

## Fire History

The study of the Shasta –Trinity Unit’s fire history is not only a view of the past but also a representation of what can be expected from future fires in similar locations and conditions. Mapping of historical fires often indicates a pattern of fire behavior in a particular area that can be utilized when planning fuel breaks or fire safe zones.

The fire plan process utilizes the fire history data to help evaluate fuel conditions. As new fire perimeters and information are collected the fuel data layer is changed to represent the effects of the fire. Previous burned areas are “aged” to represent changes in fuel volume and maturity.

The majority of large fires within the Shasta – Trinity Unit have been documented since 1910. Local historical information provides other snippets of fire history such as:

“The third (Buzzard Roost Hotel) was destroyed along with the town in a raging forest fire in 1926” is the caption of a historical photograph stored at the Shasta Historical Society<sup>8</sup> Office.

An October 1870 fire started in the vicinity of the Fritz and Thatcher mills in Shingletown and burned approximately ten square miles of land as well as local homesteads. A 1917 fire in the Shingletown area also destroyed the village of Plateau and burned approximately 4 sections of land.<sup>9</sup>

October 10, 1905 “The Enterprise and Pacheco districts southeast of Redding were in the grasp of a fierce forest fire that already had burned an area 10 miles long by 2 miles wide. The fire fanned by heavy winds, had at times leaped 200 feet.”<sup>10</sup>

Some evidence of historic destructive fires exists. A brush field covering approximately forty square miles located east of Lassen Volcanic National Park was noted by immigrants using the Noble’s Route into Shasta County and called “The Chute” or the “Manzanita Chute”.<sup>11</sup>

1870 Shingletown Ridge fire scar



Undocumented 1940’s fire southwest of Redding



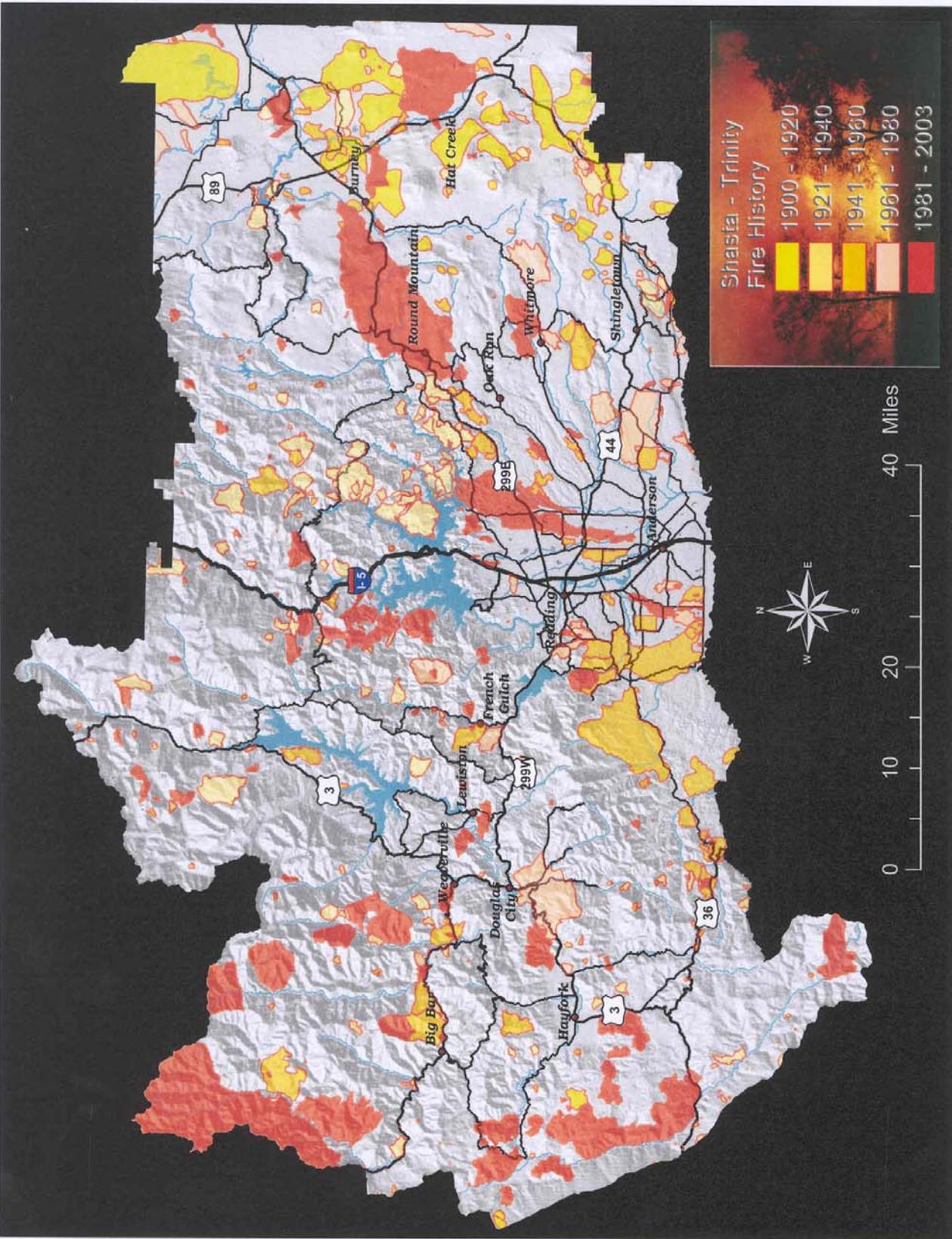
<sup>8</sup> Shasta County Historical Society 1449 Market St. Redding

