owner of the Pleasant Creek Mining Corp., operated until the diesel engine was confiscated for the World War II effort. The 300-ton, 45-foot high dredge floated on pontoons and used a chain of

metal buckets to eat into the earth, moving itself forward and filling in the pond behind it with tailings. The buckets dumped the earth into a series of sieves sluice boxes to separate the gold. The dredge was purchased by Henning Mining and Milling Corp. from Greg Adams and moved to the Caribou Mining District of central British Columbia. The Henning Mining and Milling Corp. planned to restore the site before leaving (Stanley, 1981).

SYKES CREEK

It was near the mouth of Sykes Creek and Mays Creek that native people had a camp. Mr. Hillis was the first Euro-American settler in this vicinity. He farmed and mined and had a ditch to provide water for these activities. There was also a dwelling of "Gilbert" at the confluence mouth of Sykes Creek in Section 12, T. 35 S., R. 4 W. (Atwood and Lang, 1995). Elizabeth A. Simmerville received water for irrigation from Hull ditch and Sykes Creek (Jackson County Circuit Court, 1919).

There was a stamp mill and cyanide processing facility within three quarter of a mile from the confluence with Evans Creek on Sykes Creek. There are also signs of placer and hard rock activities on Homestead Gulch, Greens Gulch, Steins Gulch, and Magerle Gulch. Most of these Gulches are above the Wimer Dam and below Murphy Gulch with the exception of Greens Gulch which is just above Wimer (Howell, 2003).

MAYS CREEK

Mays Creek is with in four miles from Wimer, while traveling East on the East Evans Creek Road. A one-room school was built about 1896, after the school districts combine in 1923 it became a personal residence of one of its former students, Mrs. Carrie Weide. The grounds border the stream that gave the school its name (Nesheim, 1977).

MURPHY GULCH

About a mile above Sykes Creek is the mouth of Murphy Gulch; a tributary of East Evans Creek on the south. Murphy Gulch was mined by Chinese in the 1800s. The creek furnished some of the richest of early-day diggings. Carter,

Siver, and Ammons operated a small plant on a back channel in the early 1900s. Several quartz ledges up the gulch received some attention also.

Situated at the mouth of Murphy Gulch, was a 207 acre property, under the ownership of W. A. Van Goethen in 1904. It was known as the old Albright place and had been under several different owners. It had previously been owned by John B. Hillis, and also E. D. Thompson, the merchant at Wimer, who sold the place to Van Goethen (SOHS, 1978) who stated that most of the acreage comprises the old channel wash. "Much of the gravel is covered by slide, this very slide matter, however, carrying a heavy trace of eroded quartz gold." The covered channel has about the same elevation as the present bed of Evans Creek and is known to carry good values."

During the depression years, resurgence in mining took place through out the Evans Creek drainage. In the early 1930s, the Oden's were mining on Murphy Gulch. Jim Oden was directly involved with three mine tunnels, as half owner. Jim and his wife lived in a cabin at the number one mine near the bottom of Murphy Gulch while the mines were worked.

There was a stamp mill and cyanide processing facility at the location of their cabin. For security reasons, their presence was required at the mine and processing site. The mines were worked up until World War II. At which time, they were shut down; as with many other mines in the area. The mines Jim Oden operated were called the Blue Ledge Mines at that time, but may have been renamed as time and owners changed.

The top two mines produced ore which was hauled down near the lower tunnel to the stamp mill for processing. By road, the distance from the lower mine to the upper mines is 5.2 miles, going straight up the canyon is only 911 feet or about three football fields in length. The problem is the elevation changes by 326 feet in the 911 feet. On foot you would go from 2,252 feet to 2,578 feet in elevation. This is very steep terrain to say the least. Mules and horses were used to pack this ore down from the upper mines.

From the upper mine tunnel ore was packed approx. 900 feet down the hill to the lower mine site and stamp mill to be processed. By BLM road the distance to the lower mine is 5.2 miles. The largest mine is over the bank. The mine under this road is the largest of the three with a portal of at least ten by ten feet.

Water was used from Murphy Gulch at the lower mine simply because of the need for a constant water supply for milling operations and amalgamation processes. The stamp mill reduced ore to a powder and freed gold from the ore. The ore was then run across a concentrating table which picked up the free gold. This table had riffles with mercury poured in them, on it and a copper plate with mercury adhering to it. The mercury supposedly picked up the gold

that was traveling across it. The ore that went across this table was then subjected to a cyanide solution in a large tank that stood nearby. This tank had zinc plates in it similar to paddles that turned and agitated the ore and the cyanide. This caused the remaining gold in the ore to be dissolved into a cyanide solution and then electrolysis caused the gold in solution to be electroplated on the zinc plate. When the plates were coated with gold new plates were installed and the old plates sent to a smelter to reclaim the gold (Brooks and Ramp, 1968).

The liquid cyanide was usually dumped at this point and new cyanide added. By dumping, I mean into Murphy Gulch, and the water took it on down. While cyanide supposedly has no long term effect on creeks, it does have short term effects. Also when cyanide reacts with sulfides in ore it may cause the extraction of arsenic compounds that may be very harmful to the environment. Arsenic may be detrimental for a much longer period of time.

The mercury was used on the copper plates on the concentrating table and in the riffles. Miners used mercury, a lot of mercury, and it got away from them ending up in Murphy Gulch and other streams throughout the area. Many people at the time were aware of this but; at the time the harmful effects of mercury were not as well known as they are today.

Murphy Gulch has mercury in it the full length of the creek; from both tunnel operations and the many small placer operations that took place on the Gulch. This has contributed to mercury being in Evans Creek. Some may be naturally occurring. It was thought at the time that there wasn't much gold upstream from Murphy Gulch and I have found this to be more or less true. There are very few signs above Murphy Gulch. Murphy Gulch is upstream less than two miles from the Wimer Dam and one half mile downstream from Sykes Creek which is another stream with extensive past mining operations both placer and hard rock (Howell, 2003).

Murphy Gulch Blue Ledge Mine, Jim Oden's cabin site, and site of stamp mill, cyanide tanks and other cabins are no longer visible. A small pile of decomposing lumber is all that is left of the cabin built in early 1930s. Approximately 30 yards from this site is a tunnel. It slopes straight out in front of the tunnel that dumps directly into the creek. The mine tunnel extends approximately two hundred feet back into the mountain in soft bedrock. This tunnel had no track or ore cars in it. A big tunnel beneath the BLM road is up near the top of the mountain. These two tunnels are approximately six feet high and three and a half to four feet in width. Both have water on the floors at the entrances (Howell, 2003).

BYBEE SPRINGS

There was a time during the later part of 19th century, when Mr. William Bybee was the largest land owner in Jackson County. The Bybee's had a home at the Meadows; 18435 East Evans Creek Road. Mr. Bybee built a resort at the mineral springs in 1882; it was called Bybee Springs Resort. Bybee Springs is located at T34 R3W section 34 western part of the north east quadrant. He also built a school in 1913. Bybee Springs School is located at 17019 East Evan Creek Road, near Maple Gulch and Sypher Gulch. Bybee Springs School is still intact on East Evans Creek Road (Liles and Boulter, 1992).

MAPLE GULCH DAM

Some time in the early 1900s a dam was built on Maple Gulch for water storage. It was eleven feet in height and was approximately 0.3 miles upstream of the confluence of Maple Gulch and Evans Creek. It is thought by some to have been built for the Bybee Springs School. It hardly seems likely that much expense and effort would be put forth to furnish water for the "tiny nearly playhouse size school house." Most of the one room county schools of the era had a water barrel or a hand pumped well at best. It seems more likely to have been built for irrigation purpose or for the resort (BLM, 2003 [a]).

Over the years the dam was pretty much ignored, it was not kept up or the water used. In the late 1970s some young men discovered the dam, but were dismayed to find the part of the dam had washed away. Thinking it would make an excellent swimming hole, they patched up the blowout with some plywood. Sediment gradually covered the plywood and dam again held water. However, the water was found to cold for swimming.

Over twenty years later the dam, located on BLM lands, had continued to fill with sediment and no longer served a purpose. However the dam served as a barrier to fish passage.

Maple Gulch dam was mechanically removed, during the summer of 2002, by BLM leaving behind approximately 750 cubic meters of sediment. A knickpoint formed in the reservoir sediments and quickly eroded a channel during the winter of 2002/2003 (BLM, 2003 [b]).

However, this is not the end of the story for Maple Gulch Dam. As part of his Ph.D. research at OSU, Greg Stewart is investigating the geomorphic consequences of two small dam removals; at Maple Gulch and Dinner Creek in southern Oregon. Greg Stewart has been using repeat surveys to estimate the volume and timing of sediment export from behind the dam. This data along

with process information is expected to result in a conceptual model for erosion following dam removal. This information provides guidance to future dam removal efforts (BLM, 2003 [b]).

ALPHONSO DAM

There appears to be no known historical records available, as to when the “Alphonso Dam’s” were first built. The earliest water rights were filed in 1892. The water was use in the 1890s by farmers and ranchers to irrigate their fields. Mr. Billie Griffith grew up along this stretch of Evans Creek. He remembers, “the original dams were of logs” and “watching the fish jump over them” (Griffith, 2003).

About 1933, Mr. Griffith's grandfather, Dave Swihart bought a small, operating lumber mill from relations; Earl and Noble Zimmerman. It was located in the flat area near the confluence of West Fork Evans Creek and East Evans Creek. The saw mill was run by a steam engine and operated until it burned about 1938 or 1939. They cut and sold, mainly pine, not much fir. The lumber, cut, air dried, and delivered to Grants Pass; brought in \$11.00/1,000 feet (Griffith, 2003).

In the early 1940s, Ben Alphonso came to the area. He lived on and owned much of the land along Evans Creek; from a little east of the confluence Ramsey Creek, to past the confluence of the West Fork Evans Creek and East Evans Creek. This included the Mission Bell Ranch where he originally lived (Griffith, 2003).

Ben was an interesting character. He seemed to think he owned the creek and the road; as much of his lands were on both sides. He tended to run his fences real close to the narrow road and was known to even stop a car a night; he even tried to intimidate people from using the road. Ben had a big bulldozer and went wherever he wished on it. He ran some cattle and logged timber off his land. He took out a lot of trees from around the creek and tried to run off any fishermen; he saw (Griffith, 2003).

