

* A History of the Arcata Community Forest

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Introduction

On 17 May 1955, dedication ceremonies for the Arcata Community Forest were held by the Arcata Redwood Circle of the Redwood Region Conservation Council, which sent out 2,500 invitations to the event. The first municipally owned forest in the State of California, Arcata's 600-acre Forest was to be "managed for the benefit of all the citizens of the city, with attention to watershed, recreation, timber management and other values (Humboldt Times, 15 May 1955).

Over the past thirty years, the Forest has done yeoman's service for the community, providing revenue to the City through timber harvest, serving as a place of study for high school and Humboldt State students, storing and controlling water from the area's heavy winter rains, providing habitat for plant and wildlife species, and giving countless hours of recreational pleasure to local residents and visitors. And as a place for Arcata's children to play and experience the out-of-doors, the Forest is unmatched.

Although timber was harvested from the Forest during the 1960's and 1970's, it wasn't until the present decade that a comprehensive timber management plan was developed. As part of that plan, the City has undertaken a program to encourage use of the Forest by developing the trail system and providing tours and interpretive information.

How the land has been used and how it came into City ownership are the subjects of this paper, which recounts a history of public domain patents, old-growth logging, community park development, and private and public water projects.

Land Ownership

Prior to settlement of the Humboldt Bay region, the land was home to the Wiyot people whose numbers were estimated at 1,000 in 1850 (Loud, 1918). Without ownership or degradation, the land and waters generously satisfied their basic living needs and provided for a culture of Northwest character.

Settlement, which began in the spring of 1850, brought rapid and dramatic change to the region. Before the turn-of-the-century, the Wiyot population had been decimated through disease, disruption, and murder. And the land fared little better. In Wallace Elliott's History of Humboldt County California (1882), a visitor to the redwoods wrote in the romantic style of the time:

No one can contemplate the wholesale destruction of these glorious forests without the saddest feelings. Nothing can be more majestic and impressive than the land clothed with them, nor more naked, desolate, ragged and uncouth than the land after it is stripped of them. It is in the one case peace, beauty, plenty, virginity and bounty; in the other rags, fire, destruction, rapine, ghastliness and most unsightly death. There are not, I think, more impressive forests in the world.

Initial ownerships of lands now within the boundaries of the Community Forest, including Redwood Park, were established through Letters Patents, authorized by a series of Acts of Congress. Six Letters Patents, totaling 1,080 acres, were issued to individuals for lands in Sections 27 and 28, Township 6 North, Range 1 East, under the Act of 24 April 1820, the Preemption Act of 4 September 1841, the Act of 3 March 1853, and the Act of 2 July 1862.

Under the 1820 Act, individuals received title to public domain lands of at least 80 acres after a full cash payment of \$1.25 per acre. The Preemption Act of 1841 granted 500,000 acres of the public land to new states and individuals were given the right to settle on and stake a claim to public surveyed lands to the exclusion of all others. The maximum acreage a settler could purchase was 160 acres for a minimum price of \$1.25 per acre and he could not be proprietor of more than 320 acres. The intent of Congress was

that the public domain not fall into the hands of those who already had enough land, but that it should be settled in small farms so as to extend the blessings of cheap land to the largest number. It was the aim of Congress to bring lands under cultivation--to settle and "civilize" the land--not to exploit the nation's timber resources. The Act of 1853 provided for the survey of public lands in California and made them subject to the provisions of the Preemption Act. The Act of 1862 granted lands to states for the purpose of endowing at least one college in each state for the emphasis of agriculture and the mechanic arts (Robbins, 1976).

The patent granting Alexander M. Preston title to the north half of Section 28 reads in part:

United States of America, State of California.
To all whom these presents shall come, Greetings.
Whereas, under the provisions of the several Acts of the Congress of the United States, entitled "An Act to appropriate the proceeds of the sales of the public lands, and to grant pre-emption rights," approved 4 September 1841, 500,000 acres of the public lands were granted to the State of California; and an Act entitled "An Act to provide for the survey of the public lands in California, the granting of pre-emption rights therein, and for other purposes," approved 3 March 1853, ten sections of land were granted for the erection of public buildings and 72 sections for a seminary of learning, also an Act entitled "An Act donating public lands to the several states and territories, which may provide colleges for the benefit of agriculture and the mechanic arts," approved 2 July 1862, 150,000 acres of the public lands were also granted to said states--and whereas the Legislature of the State of California has provided for the sale and conveyance of said lands by statutes enacted from time to time; and whereas, it appears by the Certificate of the Register of the State Land Office, No. 1011, issued in accordance with the provisions of law, bearing date the 27th day of June A.D. 1872, that the tracts of grant of 500,000 acres, school lands herein after described have been duly and properly located in accordance with law, and Alexander M. Preston is entitled to receive a

patent thereof. Now therefore, the State of California hereby grants to the said Alexander M. Preston and to his heirs and assigns forever the said tracts of land located as aforesaid, and which are known and described as follows to wit, the north half of Section 28, Township 6 North, Range 1 East...In testimony whereof, I, Newton Booth, Governor of the State of California, have caused these letters to be made Patent and the seal of the State of California to be hereunto affixed...(Patent Book 9:143, 1 July 1872).

In addition to this patent, Alexander Preston received at least another thirteen patents, signed between 1862 and 1881, all in Township 6 North, Range 1 East, totaling 960 acres (Patent Book 12:252-269).

Ownerships for each of the six Forest tracts are given by location as identified in the original patents and by Assessor's Parcel Numbers for present City parcels.

GANNON TRACT

East half of Southwest quarter, Sec. 28, 80 acres, includes part AP#20-011-02
Southeast quarter, Sec. 28, 160 acres, includes part AP#20-011-02 & AP#20-201-03
South half of Southwest quarter, Sec. 27, 80 acres, not in Forest

There appears to have been a Letters Patent to Jonathan Clark and then a deed to Thomas Titlow, but neither document could be located.

Deed Book D:662 (15 Oct. 1864): Thomas Titlow to Michael Spencer and Isaac Manheim, being same land which Jonathan Clark at the request of Titlow located under certain school land warrants.

Deed Book G:72 (16 Sept. 1868): Michael Spencer and Isaac Manheim to James R. Duff and John W. Dwyer.

Deed Book G:74 (28 Sept. 1868): Jonathan Clark to James R. Duff and John W. Dwyer (clearing title with references to original patent to Clark).

Deed Book H:139 (25 Sept. 1869): John W. Dwyer to James R. Duff, undivided one-half interest.

Deed Book I:714 (19 Sept. 1871): Court ordered sale, George W. Prescott, assignee of estate of James R. Duff, a bankrupt party of the first part, to Thomas C. Pedler.

Deed Book I:718 (25 Sept. 1871): Thomas C. Pedler to Harris Connick, George McFarlan, David Evans, Timothy Brosnan, Daniel Flanigan, Jackson A. Bryant, Ami Strinchfield, N.L. Drew, and Thomas Baird.

Deed Book L:36 (20 Jan. 1872): Connick, et al. to James Gannon, undivided one-half interest.

Deed Book R:40 (2 Nov. 1875): James Gannon to Henry Dart, Guy Baker, John Harpst, and William Carson, undivided one-half interest, excepting and reserving therefrom the timber on said land provided that said timber on the south half of southwest quarter, Section 28, be taken therefrom within 10 years and the timber from the remainder of land be taken therefrom within 5 years.