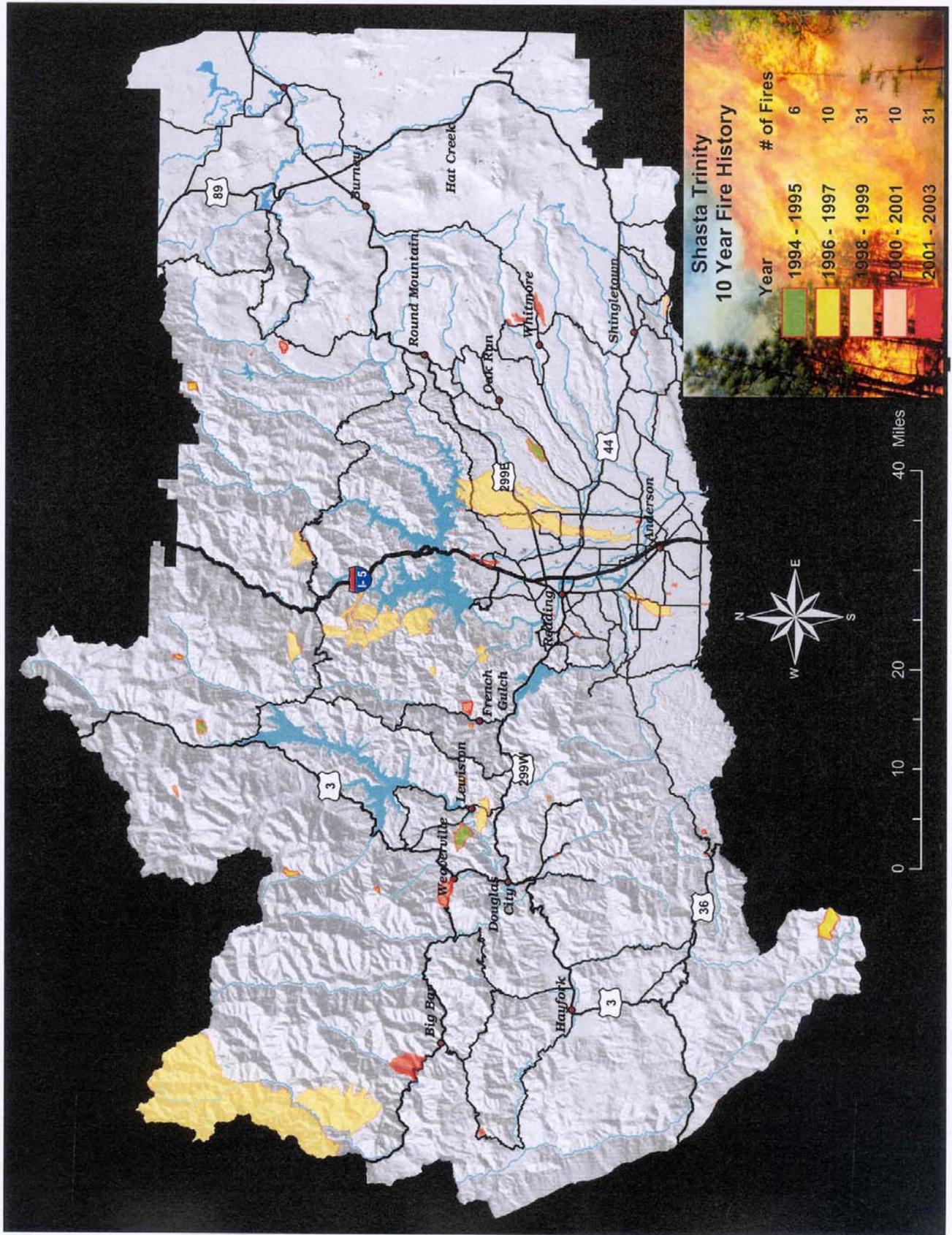
<sup>9</sup> “The Covered Wagon” 1970 Shasta County Historical Society