Ben Alphonso was the one who built the concrete dam structures. The Upper Alphonso Diversion Dam, as it seems to be called, was 10 feet high, 56 feet long, and 3 feet wide and was made of aggregate material and concrete. It was in a V-shaped bedrock-constrained canyon two miles upstream from the confluence of West Fork Evans Creek and East Evans Creek. The impounded water behind the dam extended for a distance of approximately 550 feet, with an average width of 41 feet (BLM, 2003 [a]). Mr. Griffith remembers attending some meetings with Fish and Game in Grants Pass with Ben Alphonso back in the 1970s regarding the dam; it was during the period that the Rogue

Flyfishers Club, installed a fish ladder at the dam. There was also a Lower Alphonso Diversion Dam (Griffith, 2003).

When Ben Alphonso got older he sold the Mission Bell Ranch and moved down the road to some land near Spignet Creek. The new owners broke up the ranch and sold it off in smaller lots. The water rights and the irrigation may have become lost in the transactions. Water was no longer being used from the dam for irrigation. Over time the pool behind the dam filled with gravel and cobbles and no longer held much water (BLM, 2003 [a]).

The Upper Alphonso Diversion Dam was reported to impose the largest barrier of the seven irrigation diversion dams on East Evans Creek. Depending on the flow, the structure delayed or completely blocked upstream fish passage (BLM, 2003 [a]). On July 19, 1999, work began on the removal of the Upper Alphonso Diversion Dam Removal allowing fish to easily migrate upstream to an additional 12 miles of spawning and rearing habitat (BLM, 2003 [a]).

WEST FORK EVANS CREEK

West Fork Evans Creek is one of the few creeks that had a limited amount of gold mining activity. One water right was filed on a tributary, Wells Creek. The right had priority date of 1875 for the irrigation of 15 acres and stock watering. The water was diverted via the Montgomery ditch location at: S. E. $\frac{1}{4}$ N. W. $\frac{1}{4}$, Sec 33, TP. 34 S., R., 3 W (Jackson County Circuit Court, 1919).

Often over looked but very important to the whole southern Oregon region for the first twenty to thirty years, was the salt mined in the mountains above Evans Valley. The salt came from Salt Creek, a tributary of the West Fork Evans Creek. Located near Little Battle Mountain, the salt was of immense value as a preservative and condiment. Its value to the settlers was almost like gold. A rugged, winding, and steep road that could be quite treacherous in bad weather was used to bring out the salt. When the railroad came to Grants Pass in 1883, the commercial mining of salt was discontinued at Salt Creek (Liles and Boulter, 1992).

West Evans Creek Road was an early road because of the salt mine. Fuller and Company erected apparatus, in 1864, to evaporate the water and purify the contained salt (Wailing, 1884). Salt Creek Picnic Area is in Section 3, TP. 34 S., R., 3 W. and is near where the salt was mined. Battle Creek, Raspberry Creek, Rock Creek, Lick Creek, Cedar Creek, Elderberry Creek, Swamp Creek, Sand Creek, Steinmetz Creek, Sam Creek, and Slick Rock Creek are other tributaries of West Fork Evans Creek.

Elderberry Flat Campground is located on the banks of the West Fork Evans Creek at TP 33S, R 3W, Sec. 31; about nine miles up West Fork Evans Creek Road (BLM Road #34-3-24). For years it has been a popular spot for locals. Some large salmon have been taken at the creek over the years. It continues to be a popular with young people for parties. Swimming holes are located along the creek in the campground. Nine campsites are available with picnic tables, fire pits, garbage cans, and pit toilets provided (four campsites are located next to the creek) (BLM, 2003).

The campground is a popular fall hunting camp and may fill up at this time. ATV/motorcycle trails originate from this area and are allowed on trails and roads only; not in the creek and only on paved roads in the campground. A concern is the off road vehicles riding up the banks and road of the gravel soils in this area and adding increased sediment to the water (BLM, 2003).

Over the past summer, BLM built a new bridge on West Fork to replace a box culvert. There are more roads in the area than shown on topographical maps.

Glen Woolridge told about Harry Stokes who was the government hunter for many years. Harry had told him, "he had killed thirteen timber wolves in the Evans Creek area" (Arman and Wooldridge, 1982). Glen himself saw one up West Fork. Woolridge remembered hunting up West Fork in his model T, there were hardly any roads in there at the time, no bridges, you just forded the streams.

CHAPTER 7

GOLD HILL

Within a three mile stretch along Interstate 5 and the Rogue River are three communities nestled between the hills. During their hay day, Dardanells, Gold Hill, and Rock Point, played an important role in history of the Rogue Valley. The name Dardanells has been retained in the name of the local BP station and Mobile/RV Park. Gold Hill, an incorporated city, is void of its former prominence. Traffic whizzes past Rock Point, its former importance to weary travelers unacknowledged. It was along this stretch of the river, that a number of early attacks by the native inhabitants on travelers, took place. One can't help but wonder if it was to keep the visitors moving quickly through the area or to prevent the discovery of the gold in the waterways.

DARDANELLS

Only a concrete marker, standing to the right of the Gold Hill overpass and on-ramp to the south bound lane of Interstate Five, stands to acknowledge the historic community of Dardanells, where the first post office in Jackson County was established on 19 October 1852 with William G. TVault as postmaster. Other postal firsts are distinct to Dardanelles. It was the first to be discontinued (2 August 1853), and the first to be reestablished (29 October, 1855), until it was finally closed in 2 December 1878. It had been established and discontinued four times (Throne, 1968; Kidd, 1998).

Dardanelles was situated in the neighborhood of Gold Hill, the mountain, and it was among Jackson Counties first precincts, established in 1853, at the home of William Lawless (Wailing, 1884). Some people referred to the Dardanelles as the, "TVault place." The Colonel, as William G. TVault was called, took up a donation land claim near a creek that soon took his bore, TVault. The creek is now known as Kane Creek, named in honor of Dr. Kane, an immigrant who settled there in 1853 (Tucker, 1951).

The TVault home was located near where present day Foley Lane and Old Stage Road intersect. Its design was an important consideration for protection during native hostilities. Made of rough logs, the cabin had holes cut through

the walls for rifles. It was one of the homes where people “forted” up during the Rogue River Indian Wars of 1855-56. Nearby was Doctor G.H. Ambrose’s, donation claim, sold to Davis Evans in 1857 (Throne, 1968).

Dardanells was located along the Umpqua to Yreka Road and the Old Stage Road to Jacksonville. It is in this vicinity of the river, where the position of Gold Hill, the mountain, forms a bend in the river. Here, there is a little valley with Gold Hill and Blackwell Hill to the north east. Kane, Vaults, and Blackwell Creeks flow through this little valley which is now divided by interstate 5. There was a ferry, and later a toll bridge spanning the river (Throne, 1968).

Thomas Chavner came into Jacksonville looking for gold about 1856. Being unsuccessful in prospecting, he came to Dardanells and purchased a farm. He bought the James Hawkins donation land claim of 159.05 acres for \$750 in 1857. Chavner proceeded to lease this farm to Isaac Miller in July 1858. He left the area for a short time to prospect at Fraser River. He returned to Dardanells being unsuccessful in his venture (Morehouse-Genaw, 1988).

The lease agreement, between Chavner and Miller, gives an idea of agricultural activity that was taking place in this area: seven head of cows, seven calves, two yoke of oxen, one wagon, and six or eight hogs were included. Chavner agreed to furnish wheat and oats in good farming-like manner and he would do half the labor in securing the crop of grain that was on the farm by hauling, thrashing, and cleaning the same at the end of the lease. A garden was mentioned and Miller was to dig a good well near the house, plus some fencing. Chavner agreed to furnish enough timber to the saw mill on little Butte Creek to fence the house and yard. Miller agreed to haul the sawed lumber and build the fences. The lease also mentions the clover and timothy to be cut and stacked (Morehouse-Genaw, 1988).

On a small, unnamed butte near Fort Lane, now known as Gold Hill, was the sight of one of the largest pockets of gold found in Oregon. There are many varying stories on how the lead was found, and how much was actually produced, but there were five men filed on the claim: Bill Hays, George Ish, Jack Long, O. J. Graham, and Thomas Chavner. They filed five quartz claims at 3 p.m. on 13 January 1860, called the “Emigrant Lead.” People began to file claims until 10:00 p.m. that night. Soon there were about 150 claims taking up the whole side of the mountain (Morehouse-Genaw, 1988).

A letter sent to the Daily Alta California and printed February 26, 1860, mailed from Jacksonville, was signed “On the Wing,” and gave this description: “But the most simultaneous get up-and-bundle-out-to-diggin’s we ever saw was the rush to Gold Hill the other day. At midnight every stable in town was empty, everything that had wheels had a full freight. Saturday morning, January 14, Gold Hill looked like an overgrown camp meeting. Horses were hitched to trees

all around the glittering garden of gold. Like turkeys picking up corn did they pick up rocks loaded with gold. The next day, Sunday, the census of the county could have been taken without much trouble, as everybody was at Gold Hill” (Dufur, 1975)

The pocket was not immediately found. Hays sold out for \$5,000 to Henry Kippel, John McLoughlin, and Charley Williams. O. J. Graham sold out for \$5,000 to Henry Kippel and John E. Ross. At first, an arrastas driven by two mules was used to crush and finely grind the ore, but some gold was lost due to the inefficiency of the process. A steam quartz mill to reduce the rock was obtained in San Francisco. Walling described the mill: “It was a twelve stamp mill, of the ordinary type of free gold mill, amalgamating in battery, and crushing wet. Its first performance was the reduction of one hundred tons of refuse quartz, thrown aside as being too poor for the arrastra process, which yielded one hundred dollars per ton, but other runs were only three dollars per ton. The stamp mill was set up and operated at Dardanells” (Wailing, 1884).

The Dardanells precinct sprang into new life and activity. Down near the river, a hotel called the Adams House was built. In 1860, 25 people were living at Adams House. A general store, two blacksmiths, and a restaurant were soon operating businesses (Morehouse-Genaw, 1988). Dardanelles formed School District #17 in 1865. The school was in operation 56 years before joining with Gold Hill and eventually becoming a part of Central Point #6 (Nesheim, 1977).