Deed Book R:290 (2 Nov. 1875): Harris Connick, Thomas Baird, Daniel J. Flanigan, T.F. Brosnan, A.J. Bryant, Allan McKay, N.L. Drew, and G.W. Prescott to Henry Dart, Guy Baker, John Harpst, and William Carson, undivided one-half interest, excepting and reserving timber as per Gannon to Dart, et al. (there were some changes in partners and in the amount of interest each held between this deed and the one of 25 Sept. 1871).

Deed Book U:265 (27 April 1877): Henry J. Dart to William H. Johnston, undivided one-quarter interest, reserving timber per Gannon to Dart, et al.

Deed Book 17:612 (25 Sept. 1885): William Carson, W.H. Johnston, and John Harpst to Union Water Co.

Deed Book 91:584 (7 Sept. 1904): Union Water Co. to City of Arcata, 26 acres for Park.

Deed Book 188:306 (26 Oct. 1928): Union Water Co. to Public Utilities California Corporation.

Deed Book 218:122 (2 Jan. 1935): Public Utilities California Corporation to City of Arcata.

BURNS TRACT

North half of Southwest quarter, Sec. 27, 80 acres, part AP#20-201-03; AP#20-201-06

Patent Book 1:518 (4 Aug. 1869): Letters Patent to James F. Denny, Northeast quarter of Southwest quarter, Sec. 27.

Patent Book 1:520 (10 Aug. 1869): Letters Patent to James F. Denny, Northwest quarter of Southwest quarter, Sec. 27.

Deed Book K:63 (12 Oct. 1871): James F. Denny To Josiah C. Tilton.

Deed Book P:100 (2 April 1873): Justice Court ordered sale of debtor's real property, J.C. Tilton to Robert Burns.

Deed Book 68:300 (29 Aug. 1899): Robert Burns of San Francisco to Robert Wildner.

Deed Book 94:165 (1 Feb. 1906): Estate of Robert Wildner to T.R. Emerson.

Deed Book 95:142 (9 Feb. 1906): T.R. and Anna Emerson to Union Water Co.

Deed Book 188:306 (26 Oct. 1928): Union Water Co. to Public Utilities California Corporation.

Deed Book 218:122 (2 Jan. 1935): Public Utilities California Corporation to City of Arcata.

PRESTON TRACT I

West half of Northwest quarter, Sec. 27, 80 acres, part AP#20-201-03

Patent Book 12:256 (10 Aug. 1869): Letters Patent to Alexander M. Preston.

Deed Book L:434 (8 March 1873): Alexander M. Preston to John C. Preston, undivided one-half interest.

Deed Book 30:1 (11 Feb. 1889): Estate of John C. Preston to his widow Sarah Jane Preston and his children.

(After John's death, Sarah married his brother, Alexander M. Preston. The Preston Brothers' land eventually passed to Sarah and John's children).

Deed Book 95:217 (27 Feb. 1906): William Preston (son of Sarah and John Preston) to Bank of Arcata.

Deed Book 95:218 (28 Feb. 1906): Bank of Arcata to Union Water Co.

Deed Book 188:306 (26 Oct. 1928): Union Water Co. to Public Utilities California Corporation.

Deed Book 218:122 (2 Jan. 1935): Public Utilities California Corporation to City of Arcata.

PRESTON TRACT II

North half, Sec. 28, 320 acres, includes AP#503-291-02 and AP#503-291-04

Patent Book 9:143 (1 July 1872): Letters Patent to Alexander Preston.

(The chain of title is unclear at this point, however, the land stays in the Preston family).

Deed Book 30:1 (11 Feb. 1889): Estate of John C. Preston to Sarah Preston and children.

Deed Book 44:114 (20 Oct. 1892): Sarah Jane Preston Anger and Amos Anger to Noah and Nancy Falk, 5 acres in Southeast quarter of Northeast quarter, Sec. 28, for first Jolly Giant Reservoir.

(After Alexander M. Preston's death in 1890, Sarah married Amos Anger).

Deed Book 49:72 (6 Sept. 1893): Noah and Nancy Falk to Union Water Co., 5-acre reservoir site.

Deed Book 188:306 (26 Oct. 1928): Union Water Co. to Public Utilities California Corporation, 5-acre reservoir site.

Deed Book 218:122 (2 Jan. 1935): Public Utilities California Corporation to City of Arcata, 5-acre reservoir site.

Official Records 129:412 (26 April 1950): William and Minnie Preston, and Estelle McDowell to City of Arcata, parcels in Northeast quarter, Sec. 28.

RECLAMATION WATER CO. TRACT

Southeast quarter, Sec. 27, 160 acres, AP# 503-281-03

Patent Book 3:44 (1 Dec. 1869): Letters Patent to George Tilley and John Chapman.

Deed Book R:537 (13 May 1876): John Chapman to Falk Chandler & Co., undivided one-half interest.

Deed Book 4:526 (31 Dec. 1881): George W. Chandler to Jacob Hawley, undivided one-half interest.

Deed Book 17:782 (3 Dec. 1885): Jacob Hawley of Oakland and N.H. Falk, doing business under the firm name of Falk Hawley & Co., to Arcata Mill and Lumber Co. (incorporated 23 Nov. 1885), undivided one-half interest.

Deed Book 23:60 (20 July 1887): George Tilley to John Harpst and O.H. Spring, undivided one-half interest.

Deed Book 23:242 (3 Aug. 1887): Arcata Mill and Lumber Co. (N.H. Falk, president) to Sylvester Myers, undivided one-half interest.

Deed Book 60:457 (1 May 1897): John Harpst and O.H. Spring to Sylvester Myers, undivided one-half interest.

Deed Book 72:288 (2 Aug. 1900): Sylvester Myers and wife to Arcata Land Improvement Co.

Deed Book 82:10 (24 Nov. 1902): Arcata Land Improvement Co. to Reclamation Water Co, including an agreement, dated 13 June 1896, between the Arcata Land Improvement Co. and the Union Water Co.

Deed Book 250:499 (10 June 1941): Reclamation Water Co. to City of Arcata.

BRIZARD TRACT

South half of Northeast quarter; Southeast quarter of Northwest quarter, Sec. 27, 120 acres, AP#503-281-02

Patent Book L:373 (1 Dec. 1869): Letters Patent to Alexander Brizard.

Deed Book 70:269 (28 July 1900): Alexander Brizard to Humboldt Manufacturing Co.

Deed Book 94:91 (30 Dec. 1905): Humboldt Manufacturing Co. to Schuyler Clark and Andrew Kirkpatrick, reserving all fallen timber which Humboldt Manufacturing Co. will remove within five years if they so choose.

Deed Book 151:130 (30 Aug. 1920): Decree of Distribution for Schuyler Clark, who died 8 July 1919, undivided one-half interest to heirs, children, and grandchildren.

Deed Book 237:394 (3 Sept. 1938): Andrew Kirkpatrick to W.J. Kirkpatrick, undivided one-half interest.

Deed Book 251:1 (11 June 1941): W.J. and Anna S. Kirkpatrick to City of Arcata, undivided one-half interest.

Official Records 265:442 (10 Aug. 1953): Referee sale, Clark heirs to City of Arcata, undivided one-half interest.

Early Logging

Although the Humboldt Bay region was settled as a supply center for the gold mining camps on the Klamath, Trinity, and Salmon rivers, the wealth to be made from the area's timber resources quickly established an industry devoted to cutting, transporting, milling, and shipping redwood timber.