<sup>10</sup> Record /Searchlight Oct.10, 2005

<sup>11</sup> “The Covered Wagon” 1970 Shasta County Historical Society

The following 1900 – 2003 Fire History Map indicates that the Shasta – Trinity Unit has experienced many large and damaging fires during the last century.





Fire history within the Unit shows that a large and damaging fire can occur almost anywhere within the Unit. Recent large fires within the Unit have destroyed almost 2000 structures.

	Fire Name	Acres	Structures
Aug-92	Fountain	63,960	636
Jul-99	Lowden	1,945	43
Sep-99	Canyon	2,580	230
Oct-99	Jones	26,200	954
Aug-01	Oregon	1,694	33
Aug-04	Bear	10,484	114
Aug-04	French	12,898	42

Both the Jones and Canyon fires burned mostly in woodland areas covered by grass and brush. These were fast moving fires causing the majority of the damage in one day. The Fountain Fire started in grass and brush lands and quickly spread into timber. The Lowden and Oregon fires burned in timber.

The destruction of structures and other properties is not confined to large acreage



fires. Almost every year relatively small vegetation fires damage or destroy homes and other private assets.

This five-acre fire destroyed three outbuildings, two cars, and wood fencing. (Note: dry standing grass immediately next to properties. Main house with garden and lawn received no damage.)



## Historical Fuel Modification

In addition to fire damage, many of the fuels within the Unit have been modified by human activity. In Western Shasta County, thousands of acres of land became barren because of copper mining activities that occurred between 1896 and 1919. A large amount of wood was cut to fuel copper smelting operations. The fumes resulting from smelting the heavy sulfide ores killed and damaged vegetation as far south as agricultural lands in the south of the county. In 1910, USFS Forester John D. Coffman reported on areas of complete devastation and that Pine species were the most sensitive to the smelter operations whereas Black Oak and Poison Oak were the least. In 1921, State Forester E. N. Munns in a report to the legislature estimated that 180,000 acres of forestland had been damaged by smelter operations.<sup>12</sup>

Early smelting operations utilized “open air roasting that destroyed all the vegetation within a radius of several miles of Keswick”<sup>13</sup> Even when the open air roasting was replaced by mechanical roasting, fume damage continued to destroy vegetation and damage agricultural crops as far away as Corning. By 1910 litigation and declining copper prices led to the cessation of most smelting.

Vegetation killed by smelter operations created a large fire hazard resulting in 275 fires in the Kennett area between 1929 and 1936. Some of these fires are shown on the “1900 to Present Fire History” map.

Land devoid of vegetation suffered a high amount of erosion estimated at 35 million cubic yards of soil in ten to fifteen years in the Kennett area. In 1922 E.N. Munns planted twenty-five experimental plots of various plants for erosion control with minimal success. Between 1932 and 1938 reforestation efforts also occurred.<sup>14</sup> Until the construction of Shasta Dam, eroded soils washed down the Sacramento River. After the construction of Shasta and Keswick Dams, it was feared erosion would reduce water storage capacity. Starting in 1946 an erosion control program was started which included check dam construction, broadleaf plantings and watershed reforestation. These efforts continued through the mid 1960’s and were successful in slowing the erosion.

Today, much of the landscape is covered in brush, however several areas have small stands of timber. On north facing slopes and in drainages pockets of pine exist. Unfortunately much of this land is primed for burning which has the potential to lose the last 80 years of regeneration. South of the town of Keswick much of this land has become urbanized.

The Cow Creek Watershed Fuels Plan<sup>15</sup> indicates that fuels in eastern Shasta County were removed for smelter fuel in mining operations, possibly for the Ingot Smelter as well as lumber milling operations. Kristofors’ work does not include any environmental information concerning the Ingot Smelter but does state that it was never included in any litigation perhaps because of its remote location and that air currents carried fumes away from populated areas. Looking at the fuels map of the Ingot area indicate expanses of brush fields surrounding the Ingot mine that would indicate similar environmental damage.