Closer to the mine at the foot of Gold Hill, was erected a boarding house, trading post, and an eatery. During this period, mining companies were involved in trying to turn the course of the river. They hired 25 men to dig canals at Long Bar and Big Bar, with the intention of building dams across the river about one mile apart. The work that had been accomplished was destroyed by the big flood of the winter of 1861-62 (Morehouse-Genaw, 1988). However, the “boom” ceased, the mine was exhausted, and the Dardanelles decline into anonymity.

One of the main people to prosper was Thomas Chavner. Having gained financially from the Immigrant Mine, he had capital to invest. When a farmer needed money they often went to Chavner. If they were unable to meet the mortgage, Chavner would usually end up with the land. He soon became owner of a large amount of land and a toll bridge.

All the bridges and ferries had washed out in the flood of 1860-61, but reconstruction began right away. The August 9, 1862, Oregon Sentinel, called him “the irrepressible Thomas Chavner” when it announced the opening of his new bridge, across the Rogue River. Apparently, there was some dispute over the rights to bridges that were rebuilt after the 1860-61 flood, and kept the Chavner bridge out of operation for a time. In July 1867, the Oregon Sentinel reported a bridge fell during a heavy storm, owing to some of the braces being

broken. The bridge was built in 1862, but was out of repair for several years. "It was offered as a gift to the County last year by the owner, on condition that the Commissioners repaired and throw it open to the public. It has gone down to make way for the railroad bridge that will eventually span the river at that point." Chavner built another bridge which was completed in 1876 and called the Centennial Bridge. Chavner deeded the bridge to the county before his death in 1888. The bridge served the area until 1911.

About 1892, Chavner's offspring ordered a house from a catalog and had it assembled by William Stuart. The home and out buildings are still standing at 12162 Blackwell Road. The home, being a private residence, has in recent years had some restoration/maintenance work done. The Chavners had a large orchard of pears, apples, and cherries in addition to their grain crops and livestock.

Today, a KOA Campground, a District #3 Volunteer Fire station, and a RV Park are on the north side I-5 before entering Gold Hill. Lampman State Wayside, further west on Lampman Road, is showing neglect. On the south side of the interstate is a BP station, Mobile/RV Park, Laurel Hills Golf Course and a restaurant.

KANE CREEK

Five miles south of Gold Hill, on Kane Creek, was the Revenue pocket. It was mined out by the Rhoten brothers. The Ore Bin reported the amount taken from the pocket at \$100,000. It was in Section 11, Township 37 South, Range 3 West, at about the 2,570 foot elevation (Brooks and Ramp, 1968). The Roaring Gimlet Pocket was described by Diller, as a rich deposit discovered in 1893. It was found at the mouth of China Gulch, about 2.5 miles south of Gold Hill pocket. The combined yield was said to be about \$40,000 (Brooks and Ramp, 1968).

Centennial Gulch was the richest gulch of Upper Kane Creek in the vicinity of Paddy Hill. A circular eminence, Paddy Hill, was noted for its numerous pockets. Mining operations were handicapped by lack of right of way. Some surplus water from the McDougal ditch allowed for some sluicing.

Kane Creek was dredged in 1908 by the Electric Gold Dredging Co. They worked a tributary in SW $\frac{1}{4}$, Section 36, Township 36 South, Range 3 West. This operation made use of an electric power shovel which fed a washing plant at the rate of 500 cubic yards in 10 hours (Brooks and Ramp, 1968). The two forks and their tributaries were very rich wherever they were worked. They were worked until the flat basins of the valley made further work impractical. Paddy Hill and Centennial Gulch were on the west side and Harris Gulch on

the east. The Kane Creek basin is about a thousand feet wide here. A number of shafts were drilled in this area and showed good values. The old Miner and McDougal ranches were near where the right and left forks joined with the creek, cutting through them. One and a quarter miles of Kane Creek ran through the 350 acres of the Miner holdings (SOHS, 1978).

A present concern of the Kane Creek community, as well as others on the south bank, is heavy vegetation and brush on the hillsides and the fire hazards they present. Another concern is that of a proposed BLM Medford District Resource Management Plan (RMP) designating 16,250 acres in Timber Mountain/John's Peak for Off-Highway Vehicle (OHV) use. There are areas of granitic soils in the headwaters of Kane, Galls, Foothills, Willow, and Jackson Creeks. These areas are very susceptible to surface erosion when the surface has been disturbed. This could cause increase sediment in the streams.

GALL'S CREEK

Galls Creek is named for Jacob Gall, who settled on a 317 acre donation land claim in that vicinity on September 7, 1852 (Tucker, 1951). The claim bordered the Rogue River and Galls Creek. Jacob Gall was killed by Indians on the road near Fort Dardanelles on 7 August 1856. The farm sold at sheriff's auction a few years later. His decedents settled in and were influential in the north end of the county.

The Galls Creek community had a close connection to that of Rock Point. Galls Creek was one of the few communities that never had a Post Office of its own. Mail for the people living on Galls Creek went through the Post Office at Rock Point, which was the main trade center for the Galls Creek area. In the days before Gold Hill was founded, Rock Point was the largest town for many miles (Morehouse-Genaw, 1988).

Galls Creek was one of the most famous as well as among the most productive mining areas in the Gold Hill vicinity (Brooks and Ramp, 1968). It was referred to as the Bohemia mining district (Morehouse-Genaw, 1988). Between 8 October 1856 and 30 June 1880, Gall's Creek had 95 mining claims (Wailing, 1884).

Galls Creek drew in both placers and quartz miners. In the 1890s, nearly every man living on Galls Creek was a miner, or a day laborer for a mining company. There were very few farmers in the narrow Galls Creek basin at that time. Some of the famous mines on Galls Creek were: Tin Pan, Lucky Dee, Red Oak, and Big Foot (Morehouse-Genaw, 1988).

Much of the early community was made up of miners. But by the late 1870s, miners were settling with families. There was at least one family living on Galls Creek in 1878, as the Ashland Tidings report suggests: “A violent wind-storm visited Galls Creek the other day, unroofing the house of Mr. Shoemaker, while the family was at dinner, moving large timbers which took several men to replace. A little girl received a slight wound on the head from some particle of the falling roof, but otherwise no serious damage was done” (Ashland Tidings, 1878).

Other miners with families came to the Galls Creek area. Thomas Dungey, a carpenter with seven children, settled on 40 acres on Galls Creek. He was a placer miner. The James and Luann Horn family, with six offspring, also settled in the area. One son Dee (Dillard) mined, farmed, and raised a family on his father’s homestead. He apparently had an uncanny ability to find gold. He had several mines “The Home,” “The Old Gold,” and “Braden” (Morehouse-Genaw, 1988). The Braden mine was located two miles south of Gold Hill at SE ¼, Section 27, SE ¼, Section 28, Township 36 South, Range 3 West, at 1,550 feet. It had six adits and an inclined shaft with several drifts total about 25,000 feet. The mine was discovered about 1885 and the first ore ground by arrastra. Total production was not reported, but production for the year 1907, using a 10 stamped mill, was \$30,000. In 1916, the mill was sold to the owners of the Ashland Mine (Brooks and Ramp, 1968).

Even after the turn of the century there were several large mining companies working Galls Creek area. They often had mining camps set up at their claims and offered food and lodging to the men who worked in the mines.

Diller reported in 1914 that until a few years prior, the Blockert mine on Galls Creek was the most important placer mine in the Gold Hill district (Brooks and Ramp, 1968). The mine’s owners were William and Sarah Blackert, who had four offspring. Other spellings were Blackert, Blacket, Blackard, and Blacket (Morehouse-Genaw, 1988).

Galls Creek was one of the later districts to establish a school. It was most likely because of its predominance in mining and as very few farmers who lived on Galls Creek in the early days. The school was established 3 March 1889, as District #61. The Galls Creek School continued until consolidation with Gold Hill in 1923 (Morehouse-Genaw, 1988).

ODFW surveys (2001) confirmed steelhead, rainbow trout and cutthroat trout in Galls Creek, up to river mile 5.5. Galls Creek is a 303(d) listed stream for summer temperature (BLM, 2000).

ROCK POINT

Rock Point stands upon the north bank of the river, in Township 35 South, Range 3 West. The area that became known as Rock Point has some of the earliest recorded history in Jackson County. It was near here that Ewing Young's party was attacked by the native people during his cattle drive from California to the Willamette Valley in 1836. And earlier the Turner party had been attacked in the same vicinity.

In 1854, Frederick and Christina Rosenstock took up a donation land claim of 320 acres that encompassed both sides of the river. There was a ferry landing up river between the Miller and Rosenstock farms. A man named Brown operated the ferry in 1857. It was also know as Null and King ferry. Rosenstock sold part of the land claim in 1859 to J. B. White (Morehouse-Genaw, 1988).

John B. White is considered the founder of Rock Point. He became the original town proprietor and postmaster with the establishment of a post-office in 1859. This Post Office also served the Dardanelles off and on between 1864-1878 (Kidd, 1988). White was appointed a judge in the Dardanelles precinct of which Rock Point was a part, in 1857 (Morehouse-Genaw, 1988).

A toll bridge was built before 1859, but the flood of 1861-1862 destroyed the bridge. Lytle J. White immediately began work on a new bridge. It was a wood-covered bridge and was operated by the Rock Point Bridge Co. Most of the early bridges across the Rogue River were toll. It was later purchased by Jackson County in 1890 and operated as a free bridge until replaced by the Pacific Highway Bridge. The bridge marker is reached by taking the Rocky Point exit up to the bridge that crosses over the north side of the river. At the end of the bridge on the south side of the river the marker will be noted about 100 feet out onto the rocks.

In 1862, Abram Schulz put up a blacksmith shop. The Rock Point School appeared in 1863. Lytle J. White started construction in 1864 on the Rock Point Hotel. On February 8, 1865, the hotel opened to the public with a grand ball. White simultaneously established one of the first telegraph stations in the area when the hotel opened. Ben Haymond and John B. White dealt in merchandise, beginning in 1868 (Wailing, 1884).