Eureka became the center of the industry with mills located along the Bay's edge and on Indian Island. Salmon Creek, Elk River, and Ryan's Slough were among the first areas to be cut. Carried downstream with the first winter rains, called freshets, the logs were rafted together at tidewater and towed across the Bay to the mills. This method of log transport was used into the 1880's but often proved unsatisfactory. Sometimes mills shut down because of late or insufficient rains and on occasion log rafts broke their tows and drifted in the Bay or were carried out to sea. Where water was not available, primitive railroads, which used wooden poles for tracks and horses for locomotives, moved the logs to tidewater. Gradually these methods were replaced by iron track railroads and steam locomotives. The biggest technological change in Humboldt's early logging woods, however, occurred in the summer of 1881 when "Dolbeer's patent ox-team...revolutionized things" (Weekly Humboldt Times, 6 Aug. 1881; 17 Sept. 1881; 7 Jan. 1882).

An early logging history for each of the Forest tracts and the Park has been pieced together using deed records, newspaper articles, and educated guesses. Keeping to safe generalities, the information suggests that most of the Forest was logged during the 1870's and 1880's with one tract surviving until 1900.

GANNON TRACT

E $\frac{1}{2}$ of SW $\frac{1}{4}$, Sec. 28
SE $\frac{1}{4}$, Sec. 28
S $\frac{1}{2}$ of SW $\frac{1}{4}$, Sec. 27

Arcata's first saw mill was built in 1853 on land owned by Thomas Titlow. Located in an area bounded on the west by "C" Street, on the north by 11th Street, and on the east by Gannon Creek (Campbell Creek), the steam-run saw mill provided the lumber used in the early construction of the town (Arcata Union, 28 May 1887).

In 1864 the property went to Spencer and Manheim to satisfy a \$9600 debt that Titlow and Thomas Prince had incurred to the firm of Spencer, Manheim, and Stern in June 1862. The transfer included the mill, machinery, a railroad from the mill to the Union Wharf Company's road, several blocks of redwoods in East Arcata north of 11th Street, and this 320-acre tract (Deed Book D:662, 15 Oct. 1864). At these early dates, it seems reasonable that the trees nearest the mill were being logged, leaving this tract untouched.

James R. Duff and John W. Dwyer purchased the tract in the fall of 1868 after Duff had built a steam saw mill in Eureka (Deed Book G:72, 16 Sept. 1868; Humboldt Times, 28 March 1868; 4 July 1868). The mill was rebuilt the following spring after being destroyed by fire in December 1868 (Humboldt Times, 11 Dec. 1868; 2 April 1869). Even with only about five months of operation for the year ending 31 March 1869, Duff and Co. shipped 3.6 million feet of lumber out of a total 30.9 million feet exported by four Humboldt Bay mills (Humboldt Times, 10 April 1869).

An agreement made in September 1868, dated September 1869, and recorded at the request of James Gannon on 18 December 1869 concerns the logging of the Gannon Tract:

Whereas James R. Duff and John W. Dwyer and James Gannon all of the County of Humboldt in the State of California in the month of September 1868 made and entered into an agreement to engage in the logging business at the said county for their mutual benefit and interest...and in pursuance of said agreement and to carry on such logging business the said Duff and Dwyer purchased the following parcels of land, the east half of the southwest quarter and the southeast quarter of section number twenty-eight and the south half of the southwest quarter of section twenty-seven (6N1E)...containing 320 acres...

And the said James Gannon also in pursuance of the said agreement and to carry on such logging business on the...day of September 1868 placed on said logging claim for employment and use four yoke of oxen with yokes of the value of \$758 and on the...day of...1868 placed there for the same purposes an additional ox of the value of \$69. And it was part of the agreement that the said

James Gannon should have the control and management of the business on the said logging claim and to raft all the logs sawed thereon to the Steam Saw Mill in Eureka known as Duffs Mill for which service and labor he was to receive a stated monthly compensation...(Deed Book H:243, Sept. 1869).

The agreement further provided that Gannon would get half interest in the property after half the next profit from the business, the value of the oxen, and Gannon's arrears salary added up to half the cost of the logging claim.

Meanwhile, Dwyer parted company with Duff and sold his half interest in the land to Duff (Deed Book H:148; H:139, 25 Sept. 1869). Two years later the 320-acre tract was purchased from the Duff estate by a group of lumbermen, known as Evans and Co., which also purchased the Duff mill, renamed the Occidental (I:718, 25 Sept. 1871; Palais and Roberts, 1950). The new owners, however, honored the Duff-Gannon agreement and Gannon received an undivided one-half interest in the timber tract in January 1872 (Deed Book L:36, 20 Jan. 1872).

A native of Ireland, James Gannon came to Humboldt County about 1860 where he worked as a logger until his death from pneumonia at age 52 in April 1885 (Daily Humboldt Standard, 8 April 1885). In addition to this particular relationship with Eureka lumber interests, he was also a partner in the firm of Flanigan Brosnan and Co., organized in the spring of 1876 and composed of Gannon, Daniel Flanigan, Timothy Brosnan and John Harpst. This firm built a mill at Clark's Point in Eureka and later ran the logging operations on Jacoby Creek (Weekly Humboldt Times, 22 April 1876, 23 Aug. 1876).

An article in the Weekly Humboldt Times in 1874 describes Gannon's logging operation:

Lumber Resources, Arcata, 17 June 1874. Mr. Editor: In the second letter concerning the lumber interest around Arcata, we desire to speak of the logging claim nearest the village. It is in the possession of Mr. James Gannon. The road leading from Arcata to Eureka crosses a railroad about a half mile from the former place. This railroad leads up to the timber where the logs are cut. The length of this railroad from the landing, where the logs are placed on the trucks,

to the Embarcadero Slough, which leads into the Bay, is a mile and a quarter. The grade of the road is a gradual descent (one place rather abrupt) and the four horses attached to the truck easily haul the heaviest logs. From the terminus of the railroad to the timber where the logs are cut there is a splendid snaking ground, about a half a mile long.

During the winter the heavy rains and falling trees damaged the roads, and it took a great deal of labor to repair them.

Going up to the timber, among the fourteen men employed, I recognized my acquaintances Messrs. Hill, Mitchell, Graham, McAfee, and Whitman, the latter of whom has the happy faculty of driving five yoke of oxen, without speaking much louder than a whisper. It is an average timber claim, so my acquaintances told me. The distance from the slough is so great that they do not, on an average, put more than 13,000 feet of logs onto it.

The claim has the advantage of being in close proximity to the village--being distant about half a mile.

Though Mr. Gannon has, in the five years he has been logging on it, secured 9,000,000 feet of logs, there is sufficient timber remaining to keep him busy two years after the present season. Mikros. (Weekly Humboldt Times, 27 June 1874).

The "road leading from Arcata to Eureka" refers to 7th Street, and a half mile from town would be about Union Street. The Embarcadero Slough is probably what is now known as Gannon's Slough, whose course has been changed and its outlet into the Bay moved some distance to the southeast by the free-way. The skid road still evident in Gannon Creek (Campbell Creek) along 14th Street where the creek comes out of the Park indicates that logs were brought down the creek to a landing, where they were, no doubt, loaded "on the trucks" for transport by railroad to the slough. An undated article by Harry Nixon stated that Jim Gannon's logging camp was east of "A" Street at the entrance to the Park (Fountain, 5:371).