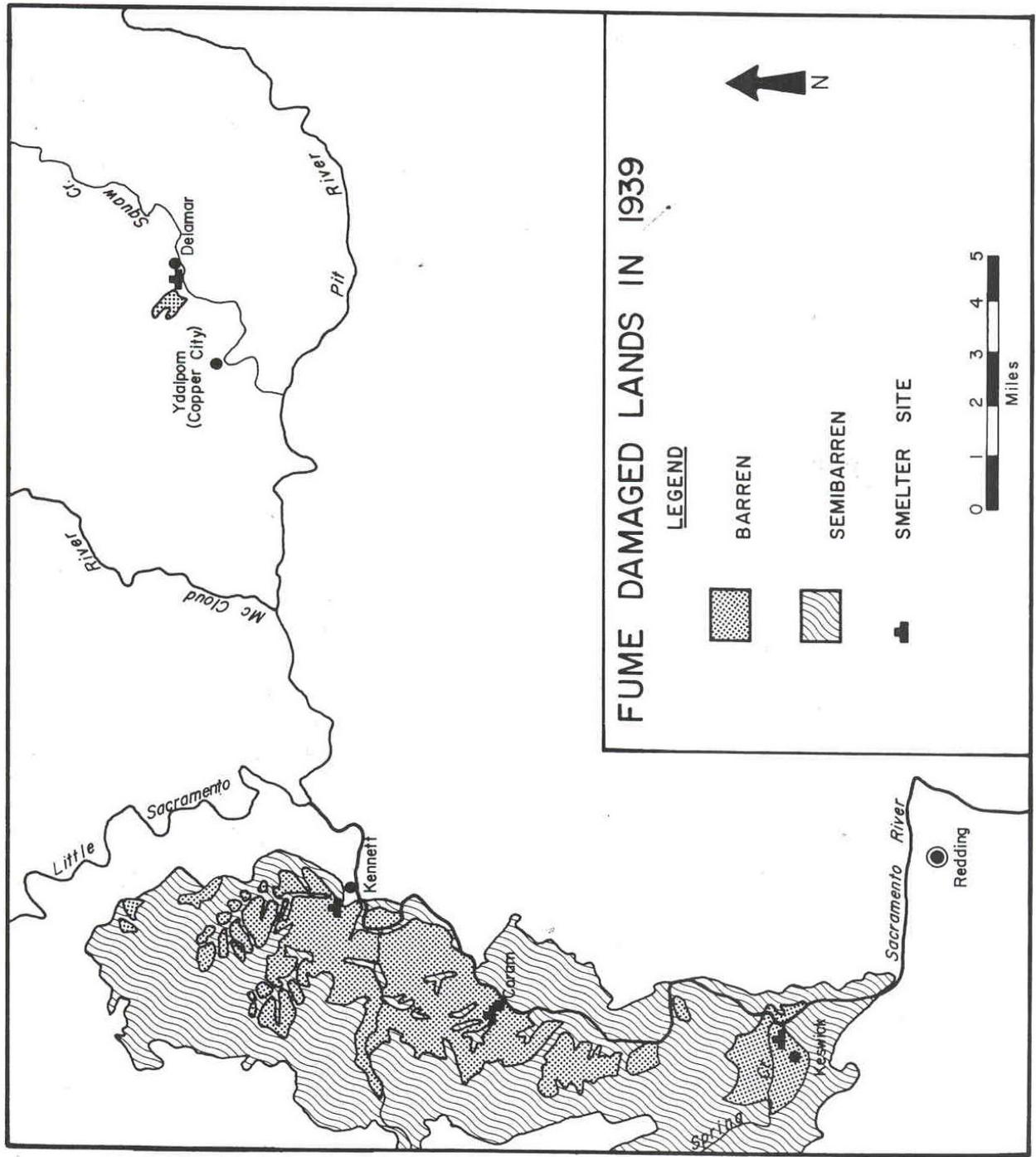
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<sup>12</sup> “The Copper Mining Era in Shasta County, California, 1896 – 1919, An Environmental Impact Study, pg.97  
Kris Vidar Kristofors

<sup>13</sup> Ibid pg.40

<sup>14</sup> Ibid pg.101

<sup>15</sup> <http://wim.shastacollege.edu/>



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<sup>16</sup> “The Copper Mining Era in Shasta County, California, 1896 – 1919, An Environmental Impact Study, pg.96

Kris Vidar Kristofors