John White hired J. S. Howard, to survey a town site and one block was platted for a town of Rock Point in 1871. Three years latter, he included another six blocks to the town Platte. The railroad ran out of money when it reached Roseburg and didn't resume construction, until 1883. John White donated the land for the Rock Point Cemetery in 1874 (Morehouse-Genaw, 1988).

White sold his part of the interest in the store to the Magruder brothers who also had a general store at the crossroads of the stage route and the wagon road to Jacksonville from Sams Valley and the Upper Rogue River area, later known as Central Point. Haymond eventually bought out the Magruders and continued to run the store until his death in 1906.

Rock Point was an important travel station and tavern for the stage on the Oregon and California Stage road (Tucker, 1951). A young girl named Ella Beal kept a diary in 1872 and she recorded her family's journey by wagon from Oregon to California. "Monday Evening September 2nd: Left Camp Birdseye this morning sun about an hour high traveled two miles came to a small town called Rockpoint. There we crossed the Rogue River on a toll bridge. (toll one dollar) (Beals, 1937).

Walling's said of Rock Point: "It is characterized by an excellent location, being upon the railroad, of which it is an important station, and in the geographical center of the two counties of Jackson and Josephine. Rock Point now contains a store, hotel, liver stable, blacksmith shop, saloon, post-office, school house and telegraph office. Above the town a short distance is the railroad bridge across Rogue river, a very considerable structure over 1,000 feet long, substantial and durable, one of the succession of extensive engineering works by which the iron causeway attains the valley" (Wailing, 1884).

Railroad construction resumed in 1884 when the railroad prepared a right away through the property owned by L.J. White. He was not pleased by this course of events. He and other land owners had differences of opinion on location and other rights-of-way. The railway accepted Chavner's offer to the Railroad Company for rights-of-way and town lots at low prices. With the coming of the railroad and the depot at the new and growing town of Gold Hill, the town of Rock Point began to wane.

Rock Point had only three Postmasters: John B. White, Ben Haymond, and Rose Haymond since its first appointment until it closed in 1912 (Kidd, 1988). In 1918, Rock Point School District #25 joined with the Gold Hill and eventually, Central Point School Districts (Nesheim, 1977).

Lytle White died in 1878 and his son Henry White eventually bought out other family members and continued to run the hotel. By the turn of the century Henry closed the hotel and turned to farming. The buildings of the town that once numbered 200 people gradually disappeared.

1907, marked a new period for the area when F.K. Duel and others purchased the hotel and surrounding land. The property grew from a one-acre family orchard to an eight hundred acre orchard yielding leading varieties of pears, apples, cherries, peaches, apricots, walnuts, and filberts. The orchards became known as Del Rio Orchards. The cold storage and packing facilities are

still standing along the railroad tracks. Up until 1997 locals were still able to by apples, peaches, and pears right at the farm. The Duel family sold to Lee and Margaret Traynham of California in 1997.

Over several years the Traynhams transformed the orchard into Southern Oregon's largest wine grape vineyard. One hundred eighty acres are planted with over 200,000 vines, twelve varietals, and 17 clones. Large windmills have been installed for frost protection. Del Rio supplies premium wine grapes to over 20 vintners in Oregon and California. The Rock Point Hotel is now opened to the public for wine tasting featuring Oregon wines produced with Del Rio Vineyard's grapes.

There are several restaurants across the river, as well as homes all along the south side of the Rogue River. Further down on the north side the river is farmland and aggregate facilities near the railroad tracks.

SARDINE CREEK

Sardine Creek enters the Rogue River on the north bank, just up river from Rock Point. It is best described as a narrow steep canyon, with a long ridge on each side. At about three miles, the creek forks around a ridge, splitting, the creek and the road. The Left Fork Sardine Creek has as its headwaters, a draw between Hillis Peak and Wilcox Peak. Right Fork Sardine Creek continues for about a mile before splitting again into Middle Fork Sardine Creek and Right Fork Sardine Creek. Their headwaters are in the vicinity of Sardine Mountain and McConville Peak. The early land survey records the area with high rugged hills, second rate soils, timber, fir, pine, and oak. At the time, the area was part of the 1853 Reservation Lands (Ives and Hyde, 1854-55).

Sardine Creek also has a long history as a mining region. According to Wailing, "Its mines were discovered in 1853 by a prospector living with A.J. Kane, near the Dardanelles. Mr. Kane reported that its name is derived from the fact that sardines formed a part of the provisions of the first arrivals. The story of its riches went forth and within a few days, a large number of miners were on the ground. The banks of the stream were worked extensively afterward by whites and Chinese, between whom the usual one-sided antagonism existed. Between 8 Oct 1856 and 30 Jun 1880, Sardine Creek had 132 mining claim locations (Wailing, 1884). Many along the creek were both farmers and miners. Placer mining was practiced along the creek, and later quartz mining dominated the area.

In 1890, Bartholomew Signorritti found gold west of the left fork of Sardine Creek (Morehouse-Genaw, 1988), on the northwest corner of Section 29, Township 35 South, Range 3 West. These workings are known as the Lucky

Bart mine are between 2,080 and 2,900 feet elevation. There are 11 claims and at least one in NE ¼ Section 29 is patented. Practically all the ores from the group were treated at a five stamp mill on Sardine Creek and the sulfides were shipped to the smelters. Production was possibly \$200,000. It has only been worked intermittently since 1913 (Brooks and Ramp, 1968). The Lucky Bart produced longer than many of the mines nearby, it was realizing about \$800 per ton in 1906 (Morehouse-Genaw, 1988).

The Lone Eagle (Gray Eagle) mine was also in the Sardine Creek area; located at SE ¼ Section 29, Township 35 South, Range 3 West, 1850 feet in elevation. Its development was prior to 1911, followed by inactivity until small operation just prior to 1942. It was equipped with an aerial tram that moved the ore to a 10-stamp mill on lower Sardine Creek (Brooks and Ramp, 1968).

Hammersly had a placer mine above Lucky Bard. Hinkle, Sperry, and White all had mines on Sardine Creek (Morehouse-Genaw, 1988). Sardine Creek has been an important producer of placer gold. A Dragline dredge was worked over one mile of the stream (Mayo, 1994).

The Sardine Creek area farmers, like others who were settled on rich gold producing creeks, also mined in the off season. The Neathammer family homestead was at the lower end of Sardine Creek, their farm holdings eventually were up to nearly 400 acres of farm land where they were occupied in general farming (Morehouse-Genaw, 1988).

Smith Dusenberry had a dairy a little further up the creek (Morehouse-Genaw, 1988). S.A. Dusenberry received irrigation water from West ditch and East ditch, plus from November 1st to May 1st he used water from East ditch for placer mining, with water returned to the stream after use. The placer mine was located at SE ¼, NE ¼, Section 8, Township 36 South, Range 3 West. The irrigated lands were in sections 8, 10, and 17. Other ditches were the Gold Hill ditch, Smith ditches, and Ring ditch. Sardine Creek Tributaries: from Spring Gulch, the Newton ditch usage was to irrigate two acres for watering stock and domestic use. On the Right Fork was the Young ditch and on the Left Fork were the Beeman at a quartz mill, and Hardman ditches in section 29 (Jackson County Circuit Court, 1919).

Joseph Dusenberry ran a saw mill on Sardine Creek and Samuel Elroy Dusenberry had a saw mill that he could transport and operate as he moved from place to place (Morehouse-Genaw, 1988).

Sardine Creek School District #88 operated from 1905-1922, when it joined the Gold Hill District. The first building and desk were crude but a modern building was built in 1915. The school was called Alderbrook School and there were eighteen students in 1924 (Nesheim, 1977).

The most unique and famous attribute, of Sardine Creek is the House of Mystery, or the Oregon Vortex. It is located at 4303 Sardine Creek Road. The oldest building at the site is one that leans precariously. It was built around 1890 by a mining company. A slide shortly after the turn of the 20th century caused it to lean at an angle. It is reported that a person will look taller or shorter than they really are, depending on where they're standing within the house. There are also reports that a compass will go haywire at the vortex (Fattig, 2003).

A physicist, Dr. H. John Lister, was intrigued by the site and purchased the property in 1918. He performed more than 14,000 experiments and explained the strange phenomena found there as a whirlpool of invisible energy. He felt the site contained unique properties, possibly distorting light. A pamphlet for the site describes the three-quarter-acre vortex as a "spherical field of force, half above the ground and half below," and by reason of this, the effected area is a circle (Fattig, 2003).

We are told the "vortex actually expands and contracts as much as 19 inches several times daily." And that "Albert Einstein thought a person's molecular structure also expands and contracts as they walk through the area." Apparently, the House of Mystery was a fore runner of similar "vortex" areas that would spring up. Such places are much the same with a house or cabin that has "slid" to its location and discovered. According to one critic: "The anti-gravity house is actually built at an angle of 25° off the true horizontal. This will explain every effect seen. Once in the area of an anti-gravity house you are always comparing the effects to what you are used to: normal, level floors and walls that are perpendicular to the ground." Whatever the explanation, the tour and mystery has been enjoyed by many.

Local school children have enjoyed field trips to the site for over fifty years. Over the years the site has attracted tourist from around the world and has been featured on television's "Unsolved Mysteries," the Discovery Channel and an "X-Files" episode (Fattig, 2003).

The Sardine Creek community has seen its share of fires. The largest and most threatening were the September 1981 Tin Pan Fire and August 1992 East Evans Creek Fire (Stockard and Stockard, 2003).

In more recent Sardine Creek history, a conflict with BLM ended in the court system. A local property owner protested the building of a proposed "logging road" adjoining his property. The proposed road was connected to a BLM timber sale. A preliminary report showed slide potential in this zone but his protest and concern was rebuffed by the agency. Building of the road proceeded over his protest. When the rains came his fears were realize, when a large mud slide covered a portion of his land. BLM was duly sued for the clean up and restoration of the injured land (Weiss, 2003).

GOLD HILL

The city of Gold Hill sits along the north side of the Rogue River. The I-5 Freeway runs south of the river and the city. The railroad runs through the town and was a major influence in the city's genesis and growth. State Highway 234 goes through the town and on toward Sams Valley. Nugget Butte sits to the north. The portion of town, north of the railroad tracks is on a hillside. According to the Gold Hill Historical Society, the amount of land area in Gold Hill is 1.567 square kilometers or 2.51 square miles. Its altitude is slightly over 1,000 feet. Annual rain precipitation is about 22 inches. The current population of Gold Hill is approximately 964. The approximate number of families is 378. The amount of surface water is 0 square kilometers. Gold Hill is positioned 42.43 degrees north of the equator and 123.05 degrees west of the prime meridian.