Mikros' mention of a Mr. Graham as a logger on Gannon's claim indicates that logging was taking place in the Park in 1874 if, in fact, this Mr. Graham is the same man referred to in a 1905 article. After the City assumed ownership of the 26-acre Park, a clean-up day was held and one of the workers was William Graham, an old-time logger, who felt at home in the Park, having

logged some of the same land in the 1870's (Arcata Union, 7 June 1905).

Another letter from Mikros, dated 23 June 1874, describes logging on the Arbuckle Claim (NE $\frac{1}{4}$ and N $\frac{1}{2}$ of SE $\frac{1}{4}$, Sec. 33; W $\frac{1}{2}$ of NW $\frac{1}{4}$, Sec. 34, 6N1E) and gives more details about the pole railroad:

On the road leading from Arcata to Eureka, about a half mile after you cross a railroad, you will come to another which leads into the timber familiarly known as the "Arbuckle" claim.

The claim was recently purchased by Mr. Gannon, who has leased it, for a term of four years, to Mr. John McCullough who is successfully working it.

It is one of the oldest claims in the vicinity of Arcata. Twelve or fourteen years ago there was logging done on it with trucks. This is the sixth summer that the railroad has been used. Three years ago the claim was supposed to have been exhausted; but the present year there will be about 2,000,000 feet taken from it, and then sufficient left to occupy the lessee two summers more in logging. It could scarcely be said that a claim was about exhausted when it still furnishes a tree that scales 30,000 feet of lumber--the logs of which may be seen in the slough at the present writing. The railroad from the landing where the logs are placed on trucks, to the ditch where they are "dumped" is about half a mile in length. The splendid snaking road is about a quarter of a mile long. We were much interested in the construction of the railroad connected with this claim. The rails are of different sizes--and it gives an opportunity to demonstrate the superiority of each kind. Part of the road has the ordinary rail of 6" by 6"; part 7"; and part consists of hewn poles.

It requires but one walk over the road--even to a novice in railroad builders to convince him that the poles were superior to the sawn rails. The 6" rail, I was told, last one year; the 7", 2 years; the pole about 5 years. The poles do not "broom" like the sawn rails. They make a more sound road, over which the car passes more easily. Then the poles are cheaper, especially when they are near at hand as in the case of the road of Mr. McCullough's. He says that he made the road for what the sawn rails would have cost him. These poles are on the average 65 feet long and it only

requires one tie for every 8 feet, while the 6" by 6" requires a tie every 2 feet. Thus making a great saving in the item of ties. The truck that is used on the road is very staunch, weighs about 7,000 pounds and is said to be the only one on the bay that has attached to it the "Brake" patented by Mr. Yocum. It is a brake of great power and gives entire satisfaction. The whole was built by William Ellis who has displayed considerable mechanical skill in his work.

There are employed on this claim the same number of men that most claims have, viz: 14, the same number of oxen, viz: 10. The reputation of the driver Mr. Rafter is known in all the logging camps. We inquired what were the requisites of good driving. He supposed it was good lungs, solid muscle, and perhaps animal magnetism, but (we) were astonished when we heard these negatives, "He doesn't lick 'em, doesn't yell, and doesn't make a fuss."

That the claim is not exhausted, that the men, oxen, and horses are efficient is evidenced by the fact that in the space of seventeen and a half days they put into the slough 205 logs which would average 1800 feet per log--equivalent to 360,00 feet of lumber.

The logs are thrown into a ditch that leads into the Embarcadero Slough. They are then floated about a half mile to the rafting ground. One raft of about 200,000 feet has been sent to the mill and there is a sufficient number in the slough to form another...(Weekly Humboldt Times, 27 June 1874).

The ditch which led into the slough was a hand-dug ditch known as the Arbuckle Logging Ditch, probably constructed in the late 1860's or early 1870's and was used to get the logs from the railroad to the slough (Fountain, 5:370; 42:12). Gannon may not have had to utilize the logging ditch since the slough was close enough to his railroad for direct contact.

In 1875 the tract was sold to Henry Dart, Guy Baker, John Harpst and William Carson, reserving, however, the timber on the land provided that the timber on the south half of the southwest quarter of Section 28 was removed within ten years and the timber from the remainder of the tract was removed within five years (Deed Book R:40 & 290). This indicates that logging could

have continued until 1885 on the land where the Park is located and until 1880 on the parcel directly east (SE $\frac{1}{4}$, Sec. 28), unless the "timber" referred to means already cut timber.

BURNS TRACT

N $\frac{1}{2}$ of SW $\frac{1}{4}$, Sec. 27

No agreements or newspaper articles were found for this tract so only assumptions can be made regarding the time it was logged. The original patent was to James Denny, who only held the land for a couple of years before Josiah Tilton purchased it. Tilton apparently was not in good shape financially when the Court ordered sale of his property and Robert Burns took it over in 1873 (Deed Book P:100, 2 April 1873). His ownership lasted twenty-six years and the land would have been logged during that time.

A tax assessment for Burns for 1878-79 lists a value of \$800 for this 80 acres; an 1885 assessment for the same tract puts a value of \$240 on the property, while another 80 acres owned by Burns in Section 35 is valued at \$800, the same amount given for this tract in 1878-79 (Tax Assessment Books, 1878-79 and 1885, HSU Library).

Perhaps this change in value of real property indicates the removal of the timber. The tract's proximity to the areas logged by Gannon could mean it was the next to be cut as the loggers pushed their way through the old-growth forest. An early 1880's date seems reasonable for logging in the Burns Tract.

PRESTON TRACT I

W $\frac{1}{2}$ of NW $\frac{1}{4}$, Sec. 27

PRESTON TRACT II

N $\frac{1}{2}$, Sec. 28

Logging of the Preston Tracts in the north portion of the Forest dates to 1873 when Noah Falk and Isaac Minor secured a lease from Alexander M. and John C. Preston "for the purpose of lumbering therefrom...all redwood, spruce, pine, and fir timber" on the north half of Section 28, containing 320 acres; the west half of the northwest quarter of Section 27, containing 80 acres; and 92 acres in Section 21, which is outside the Forest (Deed Book L:438, 3 March 1873).

Falk and Minor built the Dolly Varden saw mill on "the edge of the timber just to the south of the elevation on which Camp Curtis was located" (near the St. Louis Overcrossing, west of the freeway) in the spring of 1872 and by the middle of July the mill was operating "full blast," cutting 20,000 feet per day (Weekly Humboldt Times, 4 May 1872; 13 July 1872).

The lease with the Prestons specified that Falk and Minor "will within the period of two years from the date hereof, erect on the said premises a steam saw mill of about the capacity of the 'Dolly Varden Mill' or larger and will cut on and from the said premises for each and every year during the continuance of this lease...commencing on or after the first day of January 1874 unless the timber be sooner exhausted, not less than two million feet of merchantable lumber and will pay stumpage...for each one thousand feet cut and manufactured as follows: for redwood, pine, and spruce for the first four million feet, \$1.50/1,000 feet; and for all over four million feet cut \$1.00/1,000 feet; for fir timber cut and manufactured \$1.00/1,000 feet..." (Deed Book L:438, 8 March 1873).

The lease also referred to an existing mill on the premises; this was a water-powered saw mill erected by John Preston (West Coast Signal, 17 Feb. 1875). This mill and the subsequent one built by Falk and Minor would have been located about where Granite Avenue would intersect Highway 101. The HSU dorms parking lot covers the mill pond.