The city of Gold Hill is the new comer of the watershed communities. Its development was stimulated by the coming of the railroad. According to A.G. Wailing, between 8 October 1856 and 30 June 1880, the Gold Hill area had 361 mining claim locations (Wailing, 1884). The miners were not particularly interested in settling the area but there is a house that dates back to the 1870s. The house owned in 1968 by Mr. and Mrs. Lee H. Marsden, on 7th Street.

A toll bridge was constructed in 1858 on land owned by Thomas Chavner. It was destroyed by the 1862 flood but was rebuilt. The bridge was operated by Chavner's Rogue River Bridge Company from 1876-1888 when it was sold to Jackson County. The site, is located off the Gold Hill freeway north exit. Just before the bridge into Gold Hill, a turn right made on the Upper River Road, then a drive under the Southern Pacific Railroad bridge, you park just beyond it, and there is a marker. It has been placed about 200 feet out toward the river among the remains of old bridge abutments.

Gold Hill, the mountain, is just a little east of the town and on the south side of the Rogue. Gold was discovered there in 1859 and 1860. The Gold Hill Lode was originally owned by a partnership, with Thomas Chavner being one of the biggest stockholders. The others were James Hayes, O.J. Graham, George Ish, and A.J. Long. The state of Oregon Department to Geology and Mineral Industries officially recorded the amount taken from this mine as \$700,000. At 1990 prices, that same amount of gold would be worth \$15,312,500.00. With his share of profits, Chavner acquired nearly 2,000 acres of prime land along the Rogue River over the next twenty years (Morehouse-Genaw, 1988).

There was already the settlement at Dardanells when Thomas Chavner came to Jacksonville in 1856. He bought land and would continue to do so, and by

1877 he would pay taxes on 1,570 acres of farmland (Morehouse-Genaw, 1988).

In June of 1883, Chavner sold a right of way through his land to the O and C railroad. By November 1883, the bridge was built and tracks laid. A station was built where 4th Street is now. By the end of December the same year, noted surveyor James S. Howard had completed surveying and laying out a town site. The plat for the town of Gold Hill was filed with the Jackson County Commissioners by the Chavners and the streets and alleys deeded to the Public on 7 January 1884. Seven acres had been sold to the railroad and 80 acres surveyed for the town site. The town was named Gold Hill but it wasn't until 1895 that the city became incorporated. With incorporation, a town council was elected. In 1893 William S. Fitzgerald became the first postmaster (Kidd, 1988).

The railroad was completed in 1886 and a depot was established. Growth soon followed with several stores, saloons, a hotel, livery stable, newspaper (the Gold Hill News), bank, movie theater, bowling alley, and an opera house. A telegraph office and rail road linked the area to the rest of the country (Fitch, 1970). A flour mill was located just out of town on the road to Sams Valley. The Trumbles sold it to Oscar Gainard and he put A. Lamb in charge of the milling (Morehouse-Genaw, 1988).

Dr. Arad C. Stanley, a twenty year resident of Sams Valley, sold his Tolo and Sams Valley drug stores and moved his home and business to the growing town of Gold Hill. He soon became active in the city council and served as president. Sams Valley's tinsmith, W. H. Runnells, was also lured to Gold Hill where he opened another smithy (Morehouse-Genaw, 1988).

The Democratic Times for 31 October 1889 mentions over two thousand boxes of apples had been shipped out from the Gold Hill Station. A good mining season was being anticipated but depended on plenty of water. They received more water than they could wish for that winter. In February 1890 came a devastating flood, it was compared to the flood of 1861-62. The Rogue's high water took part of the town of Gold Hill. Several blocks were cut away and washed down stream. Tailings accumulated from the old mines caused some streams to change course, while some tailings were washed out and deposited onto farmlands. Mining dams, ditches, and reservoirs were also washed out. The railroad had to be closed to repair the damage it sustained (Democratic Times, 1889). However, it was not all bad news the flood waters had uncovered new seams and pockets of gold bearing material. Gold Hill area was enlivened with renewed mining activity (O'Harra, 1993).

News of quartz discoveries soon had the town full of activity. Miners came to the area to stake their claims while investors came looking for opportunity. Gold Hill was fast becoming a major shipping and trade site. Grain, hay,

cattle, hogs, and produce were shipped out by the Sams Valley farmers. J.W. Hays shipped fruit to the Willamette Valley from his orchard near Rock Point (Morehouse-Genaw, 1988).

Builders Griffis and Walder milled their own lumber with a portable sawmill which they would set up at different locations (Morehouse-Genaw, 1988). Trees were cut and milled locally for the buildings of the town.

In 1895, Utility Companies began to operate in Gold Hill. Rogue River Telephone Company installed poles and wire. Gold Hill saw the need for a fire department and in 1898 organized a hook and ladder: Co. No 1. In 1899 the Council approved the issuance of bonds to construct and operate a water works. In 1902 an Electric Light and Power Plant was granted an ordinance to operate (Fitch, 1970). Jesse Houck's Rogue River Milling Company supplied the town with electrical power and a pumping station for the water plant. In 1897 the town's newspaper was established, it would move from Gold Hill to Rogue River.

An interesting piece of Gold Hill history was that of the Gold Hill High Line Ditch Company. In June 1899, a Gold Hill High Line Ditch Company proposed, the building of a canal. It would begin near Prospect, and bring water from the Rogue River to the city of Gold Hill. The project had an estimated cost of \$1,000,000. A fifteen foot wide and ninety three mile long ditch at a depth between six and nine feet was envisioned (Fitch, 1970).

The water would be used for irrigation, mining, and floating timber to the railroad at Gold Hill. By 1900, the Gold Hill High Line Ditch Company (GHHLDC) had purchased much of the right of ways for the project. Surveyor J.S. Howard with his crew did a preliminary survey marking the route the canal would follow. The GHHLDC continued to promote their project and a part of the ditch was begun above the town and is still visible near the city water reservoir. By 1906 the GHHLDC was having difficulty purchasing the additional right-of-ways and was lacking capital to continue. It was sold to the Gold Hill Canal Company. The ditch never materialized (Morehouse-Genaw, 1988).

By 1911 Gold Hill had a large businesses district containing several large general stores, drug, furniture, jewelry, and confectionery stores. There was also an undertaker, a bank, a brick factory, and flour mill. Churches were being built, and a school, an opera house, and skating rink and hospital were in operation.

Over a hundred years ago hydro power began to be produced on the Rogue River for the needs the citizens of Gold Hill. In 1886 the Trumble's flour mill, located off Hwy. 234, a mile north of Gold Hill, changed ownership when it was purchased by Sams Valley farmer, Oscar Gainard. A. Lamb was hired to

operate the mill. When this mill first began operating and how it operated, is unknown (Morehouse-Genaw, 1988).

In 1899 the City Council approved the issuance of bonds to construct and operate a water works. In 1902, Jesse Houck's Electric Light and Power Plant was granted an ordinance to operate. His Rogue River Milling Company supplied the town with electrical power and a pumping station for the water plant (Fitch, 1970).

Beaver-Portland Cement Company built a plant at Gold Hill in 1914 and produced up to 1,000 barrels a day. It was the main employer of the people of Gold Hill from 1914 until it closed in the mid-1960s (Fitch, 1970). Other sources refer to it as the Ideal Cement Company. On the south side the river near the dam is a large irrigation ditch that carries water west past Galls Creek. There is also a small slough on the south bank, down river from the dam (Metskers, 2003).

The Electric Light and Power Plant was the first to supply electrical power to the community. Someone built a dam in the river and a canal or raceway, where for about one hundred years, the city of Gold Hill has obtained its municipal water supply. The dam was built for power generation, not flood control. The cement company generated power to operate its plant.

A diversion dam is near river mile 121 in the NW $\frac{1}{4}$, NE $\frac{1}{4}$, Section 115, Township 26 South, Range 3 West. There is a grated concrete headworks structure on the right abutment of the dam that regulates diversions into the 2,000 foot long diversion canal. The City's water treatment plant currently pumps water from the diversion canal at a point just upstream from the abandoned power plant (OWEB, 2003). The powerhouse has three generators and it would generate close to three kilowatts. The dam would be shut down for a couple of months of the year because of the low flow of the river.

Apparently, the canal was rebuilt in 1944, along with a fish weir, that was built to pipe salmon and steelhead out of the canal. Additional diversion facilities were built by the cement company, such as a fish ladder. The canal provides a natural way to keep logs and debris from damaging fish screens on the intake pumps. "The city's two pumps in the canal carry 450 gallons a minute to the nearby treatment plant, where the water is purified and distributed to nearly 500 homes and businesses in town" (Martin, 1999).

According to a Mail Tribune interview with ODFW fish and wildlife technician Brad Fuss, "On one end, the water velocity at the head gate creates more pressure than a fish can overcome to get out. On the other end is the channel's return to the river by narrowing through a culvert and dropping turbulently six to eight feet onto bedrock, bouncing through a 40-foot tunnel and emptying out into the Rogue River. That's not a good situation for a fish,

to get dropped six feet onto rough bedrock and bounced through a rock tunnel” (Martin, 1999).

In 1968 the Ideal Cement Company abandoned the power plant facilities and transferred title to the City of Gold Hill. The city unsuccessfully attempted to keep the power plant on line, but the power plant fell into disuse (OWEB, 2003).

The City of Gold Hill lost its hydroelectric water right because they stopped using it and stopped paying the re-licensing fees. It hasn't produced power since the late 1970s. As they couldn't sell the electricity, they lost the water rights because they lacked capital to pay for them. The water rights were canceled in 1991. PP and L did a preliminary study of the power plant in the mid 1970s and found it to be an uneconomical venture.

However, the city has water rights for diverting water for municipal uses and for diverting water for hydroelectric power generation. It was the permit for hydroelectric generation that was canceled. They continue to divert water for municipal uses.