Construction of the Jolly Giant Mill was underway by the two-year deadline and a Mr. Thomas had the contract with Falk and Minor to supply the mill with 20,000,000 feet of logs over the course of the next four years (West Coast Signal, 17 Feb. 1875).

To assure adequate shipping facilities for the lumber to be produced at the Jolly Giant, Falk and Minor negotiated with the Union Wharf Co. for a 600-foot extension of the wharf to better access deep water. The Union Wharf Co. also agreed to extend its railtrack from the depot on the Plaza to the new mill on Preston's timber tract (Weekly Humboldt Times, 27 Feb. 1875).

Construction of the Union Wharf by Daby Deming & Co. was begun in December 1854 and at the time of its completion in September 1855, extended approximately two miles over the marsh land and into the channel of the north bay (Humboldt Times, 20 Jan. 1855; 15 Sept. 1855). The "rails and running cars" on that wharf are considered locally to be the first railroad in the State of

California. The rails, of course, were wooden poles and the cars were drawn by horses, but, nonetheless, it was an efficient means of moving freight and passengers between the Plaza and the ships which docked at the Union wharf.

An engine and machinery for the new mill arrived in April and by summer, the mill was in operation (Weekly Humboldt Times, 10 April 1875). Considered the "smartest mills of their size in the County," the Dolly Varden and Jolly Giant mills gave employment to about fifty men and produced an average of 45,000 feet per day (Weekly Humboldt Times, 21 Aug. 1875).

In the mean time, the Union Wharf Co. was having a new locomotive built for its railroad because the old horse power "locomotive" wasn't sufficient to move the amount of lumber being produced from the Preston Tract (Weekly Humboldt Times, 22 May 1875; 2 Oct. 1875). Completion of the wharf in the fall of 1875 and the arrival of a steam locomotive which hauled three cars of lumber from the Jolly Giant Mill on its first run in January 1876 ushered in a new era for Arcata's lumber industry (Weekly Humboldt Times, 11 Sept. 1875; 29 Jan. 1876).

Soon after construction of the Jolly Giant Mill, Isaac Minor left the firm and George Chandler became Falk's new partner. Falk Chandler & Co. began planning for a new shingle mill in the spring of 1876 and Falk went off to San Francisco to purchase the machinery (Weekly Humboldt Times, 8 April 1876). To transport its expanded production, a steamer was contracted for in San Francisco by the new partnership (Weekly Humboldt Times, 15 April 1876), and the following summer Falk and Chandler made additional improvements by building a half mile of railroad track from the Jolly Giant mill "up the gulch to the point where the logging is going on" (Fountain, 5:350, 16 June 1877). In May 1878 the Jolly Giant and the Dolly Varden were running full time with about 100 men employed, but equipment failure that same month resulted in the Jolly Giant being closed down, its reopening rested on whether or not the lumber business "brightens" (Weekly Humboldt Times, 18 May 1878; 25 May 1878). Markets improved and the mill was running again the spring of 1879 (Weekly Humboldt Times, 26 April 1879).

Spring 1880 brought extension of the iron track railroad from the Jolly Giant further up into the timber, making the "facilities for logging...greatly improved..." (Weekly Humboldt Times, 29 May 1880). Accidents were a fact of

life for those involved in the logging and milling business. Reports of accidents appeared with regularity in the local newspapers.

The Jolly Giant Mill is in full blast. A full crew is at work both in the woods and mill and all is life and industry. One of the sawyers in the woods, William Alseph, met with quite an accident yesterday while cutting some bark from below the saw, he struck his hand against the sawteeth, lacerating it in a terrible manner. Another accident on the same day happened at the claim of Jas. Gannon. The teamster, Archy McBride, got severely kicked by a horse in the stomach, but both are rapidly getting well under the skillful treatment of Dr. L.E. Meeker of this place (Weekly Humboldt Times, 19 June 1880).

The following week a workman in the Jolly Giant logging woods had two fingers crushed while moving a huge log by a block and tackle. "Scarcely a week passes but we hear of some accident in or about the mills on Humboldt Bay" (Weekly Humboldt Times, 26 June 1880).

In January 1882, Jacob Hawley replaced Chandler as Falk's partner (Weekly Humboldt Times, 7 Jan. 1882). That fall the new firm of Falk Hawley & Co. purchased the schooner, Ivy, for transporting its lumber (Weekly Humboldt Times, 23 Sept. 1882). The Jolly Giant was still turning out lumber for shipment from the Arcata wharf in 1883 (Daily Times Telephone, 5 Jan. 1883), but the lease agreement with the Prestons, which Falk and Minor had signed in March 1873, was about to expire.

In October 1883, an agreement was made between the Preston Brothers and John Harpst, O.H. Spring and Sylvester Myers whereby the Prestons conveyed to them the right to "all shingle bolt timber either standing or down" on the same land leased to Falk and Minor in 1873 and "from which the lumber has been cut and hauled to the Jolly Giant saw mill." The lessees were to have use of the mill known as the Jolly Giant and a free right-of-way over the land for the "purpose of cutting and removing the said shingle timber." The agreement was to extend ten years at the rate of 50 cents per cord paid quarterly (Deed Book 21:467, 9 Oct. 1883).

The mill operated, probably off and on, until the lease expired and poor shingle markets resulted in its closure about 1893 (Arcata Union, 2 Sept. 1893). The Harpst and Spring partnership was dissolved in 1892 (Arcata Union, 21 Feb. 1906), but the partners and Sylvester Myers were sued for \$8000 in the spring of 1894 by the Preston family who alleged they had failed to comply with the terms of the lease signed in 1883 (Ferndale Enterprise, 2 March 1894; Arcata Union, 3 March 1894).

In 1907 William Preston, a son of John and nephew of Alexander Preston, built a shingle mill on the site of the old Jolly Giant mill, employing fourteen men in the mill and woods (Arcata Union, 26 Oct. 1907; 25 Jan. 1908).

It appears from the information gathered that the Preston Tracts were logged beginning in 1873 and continuing into the 1880's. After 1883, the land was utilized for shingle bolts into the 1890's. During the early 1900's it produced material for William Preston's mill.

RECLAMATION WATER CO. TRACT

SE $\frac{1}{4}$, Sec. 27

The patent for this 160-acre tract in the southeastern most corner of the Forest was granted to George Tilley and John Chapman in 1869. Tilley held onto his interest until 1887, but Chapman sold his half to Falk Chandler & Co. in 1878. Although there was a partnership change in this firm in January 1882 and a name change to the Arcata Mill and Lumber Co. in 1885, the major personality in all these ventures was Noah Falk (Weekly Humboldt Times, 7 Jan. 1882; Deed Book 17:782, 3 Dec. 1885).

Noah Falk's influence in the development of Arcata is surpassed by none and probably only challenged by one other man, Isaac Minor. Falk was a lumberman first and foremost and his mills and associated activities provided employment for many local men. But he was also a generous man, giving both of his time and resources for the betterment of Arcata. Whether it was a new piece of fire-fighting equipment or land for a park, or land for a college, he gave freely. He died in 1928 at the age of 92, having been a participant in and witness to more than sixty years of change as the Humboldt Bay region emerged

from an isolated settlement into a modern community with rail and highway connections with urban areas to the south (Arcata Union, 15 March 1928).