There is a non-operational, impassable fish ladder. ODFW had the fish passage closed because it takes the fish so long to get through that they are too easy to catch. They also closed Rainey Falls to fishing for the same reason. According to Water Watch, “there is no significant fish passage problem there now; there is a poaching problem though where the fish school up. The passage problems are more severe in the rapids upstream.”

The City of Gold Hill inherited problems that they have been trying to resolve for the past twenty to thirty years. Previous solutions have been hampered by lack of funds and opposition by government agencies and environmental groups. Gold Hill's Public Works Department has worked with RVCOG and obtained grant funding for three projects: removal of the Gold Hill Dam by the Corps of Engineers, moving the city's water supply intake, and wetland and riparian restoration in the adjacent diversion channel and the adjacent wetland and riparian areas.

Last January, The Oregonian reported on the removal and of decommissioning plans for the Gold Hill diversion dam. It will apparently “become a military training exercise for operating heavy equipment. If the Department of Defense agrees to help the city, reservists may use bulldozers and other equipment to remove the diversion dam. We try to find real-world training opportunities on American soil that can help us prepare for the global experience,” said Captain Sheldon White of Robins Air Force Base in Warner Robins, Georgia (The Oregonian, 2003).

Drinking water for the City of Gold Hill is supplied by an intake on the Rogue River. This public water system serves approximately 1,000 citizens. Gold

Hill's portion of the drinking water protection area is located in the Bear Creek and Rogue River/Snider Creek Watersheds in the Middle Rogue Sub-Basin of the Southern Oregon Coastal Basin.

Included in this area are a number of tributaries to the Rogue River including Water Gulch, Rock Creek, Sams Creek, Snider Creek, Bear Creek (and its numerous tributaries), and Whetstone Creek. A total of 50 potential contaminant sources were identified in City of Gold Hill's drinking water protection area.

A new water system was recently installed to improve the city's capacity to deliver water. It has been an issue in the summer season, when demand for water is high. Residents would often experience low pressure. The old and undersized 4-inch water mains on Sixth Avenue, First Street and Fourth Avenue, were replaced with new 6-inch pipes which are looped. Water will remain fresh and not stay in some of these dead-end lines where it used to collect and become discolored because of the iron in the old pipes. Funding of a \$695,137 grant came from the Oregon Economic and Community Development Department (Mail Tribune, 2000).

On July 31, 1955 the last passenger train came to the Gold Hill the depot, and it closed. Although many businesses have closed in Gold Hill over the years, the population has remained fairly constant, averaging about 600. The highest population being 700 in 1909, and the lowest was 502 in 1950. Gold Hill and surrounding communities have grown and many living up the creeks and gulches are only a few minutes away from Interstate 5, and less than 20 30 minutes from their place of employment. The current population is over 1,000 (Fitch, 1970).

CHAPTER 8

ROGUE RIVER AND SURROUNDING COMMUNITIES

ROGUE RIVER/TAILHOLT/WOODINVILLE

The city of Rogue River, the largest of the two incorporated cities within the watershed, is located at the western border both of Jackson County and the SBW. Its proximity is close to the city of Grants Pass, situated about seven miles to the west. Medford is located approximately 26 miles south east. The population of Rogue River is just under 2,000. The amount of land area in Rogue River is 2.508 square kilometers.

The city is ensconced in a valley with the Rogue River running through it from an east to west direction. The town straddles the Rogue River, from which it took its name in 1912, as well as Interstate 5 and the railroad. A saw mill is still in operation near its eastern city limits. Evans Creek flows down through the Evans Valley to the north. From the west, Fielder Creek intersects with Evans Creek. Fielder Mountain to the west is 3,747 feet in elevation. Ward Creek, a tributary of the Rogue River, runs through the town from the north east.

The town of Rogue River has had a series of names. It is one of the earlier settlements in the Rogue River Valley. It was first know as Evans Ferry, later Tailholt, and Woodville (1876-1912). Woodville was the first legal name given to the town. The settlement of Woodville became a stage station and a blacksmith establishment for shoeing horses. From the ferry, pack trains went to the gold mines in Evans Valley, carrying supplies to the miners (Tucker, 1951).

Evans Creek was prospected for gold before the Indian war of 1853. It was abandoned by whites from fear of the Indians, until the final settlement of these difficulties in 1856. Possibly before this date, the Chinese came in large numbers, took possession of the ground, and mined successfully. They were driven out by whites when their good fortune became known, and the latter took the claims and made good wages. Various other mineral substances of value were found on this stream (Wailing, 1884).

A river-crossing known as Tailholt was used by the early miners and prospectors that came in 1848 looking for gold. The original settlers swam across the sometimes treacherous Rogue River by grabbing hold of their horse's tail. Davis "Coyote" Evans saw a chance to cash in on the growing need for dependable transportation across the river. In the year 1850 or 1851, he built a ferry and two cabins at the mouth of Evans Creek (Sheffield). He also planted two acres in potatoes, cabbage, onions, corn, and beans (Waldron, 1992).

This first ferry established by Davis Evans, was know as Jewett Ferry. On October 12, 1854, a receipt was filed in the county courthouse in Jacksonville for a ferry license on Rogue River. The receipt states that D. Evans paid one hundred dollars for a ferry license (Nesheim, 1977). The ferry boat was approximately eleven feet by forty feet and maneuvered by a rope of two inch rawhide that spanned the river (Waldron, 1992).

In 1854 the state legislature (for advertising purposes) changed the name of the Rogue River to Gold River. Since the new name did not prove popular, the original name was restored to the river by the legislature in 1855. In the early 1850's, the settlement near the north of Evans' Ferry was served by the post office at "Gold River", which was located at Evans Ferry about three miles below the present town. It opened, 18 April 1855 with Davis Evans as postmaster. The following spring John Sears became postmaster until it was discontinued in 1859 (Nesheim, 1977).

Davis Evans' ferry at the mouth of Evans Creek was in operation only about a year when the station was burned by hostile natives in August 1852, and the ferry boat suffered damage. Evans sold the site and moved downstream about two miles to supply miners and packers from a new location.

In 1868, a covered bridge was built beside the Rogue River ferry so the stage could cross Evans Creek. The Evans Creek covered bridge was moved seven miles up Evans Creek in 1914 and replaced with a concrete bridge. In 1872, John Wood built a cabin on the east side of the creek. His was an improvement over some of the more rustic dwellings since his was of sawed lumber. The settlement that grew up around him honored him with naming itself for him. The name Woodville continued until the change in 1912 to Rogue River (Nesheim, 1977).

By the early 1870s, Tailholt had been renamed Woodville, a center for small scale lumber and agricultural activities. The 1862 flood destroyed the ferry, but it was replaced. First a rope bridge, then in the late 19th century, a wooden bridge spanned the river. With the arrival of the railroad to the region in 1884, the railroad tracks were laid parallel to the river and a station was built just north of the present bridge, at the head of the aptly named "Depot Street." In 1909, the first steel bridge was built across the Rogue River. A new bridge was started in 1949 and by September 30th, 1950, the bridge was

complete. Construction of a new bridge started in April 2003 and is slated for completion in the fall of 2005 (RVCOG).

When you get off the freeway and cross the bridge there is a little park at the right of the bridge, there is a marker for the ferry site at the park. Coyote Evans and Fleming Wayside Parks, located on the Rogue River, are accessed off I-5 and Rogue River Highway, each on one side or the other of Depot Street. The Jet Boat Excursion landing is located in Fleming Wayside Park. Parking and a dock for private boats and rafts can be found at Coyote Evans Park (RVCOG).

Originally, in the general area of the Rogue River District, there appeared in the 1860s, the Schleifflin School. It was a log building and it was given #35. The building was subsequently replaced numerous times each being an improvement over the former, but in 1882, while William M. Colvig was Superintendent, there was a change. By 1883, the first schoolhouse was built in Woodville, with the creation of the Woodville School which took #35, Schleifflin was issued #48. No explanation of the number switch has surfaced (Nesheim, 1977).

In 1906 the Woodville High School had one teacher. In 1909, a modern six-room, brick building costing \$25,000 was constructed. The bricks were made locally. In 1912, the city and school names were changed to "Rogue River" (Nesheim, 1977).

In 1874 quicksilver was found and mined on Evans Creek. An assay office was established in Woodville (Wailing, 1884). The stage route passed through Woodville. Later a bridge was built for the train and it passed through Woodville. The rural shipping point soon drew a new village around it, suddenly becoming a familiar center of activity. In 1912, by a vote of the people, Woodville was renamed City of Rogue River and incorporated.

Prune and apple orchards were established in Rogue River, but were cut down after 1913. Pears and strawberries were grown, where many of today's business and homes now sit (O'Harra, 1993).

The new city grew slowly. In 1915 Rogue River had a population estimated at 500, but by 1920 the census reported just 211 residents, growing to just 286 by 1930. There were just less than 600 residents in 1950 (RVCOG). Rogue River has experienced steady growth over the past fifty years. The current population is around 2,000. The area is also known for its growing senior population. The lure of a small, rural community, natural beauty, availability of comfortable, affordable housing, and level of personal safety, has drawn many retired residents to the area. A residential living home has been built in recent years to accommodate the senior citizens. The Rogue River Community Center and the Multi-Service Center are located at 132 Broadway Street. The

Community Center serves lunch to seniors every weekday for a nominal fee. The center serves residents inside and outside the city.

The five-acre Palmerton Arboretum located on West Evans Creek Road was originally a nursery during the 1920s and 1930s. It contains plant specimens from all over the world, including pines from Japan, cedars from the Mediterranean, and several large coastal redwoods. The city is a 15-year member of the Tree City U.S.A. program, joining with cities across America to celebrate Arbor Day and works to promote trees and tree-planting (Rogue River Chamber of Commerce, 2001).

A large modern district fire station is located in Rogue River and serves not only the city of Rogue River, but the surrounding rural community. Other public buildings include city hall, a new library, and post office.

There is a small shopping center as well as business and shops on both sides the river. Most of the housing is concentrated on the north side of the river.

“Drinking water for the City of Rogue River is supplied by an intake on the Rogue River. This public water system serves approximately 2,000 citizens. The intake is located in the Rogue River/Savage Creek/Evans Creek Watershed. In addition, Rogue River uses groundwater wells for drinking water supply. A total of 30 potential contamination sources were identified within the Rogue River portion of the drinking water protection area” (City of Rogue River).

FIELDER CREEK

Thomas Fielder was a pioneer settler for whom the creek and mountain were named (Tucker, 1951). Fielder purchased land from Samuel Smith in Section 9, Township 35, Range 4 West. Lumber for the town of Woodville had been furnished by the Steckel Sawmill since the 1870s. It was located about four miles up West Evans Creek and south of Fielder Creek. It was of the old circular-saw type and it would cut a maximum of four thousand board feet of lumber a day. The mill was operated by Mr. Steckel and his eldest daughter (Nesheim, 1977).

Fielder Dam is located on Evans Creek a few miles out of Rogue River. Apparently it is privately owned and was built about 70 years ago to divert water for irrigation. Fielder Dam is about 18 feet high and has an existing ladder that is reported in 1979 to be deteriorated to the point of being dysfunctional (Bureau of Reclamation, 1979).

WARDS CREEK

Wards Creek, a tributary of the Rogue River, runs through the town from the north east. The creek was named for Oliver P. Ward (Tucker, 1951). Metsker's Map of Jackson County shows the headwaters for Wards Creek near Wilcox Peak and in the vicinity of the mines at the head of Left Fork Sardine Creek, the creek has produced placer gold. There is Magerle Reservoir in Section 25, Township 35 South, Range 4 West. Boyd Creek appears to be the only tributary of Ward Creek.

Mining Wealth in 1904 reported "Wards Creek as the scene of an interesting new enterprise, that of combining mining with fruit, hay, and stock ranching. The gist of the plan is to store the water by means of great retaining dams. The winter season will furnish water in abundance for mining the dams will store water for irrigation of the summer. This corporation is the Bagley Improvement Company. It dates from 1900, the year in which John H. Bagley visited Rogue River and latter with a partner bought some land and mining claims on Wards Creek" (SOHS, 1978). The Bagley ditch named after John Bagley was used for placer mining and irrigation (Jackson County Circuit Court, 1919).

Meadowbrook Orchard had 27 acres irrigated from Wards Creek ditch in Section 14, Township 36 South, Range 4 West. Lizzie Hale had 6.5 acres irrigated from Trimble ditch in Section 14, Township 36 South, Range 4 West (Jackson County Circuit Court, 1919).

CHAPTER 9

FORT LANE/WILLOW SPRINGS/TOLO/GOLD RAY

FORT LANE

Fort Lane was built and used by the U. S. military in 1853-1856. The fort served mainly as a protection for the native people from the Euro-American settlers (Morehouse-Genaw, 1998). The location of the fort was in the southern part of the north eastern quadrant of Section 19, Township 36, Range 2 West. The reserves boundaries extended to the river, into sections 17, 18, and 20. It was situated across the river from the western appendage of Lower Table Rock. Most roads connected to or led to Fort Lane. The hills west, south, and southwest of the military reserve are described as Oak & Y (young?) Pine, openings, rounded hills, soil second rate. To the east in the Bear Creek Basin were the Rich Prairie Bottom lands.

The fort was considered to be commodiously and even handsomely built. A stockade enclosed quite a spacious area in which a parade ground, together with barracks for private soldiers, houses for officers, and an armory, a hospital and other necessary buildings, were all built of log (Wailing, 1884). There was abundant grazing for the horses and hay and wood available for cutting on the 640 acre reservation. In 1854 there was a good garden attached to the post, but they had a problem with grasshoppers devouring it. The river was used for bathing (Grants Pass Daily Courier, 1960).

Lieutenant Henry Larcom Abbot of the corps of topographical engineers, while on exploration and survey of California and Oregon, (railroad survey) made notations in his diary: "Nov 2: Camped at Harris's house where woman fought where we found forage. Bad divide to Jump-Off Joe Creek could be avoided by following Creek down. Then level country with slight hills and open timber of sugar maple oak and a little pine and hemlock. Nov. 3: Good road to Fort Lane. Trees mostly thin and of oak, pine, etc. Salt spring. Nov. 4: Lay by at Fort Lane & observed and turned over property." The party continued south the next day. Sawyer noted there was a salt lick at Fort Lane (Sawyer, 1932).

A quarter of a century after its last days for the military, Wailing remarked that the old fort had fallen into ruins, and was scarcely a vestige of what was once

(Wailing, 1884). In 1929, the Daughters of the American Revolution, Crater Lake Chapter, placed a marker at the ruins site south of Gold Ray Road. The stones for this marker were gathered from the site of the former fort.

WILLOW SPRINGS

One of the early farms in the Rogue Valley was the Dean farm, taken up in 1851. It was located on "Old Stage Road," of the Willows Springs district, about five miles north of Jacksonville. It included the spring of Willow Springs. The old farm home was characteristic of many of the farm home yards of the day, as it was surrounded by shade trees and a lawn. John Kennedy also built at Willow Springs and for a number of years, both he and Sears kept wayside lodging for miners (Daley).

Daniel Fisher had a claim nearby in the gulch where gold was discovered in 1852. Lane Gulch was also reported as being very "rich" (Daley). The 1855 GLO survey map shows about 20 Donation Land Claims of 160-300 plus acres. Portions of the lands were under cultivation. The Bowdin mining claim, less than a mile east of the fort, was probably a hard rock mine. There was a saw mill, with a mill race, branching off Stewart Creek (Bear Creek), flowing to the northwest. The race was in sections 20 and 21 and a little over ½ mile long. This map shows all the land along the river to have been surveyed, they were numbered and the lot sizes varied (GLO, 1855). From 8 October 1856 to 30 June 1880, Willow Springs had 785 mining claim locations (Wailing, 1884).

In 1862 Willow Springs had three boarding houses, three saloons, a store, a blacksmith shop, and other buildings (Oregon Sentinel, 1862). The community opened a Post Office in 1864 at the home of the first Postmaster, rancher Samuel Dean. There would be seven Postmasters from 1864-1886 (Kidd, 1998). The people who settled there were of mixed vocations including fishing, brick making, lumbering, and mining but mostly the Willow Springs area was noted as a farming community.

The Willow Springs mines were worked over several times with considerable profit and later abandoned as exhausted. Reports in The Democratic Times, April 1880, show that gold mining activity was still alive in 1880:

- Ralls & Co. in the Willow Springs district are cleaning up and making several dollars a day to the hand.
- Kabler, McDonnough & Co. of the Fort Lane diggings, made another clean-up last week, which resulted favorably. They will do quite well this season.

- Egan & Co. will resume work on their quartz ledge near Willow Springs at once.
- Montgomery & Dodge have struck a rich pocket of quartz in the Blackwell diggings (The Democratic Times, 1880).

TOLO

In 1886 the name of Willow Springs was changed to Tolo. With the coming of the railroad, the farmers saw an opportunity for a shipping point and decided to take advantage of it. A town site was platted and surveyed by Payne Page Prim and filed 6 December 1888. It was located in part of Section 19 and 20, Township 36, Range 2 West. It was an ambitious plan for a large town, with 16 more blocks than the neighboring railroad town of Gold Hill (Morehouse-Genaw, 1998). Tolo had postmaster appointment from 1886-1918. However, Tolo didn't develop as the promoters planned (Kidd, 1998).

The Tolo Townsite and Milling Company promoted the Townsite and offered building materials at low prices. A Democratic Times ad on January 24, 1889, claimed "A mill site, mill race, and side track that would be furnished by the Tolo Townsite and Milling Company for a nominal sum to any responsible party who will put up a flour mill at Tolo" (The Democratic Times, 1889).

Dr. Charles Ray came to the Rogue Valley in 1898, to look after his brother Colonel Frank Ray's mining interest. Beside their mining interest, they also had vast timber holdings in the reaches of the Upper Rogue. The Rays were men who saw potential in the many natural resources of southern Oregon and they had the capital and financial backing to make their ventures work.

Their timber operation used the Rogue River to get their logs to a saw mill at Tolo. Men in boats accompanied the logs, as they floated down the river. At the Tolo mill, the logs were cut into lumber, and used locally or shipped out. The mill being near the railroad was advantageous for transportation of the finished product. The Ray brothers accumulated and developed land surrounding Tolo. They opened up a rock quarry on Blackwell Hill, but their most noted achievement would be at the Rogue River itself (Morehouse-Genaw, 1998).

The Tolo community was producing a lot of building materials from its large brick factory, saw mill, and a rock quarry, thus it received its nickname of "Construction City." Other businesses were established including a hotel, boarding house, and several stores. In 1910 a lovely school house of brick was built. It burned in 1950. Even with all its assets, the town of Tolo never really

took off. By 1918 the stores had closed as well as the railroad depot (Morehouse-Genaw, 1998).

The old wood framed Willow Springs School still stands on the hillside with views of the Bear Creek Valley to the east. Apparently, the land is owned by Jackson County and the building by School District 6. Interstate 5 separates the community that is mainly farm and rural residential to the south. North of the Interstate is located more of the industry as well as residential and farmland. The industries are much of the same venue as in times past: aggregate, wood, and agricultural products.

GOLD RAY

When the Ray brothers Dr. C. R. Ray and Colonel Frank Ray, bought a mine owned by Dan Condor, they also acquired a site to harness the power of the Rogue River. The Rays raised some capital from the American Tobacco Company, of which Frank Ray was a vice-president. Additional capital was raised on the New York Market in the sale of bonds for a dam and power plant. The dam site was located a mile north of Tolo and construction took place in 1903-04. Even at that date there was some controversy over the building of the dam, as some believed it would obstruct fish passage. The site was placed under 24-hour armed guard after it had been discovered that someone had went so far as to sabotage it with dynamite. The dynamite was found and no damage was done to the project or a person from it. However, in May 1903 over 50 pounds of dynamite was set off by those working on the dam. As Teddy Roosevelt's, presidential train went past the construction site, on his historic trip through the valley, the workers saluted him by blasting the dynamite as well as shooting off their guns (Morehouse-Genaw, 1998).

In early 1900, there was very little in the way of a requirement if a person decided to dam the river. If you owned the land adjacent to the river, and posted your intent to build a dam and got the fish ways approved by the fish warden, you could build a dam (Arman and Wooldridge, 1982). Dr. C. R. Ray declared his intent of using it for mining, irrigation, and power.