In the summer of 1887 the one-half interest in the tract went to Harpst and Spring and the other half to this partnership's associate, Sylvester Myers (Deed Book 23:60 and 23:242, 20 July 1887 and 3 Aug. 1887).

The 1878-79 tax assessment values this 120-acre tract at \$600, the same figure listed for an unlogged tract of 120 acres adjacent on the north (Tax Assessment Book, 1878-79, HSU Library). This may indicate that the tract was still unlogged at this time.

One might guess that as Falk came to the end of his lease on the Prestons' land and completed the logging of saw timber, he turned to this tract to keep the Jolly Giant mill running. The fact that he sold the land off to Harpst and Spring in 1887 could indicate that the timber had been taken and it was now available to supply shingle bolts for the Jolly Giant shingle mill, which Harpst and Spring took over. This assumption might be further substantiated by newspaper references to "Myers old camp" on the headwaters of Janes Creek within this tract of land. Perhaps, Sylvester Myers was the logger part of the Harpst-Spring-Myers relationship and worked from this camp "getting out shingle bolts" after 1887 and into the 1890's (Arcata Union, 18 Aug. 1900; 18 April 1908).

If all these assumptions are generally correct, this tract would have been logged in the first part of the 1880's and, after 1887 and into the 1890's it would have provided shingle bolts.

BRIZARD TRACT

S $\frac{1}{2}$ of NE $\frac{1}{4}$ and SE $\frac{1}{4}$ of NW $\frac{1}{4}$, Sec. 27

The first logging information on the Brizard Tract of 120 acres appears in several newspaper articles after Brizard sold the land to the Humboldt Manufacturing Co:

William Chaffey has been busy the past few days moving camp to the new purchase of timber made by the Company (Humboldt Manufacturing Co.) from A. Brizard. This tract lies at the head of Janes Creek and consists of 120 acres of as fine redwood

timber as is to be found anywhere and in its cutting will see the finish of the last body of virgin redwood lying near Arcata. Two sets of choppers went to work there on Tuesday and the day previous the tools and cook house outfit was taken into Myers old camp which lies just south of the chopping...A railroad track will be laid to the head of Janes Creek gulch over the bed of the logging road which was formerly used by the Arcata Mill and Lumber Co. and will connect with one or the other of the roads passing Janes Creek by which method the bolts will be brought to the mill in town...The new purchase is entirely redwood and it is estimated that 20,000 cords of bolts will be worked out, requiring about five years time to complete the work (Arcata Union, 18 Aug. 1900).

If this article is correct, it means that by 1900 all of the Forest had been logged with the exception of this 120 acres of "as fine redwood timber as is to be found anywhere" and even it was to be cut into shingle bolts!

At the Chaffey camp, where the Humboldt Manufacturing Co. is operating in its timber, 20 cords are shipped daily. One set of choppers, Hugh McCormack and George Hill, have already leveled more than 1,000 redwood trees, which are worked up by a crew of about 25 men. Manager Cullberg states there is timber enough left to keep them busy for four years (Arcata Union, 24 Aug. 1901).

Four years later in December 1905, the land was sold to Schuyler Clark and Andrew Kirkpatrick, reserving all fallen timber which the Humboldt Manufacturing Co. was to remove within five years if they so chose (Deed Book 94:91, 30 Dec. 1905). Clark and Kirkpatrick were Arcata bottom farmers and they purchased the Brizard tract for grazing (Arcata Union, 3 Jan. 1906).

William Chaffey has taken a contract from the Humboldt Manufacturing Co. to get out 3,000 cords of shingle bolts and will be most of the summer cutting and delivering them at the mill in Arcata. He will commence operations Monday on the Brizard claim on upper Janes Creek where

the Company operated some five years ago. At that time, some 300 fine trees were left and it was expected in time to take them out by way of Warren Creek. The plan now is to haul them out in wagons and three, four-horse teams will be employed for that purpose. Each team making two trips a day, the bolts being hauled the entire distance from the claim over the Alder Grove Road to town. The crew which will consist of 25 men will occupy the old Myers Camp. The trees are all felled and peeled and will only have to be sawed and split into bolts (Arcata Union, 18 April 1908).

Thus the last of the virgin redwood stands in what now comprises the Community Forest and Redwood Park were removed from the land..."There are not, I think, more impressive forests in the world..." wrote the visitor to the Redwoods in 1882.

Union Water Company

In its early days (and not so early days), Arcata suffered from recurring fires, some of which caused major damage to the downtown area. The July 1875 fire was particularly disastrous; the entire block on the north side of the Plaza was burned to the ground and adjacent buildings on the east and west sides of the Plaza and side streets were destroyed (Humboldt Times, 11 July 1875). Townspeople and City fathers alike knew that the Plaza's pump-and-bucket operation was woefully inadequate for protecting the business district.

It took another decade, however, before the Arcata Volunteer Fire Department was organized on 24 January 1884 (Trainor, 1984). Just the month before, the Union Water Co. was incorporated for fifty years with \$25,000 capital stock. The major stockholders were William Carson with 200 shares; W.H. Johnston, 150 shares; and John Harpst, 150 shares--the same men who held title to the Gannon Tract. Arcata businessmen O.H. Spring and B.F. Stern each owned one share in the new company. Activity began immediately to bring water to the Plaza:

Operations have already been commenced and a force of men are employed in clearing lands, building ditches and tanks, laying pipes, etc. The water is obtained from a living stream on land owned by members of the company, adjoining the town of Arcata. The water will have to be conveyed a distance of $\frac{3}{4}$ of a mile to the tanks on the top of the hill, through $2\frac{1}{2}$ and 3 inch pipes. These large covered tanks will be built each holding 35,000 gallons. From the tanks the water will be conveyed through 7 inch mains around the Plaza and along the principal business streets. (Daily Times Telephone, 2 Dec. 1883).

The "living stream" was Gannon Creek (Campbell Creek) which runs out of the Park along 14th Street. Nothing is said about an impoundment, so perhaps the water was simply siphoned off the creek and stored in the tanks, which appear to have been located on the top of the hill on "H" Street.

By the middle of February, the water works were about completed with water in the mains and hydrants on each corner of the Plaza--plenty of water for fire protection and even some for beautifying the "public square" with

shrubby and flowers (Daily Times Telephone, 14 Feb. 1884). At least that is what everyone thought, but water shortages and low pressure were constant problems, especially in the summer months when it was necessary to prohibit night sprinkling (Arcata Union, 13 Aug. 1887; 8 Oct. 1887).

The supply of water in the tanks of the Union Water Works is barely sufficient for house use, and in case of a fire would be totally insufficient for effective service. Superintendent J.B. Pouleur says that the supply is insufficient in the dam and he ought to know; but the general belief is that the mains are either choaked or are leaking. Be this as it may, the effect is the same. The company is receiving compensation from the town for a supply of water for fire purposes, and if they do not furnish it the Trustees should take action in the matter (Arcata Union, 21 Jan. 1888).