The project started with the diversion of the Rogue around the dam site to expose the basalt river bed. Logs came from Prospect and were floated down the river, to be bolted into the riverbed, and strengthened by cement to provided extra strength. The laborers worked a twelve hour day for \$2.00.

When the Rays began filling their reservoir, it affected the city of Grants Pass and the river below. Instead of closing the gates gradually and letting the water fill the reservoir accordingly, Ray just shut the gates down tight. The result was the river dropping to a brook-sized trickle. Grants Pass spent the night in

darkness until the river rose again because the stream was dropped too low to operate the power plant's wheel at the Grants Pass Dam. Below the Grants Pass dam, 20-25 pound salmon flopped around in the mud (Arman and Wooldridge, 1982).

The dam was equipped with two vertical 56-inch turbines to drive the generating unit. It generated power from 7 December 1904 until 1971. The generating unit was replaced by two 750 KW generators in 1905 (Morehouse-Genaw, 1998). The dam was named as the Gold Ray Dam and the power plant as the Condor Water and Power. In 1907 it became Rogue River Electric. California-Oregon Power Company acquired the plant in 1913. It became Pacific Power and Light Company's original holdings. Shortly after the power plant closed in 1971, negotiations started with Jackson County to gain ownership of the dam and surrounding property. In 1941 the original dam was replaced with a concrete dam that included a concrete chamber to house a fish counter at the fish ladders (Thorne, 1968).

Utility contracts were signed with many local municipalities as well as mines and orchards of the area. It furnished electrical power to Medford, Jacksonville, Central Point, Grants Pass, Gold Hill, and Ashland. With this relatively inexpensive source of electrical power, many of the large mining companies took advantage of it to run their mining equipment and giant dredges.

Gold Ray Bridge once spanned the river below the dam, but it was washed out during a high water event. Across the river was the Ray's lodge. A little up river on the south bank was a small railroad depot. In order to avoid confusion with Gold Ray, the railroad company named its station "Ray Gold" (Tucker, 1951). It was convenient for the Rays to be able to board the train there. Today there is an upscale residential community on the north bank know as Gold Ray Estates. The community is entered via John Day Drive from Highway 234.

Jackson County owns 85.28 acres that are maintained as a natural area. Gold Ray Dam is located on Tax Lot 300, in Section 16, Township 36 South, Range 2 West, and is also county-owned. The county owned properties are zoned Open Space Reserve. Kelly Slough behind Gold Ray Dam provides unique habitat for many aquatic birds and has been identified as a potential Bird Conservation Area.

FLOOD DAMAGE

The largest flood in recorded history in the Rogue Basin was in December of 1861 when an estimated 1,260,000 acre-feet was discharged on the Rogue

River near Tolo. The second largest flood occurred in 1890, releasing 132,000 acre-feet near Tolo (OWRD, 1985).

The Bybee Bridge, built in 1913, suffered its heaviest damage from the big flood of 1927. The approach was washed out and the bridge was closed to traffic for a considerable length of time. During the 1955 flood, Camp White Military Bridge was washed out (Leavitt).

During the 1964 flood at Table Rock, “Fences were washed out and many trees were uprooted, but worst of all was the damage it did to the farmer’s fields. It carried the good soil away and left great depressions deep enough and wide enough to set a house in. Great deposits of sand were left where the river loam had been” (Leavitt). The 1964 flood, a 100-year flood event, released 131,000 acre feet at Gold Ray Dam, caused over \$25 million in damage, and instigated a myriad of flood control measures (OWRD, 1985).

The New Year’s high water event of 1997 turned the river away from Table Rock and sent it crashing through a series of old aggregate pits on the south bank, before spilling back into its original channel between Touvelle State Park and Gold Ray Dam. Opinion is that if left to its own devices, the river’s winter flows would continue washing through more old pits, eventually drying up about a mile of prime riverbed that has channeled the Rogue since before the 1930s (Freeman, 2002).

The flood water washed through a 250-foot earthen berm and into a state-owned, reclaimed gravel pond. This breach threatened adjacent mine ponds and nearby Harry and David pear orchards. With emergency authorization, a downstream cut through the pond bank diverted the river flow back to the original channel downstream of Salmon Rock. This action greatly minimized the flood damage to surrounding properties. The river has since cut a larger opening in the berm and the washed out materials have created a midstream island that have caused all flows toward Salmon Rock to be cut off.

The dried-out stretch includes prime fall chinook spawning gravel as well as key “side-channels” used by juvenile wild steelhead and wild coho salmon. David Haight, a fisheries biologist with the Oregon Department of Fish and Wildlife, quoted in the Medford Mail Tribune said, “It’s a fairly complex habitat for the Rogue River. You’d lose a lot of developed side-channels if the river got captured in those (gravel) pits” (Freeman, 2002).

A 2000 state assessment reported that the re-channeled river dumps an estimated 100 tons of sediment annually into this stretch of the Rogue. A concern is that future high water events will continue to blast through more berms and farmland all the way to Kirkland Road (Freeman, 2002). Near here down stream from the mouth of Bear Creek, is a gray area where the

boundaries lines of the northwest Bear Creek Watershed and of the southeast boundaries of the SBW meet.

Salmon Rock has been a favorite, chinook-fishing hole for fishermen. Its deep, cool hole was the first primary resting place for salmon once they crossed the passage at Gold Ray Dam more than two miles downstream. Apparently, a jet boat was the only access to the hole, as walk-in access was closed and driftboat access was limited because there are no public ramps downstream of it (Freeman, 2002).

Mark Freeman, reporter for the Mail Tribune described Salmon Rock as “The actual rock is a house-sized piece of basalt that juts into the river from an underground rock formation that is most likely the base of Lower Table Rock. Decades, perhaps centuries, of flowing water carved a deep hole around the rock big enough to hide three truck-and-trailer rigs under water” (Freeman, 2002).

A project costing over \$1 million, with more than half of that coming from state funds has begun. The Oregon Watershed Enhancement Board gave \$283,000 toward the project, and the Oregon Department of Transportation contributed over \$220,000. Rogue Aggregates donated materials, equipment, and personnel to this project, providing \$200,000 in in-kind support. The engineering and hydrologic study necessary for this project was completed and paid for by Rogue Aggregates before the OWEB funding was approved. This amounted to close to \$50,000.00. Rogue River Guides and Rogue Flyfishers Association also have put money or sweat into the project (Freeman, 2003).

Frank Schnitzer, a reclamation specialist with the Oregon Department of Geology and Mineral Industries, helped devise a plan to reroute the river by installing huge piles of large rocks. Excavators were used to place the jetty-like rock bars in the stream. These “barbs,” are to slow down water flows and fortify the berm. Earth movers thickened the berm, and its slopes were either planted with willows or lined with the willow branch piles. A path was scraped through the old river channel in hopes to eventually to realign the river into its pre-flood path past Salmon Rock via further high water events (Freeman, 2003).

CONSIDERATION OF A PARK AND BOAT LAUNCH

In April and May of 2002, Jackson County Parks and Recreation Committee considered the question of the land and the wetland created by the Gold Ray Dam. One issue was, “Most of that is private property and the owners were having a hard time selling because it is designated wetland. It was suggested that the State could possibly take that over. ODOT is trying to sell a piece of

property just above Kelly Slough. It's the property where the river took it over. Land that is turned over to State Parks will be good for our economy. It will do nothing but help our economy. It would create more recreational opportunities, without the County incurring the costs of operation and maintenance of the acquired land." The Committee wanted to look into it further.

At the second meeting of the Committee, an aerial photo was viewed to show where the property is located. "It's mostly water and is located where the river in the '97 flood changed it's course and took out some renovated bottle pits, used as fishing ponds. A boat launch is needed at the backwaters of Gold Ray Dam." It was stated that, we do have a place there just above the powerhouse, that would make a good launch ramp. The jet boat community is against any access there because they want to keep it private and not heavily used. It was added that the reason that idea hasn't moved forward is because the County has liability problems with the Dam. There is also a parking problem on the North side of the river. There is a site plan that has been developed for the area around the powerhouse, including a boat ramp and creating a parking lot.

Paul Korbolic has been "working with CH2MHILL," a region-wide engineering firm, to come up with a project for them to seek out grant money to do a feasibility study for Gold Ray Dam. They have agreed to donate a certain value of their services. "If we can match that, they will do all the research, make all the contacts, and find out if there is money out there for a feasibility study" (Freeman, 2003).

The 53 acres of aggregate land along the Rogue, across Lower Table Rock, that was until recently for sale by Oregon Department of Transportation, was bought by The Oregon State Parks Department at the cost of \$1. This is the land that is part of a project to repair damage caused by the 1997 flood (Freeman, 2003).

Parks officials may be looking at the site soon to see whether recreational use could one day fit in there. Andre Briggs, the state park's assistant area manager in Rogue River, was quoted in the Mail Tribune as saying "I think the priority and focus is completing the project. We have to go slow and work with the stakeholders. There's no master plan, no site-development plan, anything from a few picnic tables to a boat ramp could one day fit in there" (Freeman, 2003).

There is currently no public boat ramp downstream and no walk-in access, the only access to these waters are primarily by jet boat and by a few driftboaters who rent keys at \$60 a year to a private ramp just upstream of Gold Ray Dam. It has been suggested that the State Parks not put in a public boat ramp, but create a low-intensity recreation area for people to beach their boats, have lunch, and perhaps read some interpretive signs highlighting the re-channeling

project. This would make the waters pretty private to a few, and some see it as suggestive of elitism. On the other side, is a potential safety problem, caused by an increase of rafts and boats commingled among the jet boats. Another concern is that the area will be trashed like other areas along the Rogue. There has been a push for a ramp near Gold Ray Dam also, but opinion has been split among members of various groups that use the waterway (Freeman, 2002).

Near Gold Ray Dam, Gold Ray Road becomes a rough, narrow, one way road. The river is on the north side and train tracks on south side of the road. It is also along this stretch of the river that vehicles are parked to fish below the Dam. At times vehicle passage is difficult to maneuver though this stretch. Rafters put in lower down, at a wider stretch, on government land. Kayaking events have been held along this stretch of the river.

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