Another article in the same issue of the Arcata Union mentions the "reservoir of the Union Water Works." These are the first references to "dam" and "reservoir" with regard to the Union Water Co. system. This dam was on Gannon Creek, but whether or not the remnant reservoir still evident in the Park at the top of 14th Street is this original one is unknown. But regardless of its exact location, people were not happy with the state of affairs and the Editor of the Union voiced his opinions on several occasions:

It is about time for the patrons of the Union Water Works to decide whether they are willing to be supplied another season from the little puddle that for several years has constituted the sole supply. The business of this company is no longer an experiment; and our people ought to insist that the company connect its pipes with a purer and more abundant supply. The little pond above the dam is still unenclosed; and free to all pigs, cows, and other livestock that may like to visit it; and that they do so, is evidenced by the tracks that indent its muddy margin (Arcata Union, 31 March 1888).

After "dilly-dallying" with local residents and the town authorities for too long, the Union Water Co. finally took steps to correct the problems:

O.H. Spring has been appointed superintendent and William Carson has been looking into matters per-

sonally. After examining the ground and supply of water, it has been decided that the supply can be sufficiently increased by building another dam a few hundred yards below the old one to catch the large yield of excellent spring water putting into the gulch. This supply can either be pumped into the dam above or led into town in new mains. The work has been commenced and will be pushed to completion. Mr. Spring further assures us that the work of putting a wire fence around the dam will be attended to immediately. People of Arcata will be glad to hear that Mr. Spring has been placed in charge of the works for he is as much interested as anyone in having a good supply of pure water (Arcata Union, 26 May 1888).

Perhaps it is this second dam and reservoir whose remains are visible in the Park at the top of 14th Street. Regardless, the "good supply of pure water" didn't last long and within a few years the Editor of the Union was again complaining, this time about the Union Water Company's "negligence" in keeping the tanks full, not only for customer use, but more importantly for use in case of fire (Arcata Union, 23 Jan. 1892). Despite continuing problems, the City made its annual \$300 payment to the Company for fire protection water (Arcata Union, 9 April 1892). The last payment was made in April 1894, the ten-year contract having been satisfied, and from that point on water would be free for town purposes (Arcata Union, 7 April 1894).

In the fall of 1892, Noah Falk purchased a five-acre site on Preston Creek (Jolly Giant) in the gulch above the mill and log pond from Sarah Jane Preston Anger and her husband Amos (Deed Book 44:114, 20 Oct. 1892). Included in the deed were the rights to water in the creek and the right to construct dams, maintain reservoirs, and lay pipe. The following September Falk sold these rights and the property to the Union Water Company (Deed Book 49:72, 6 Sept. 1893).

In the spring of 1894 the Company built a dam across Preston Creek at a point about 200 feet above the level of the Plaza. August saw completion of the undertaking and the water from this dam, which was a little more than a mile north of the supply on Gannon Creek, was united with water from that old reservoir at the tanks on the hill. At last Arcata was "provided with an inexhaustible supply of pure mountain water flowing directly from substantial dams" (Arcata Union, 14 April 1894; 4 Aug. 1894).

The remains of this dam can be seen on Jolly Giant Creek a short distance above the University dorms alongside the Forest Loop Road. This dam is not to be confused with the larger reservoir, built upstream by the City in the 1930's. In fact, this first Jolly Giant dam is so small, it is difficult to imagine it could provide an "inexhaustible supply" of water even when added to the Gannon Creek water. But the people of Arcata were satisfied and the Editor of the Union was truly optimistic when he stated that "although it is now about the driest month in the year, the water in the Preston Creek dam is flowing over the top of the dam, quite freely. This proves the supply to be inexhaustible" (Arcata Union, 25 Aug. 1894).

The following spring the frame work for the old water storage tanks was taken down; stop cocks were used to regulate the flows from the two reservoirs, eliminating the need for tanks (Arcata Union, 14 April, 1894; 9 March 1895). Water from the Gannon Creek reservoir supplied East Arcata with the main part of town supplied by the Preston Creek reservoir. However, pressure was unequal so that if the two systems were thrown together, the water would all run from the Preston reservoir into the Gannon reservoir. Plans to equalize this pressure called for moving the Gannon dam to give it about 20 feet more fall (Arcata Union, 9 March 1895). Whether or not this move took place is unknown, adding to the uncertainty about just where the original and subsequent Park reservoirs were located and which one remains at the top of 14th Street.

Diking and draining operations around Arcata Bay during the 1890's brought hundreds of acres in the Arcata bottom into grazing use. An agreement between the Union Water Co. and the Arcata Land Improvement Co. in 1896 resulted in water pipes being laid to provide stock watering in the newly-reclaimed areas (Arcata Union, 4 July 1896).

In September 1904 the Union Water Co. donated 26 acres of land to the City to be used "solely for park purposes" (Arcata Union, 10 Sept. 1904), but the Company retained its water rights and access to the reservoir (Deed Book, 91:584, 7 Sept. 1904).

In the summer of 1905 the Union Water Co. made improvements in both reservoirs, raising the Preston dam five feet and the Gannon dam three feet. Arcata's general growth, the opening up of new residential areas, and the "hundreds of head of stock" on the reclaimed marsh district were straining

available water supplies (Arcata Union, 5 Aug. 1903; 12 July 1905). But even with these improvements, Noah Falk was thinking about bringing water from Janes Creek, where he owned 500 acres of "watery" land (Arcata Union, 12 July 1905).

In February 1908, Falk gained controlling interest in the Union Water Co. by adding to his 200 shares, all the stock (400 shares) owned by William Carson. Mrs. John Harpst held 200 shares and Miss Blanche Johnston of Eureka, 200 shares. O.H. Spring still held his one share (Arcata Union, 18 April 1908). At this time, in addition to the comprehensive system of water mains, the Company maintained three reservoirs which gave an "abundance of water at all times of the year both for domestic purposes and for fire protection" (Arcata Union, 18 April 1908).

The 12 July 1904 Union article mentions "both reservoirs" of the Union Water Co., which would be the ones on Gannon and Preston Creeks. However, this 18 April 1908 article refers to "three reservoirs," indicating that sometime between these dates, a third reservoir was built. Its location is uncertain.

During the summer of 1909 a pumping plant was built on Janes Creek to bring 12,000 gallons per hour to the Park reservoir on Gannon Creek which had a holding capacity of 225,000 gallons (Arcata Union, 12 June 1909). With the Preston reservoir having a capacity of 500,000 gallons and the third reservoir, identified in this article as the "Harpst addition dam," with a 225,000-gallon capacity, the Union Water Co. had a million gallons available. The Union Editor again waxed optimistic: "Arcata has a supply of mountain water now that will meet every emergency for many years to come" (Arcata Union, 12 June 1909).

Location of the third reservoir in the Harpst Addition seems unlikely; perhaps, it should have read "Union" Addition. An undated map in the Public Works Department shows a "pond" where the University's Fern Lake is presently located. The map appears to have been drawn by William Hunter at the time he surveyed the land given by the Union Water Co. for the Normal School in 1914. The "pond" was enlarged for the college fish hatchery in 1960 because the existing small, earth-filled dam was inadequate (Arcata Union, 30 Sept. 1960). It is possible that this "pond" was the third reservoir in the Company's system.

In December 1914, William Preston donated 25 acres and the Union Water Co.

25½ acres to the newly-established Humboldt State Normal School for a campus. The Water Company's land adjoined the Park, making, as the Union Editor noted, "a tract of 77 acres available for Normal purposes" (Arcata Union, 10 Dec. 1914).

In 1916, Arcata's other water system, a small company started by G.W.B. Yocom in 1884 and sold to Robert Foster in 1906, was purchased from the Foster family by the Union Water Co. This system had used a small creek in the gulch back of Jasper Janes place to supply its customers which, in 1916, totaled fifty (Arcata Union, 5 Oct. 1916). At the time the fire department was organized and a water system secured by the City, the Union Water Co. beat out the Arcata Water Company for the contract to supply the City with water for fire protection. The Arcata Water Co., however, was given the go ahead to lay pipe and provide water for residential use (Trainor, 1984). "Jasper Janes Place" is west of Highway 101 just north of the St. Louis overcrossing; his house sits on a little rise facing west.

In 1919 Noah Falk sold his interest in the Company to Len Yocom, who had been superintendent of the water works for twelve years. Blanche Johnston, now Mrs. A.W. Way, and Kate Harpst retained their interests of 198 shares each. The remaining four shares were held by others to insure election of five directors (Arcata Union, 10 July 1919).

The Union Water Co. came to an end in 1928 when it was purchased by a Minneapolis Corporation, the Public Utilities California Corporation, a subsidiary of the W.B. Foshay Company (Arcata Union, 2 Aug. 1928). The sale included all the pipes, reservoirs, dams, rights-of-way, equipment and property which were part of the Union system. Approximately 240 acres changed hands: the West half of the Northwest quarter and the North half of the Southwest quarter in Section 27 and a fractional part of the Southeast quarter of Section 28 along with the 5-acre Preston Creek reservoir site in the Southeast quarter of the Northeast quarter of Section 28 (Deed Book 188:306, 26 Oct. 1928). The new owner began serving the Union Water Company's 300 customers in the fall of 1928 after paying \$80,000 for the system (Arcata Union, 22 Nov. 1928).

Redwood Park

Headlines in the 10 Sept. 1904 Arcata Union gave out the exciting news that the Union Water Co. had deeded a valuable tract of second-growth redwoods to the City for a park.

The people of Arcata can now congratulate themselves upon one more progressive move which will do much for the growth of our City and take rank in importance with such movements as the building of the new sewer system, the improvement of the Plaza, the building of the High School and other moves in the right direction which have given Arcata a name as a wide-awake place throughout the State (Arcata Union, 10 Sept. 1904).

At a City Trustees meeting, Union Water Co. president Noah H. Falk "arose" and made the following proposition: "The Union Water Company will sell to the City of Arcata the land in the proposed park site for the sum of \$1500 and will donate that sum to the City to be used toward the improvement of the park." The City agreed to "use it solely for park purposes" and the Company retained water rights, access to the reservoir, and the right to lay pipes (Arcata Union, 10 Sept. 1904; Deed Book 91:584, 7 Sept. 1904).

A Park Commission consisting of Falk, Bert Waite, John Dolson, Mrs. H.W. Jackson and Mrs. J.M. Menefee was appointed by the City Trustees; the Commission was to prepare a plan for park beautification, improvement, and access, and an estimate of the costs of such efforts (Arcata Union, 10 Sept. 1904). The City now had title to "as fine a piece of land for park purposes as can be found anywhere," 26 acres of second-growth redwood with a heavy growth of other natural shrubs, vines, and ferns (Arcata Union, 14 Sept. 1904).

Work began immediately to build the "boulevard" into the park:

The entrance proper will be at the end of 14th street...Beginning at the entrance of the park there is a good road leading up to the reservoir, a distance of about a quarter of a mile. Here a small bridge would have to be built to get across the creek and from this point the survey was made leading up the hill in a southeasterly direction. A preliminary survey was made on the basis of an

eight per cent grade and a fine connection was made with the road already built on top of the hill, connecting with the county road which runs up towards Fickle's Hill back of the Neilson place (Arcata Union, 5 Oct. 1904).

Brushing out the proposed road was to be done with as much volunteer labor as possible in order to save the \$1500 for completing the road. The contract for construction was awarded to A.L. Willis and Peter Anderson who bid \$1482 (Arcata Union, 28 Jan. 1905).

The Park Commission began holding meetings to outline a plan for park improvement. At a February 1905 meeting at Noah Falk's house, the Commission discussed having the community name the new park but "finally decided to dispense with the voting contest proposition, and give it a name at once." Arcata Redwood Park it was! The cost of the bridge across Gannon Creek was estimated at \$200 and Mr. Falk started things off with a \$25 donation followed by H.W. Jackson (Arcata Union, 11 Feb. 1905).

The section of the road from the entrance up 14th along the gulch to the reservoir was completed in February 1905; the bridge across Gannon Creek was finished in May (Arcata Union, 15 Feb. 1905; 24 May 1905). Brushing out the remainder of the road through the park to 13th street was also undertaken.

Meanwhile a two-night park benefit of entertainment of piano solos, Janpanese love songs, a three-act comedy, and a whistling solo by Emily Nixon (she often performed) and booths on May 26 and 27 was a big success and "the way the people turned out and helped the good work along showed that they were in hearty accord with the Park Commission on the question of beautifying what (Judge pro tem) Clifton Connick of Eureka was pleased to call the 'Yosemite of Humboldt County'" (Arcata Union, 27 May 1905; 31 May 1905).

In early June a Park Day was held for clearing brush from a 5-acre site selected for the picnic area and dance platform. Commissioner Falk directed the workers but was no "straw boss" as the brush was cleared and burned. The picnic ground was skirted by the road and off to the side was a fine place to tie the teams. Downed logs were "snaked" out and rolled down into the gulch and trails leading in different directions were brushed out. Several springs were located in the picnic area and the "old logging road which was tread by

the pioneers and their ox teams a half century ago was again cleared out for the present generation" (Arcata Union, 3 June 1905).

That summer, even before improvements were built, local residents were enjoying their new park with supper picnics and camp fires (Arcata Union, 7 June 1905; 10 June 1905). Construction of the dance platform was well underway in July. The 50' by 60' platform had seats arranged on the outside in two tiers and a 14' by 12' music stand on the west side. The band stand was built in the form of a shell, facing up the hill so that the music would be easily heard by an audience seated on the hill (Arcata Union, 21 June 1905; 15 July 1905).

It was the intent of the City and the Park Commission that the improvements be well done and permanent in character. In order to keep the Park in good condition and continue improvements such as building picnic tables and maintaining the road and trails, it was suggested that a log house be built for a caretaker, hired by the City (Arcata Union, 16 Aug. 1905). Apparently this suggestion didn't fly as it wasn't until the 1920's that a keeper was hired and a house constructed.

The band stand which has ornamented the center of the Plaza for some years past and which was recently removed to make room for the McKinley statue has been moved to the entrance of Arcata Redwood Park and will occupy a position to the right of the road, a few feet beyond the entrance. A commanding location overlooking the gulch, which some time may be transformed into a small lake, was found and the stand will be used for a sort of rest booth at this point. It will be covered with vines and made into a large summer house. The stand was moved by A.L. Willis and Quincy Jones, and reached its destination in good shape, the moving of the structure being considerable of an undertaking (Arcata Union, 12 May 1905).

After the initial flurry of activity over the Park, things calmed down and by 1912 the City Trustees were considering appointment of a Park Commission, the original one having faded away. Noah Falk was still interested in the welfare of the Park, however, and had offered to erect a "picturesque log cabin" in the Park for a caretaker if the City would pay his salary and otherwise improve the property (Arcata Union, 14 Nov. 1912). Again the suggestion was passed over.

With the coming of the Redwood Highway through Arcata in the early 1920's, gas stations along "G" Street and tourist-serving facilities came of age. Arcata's Chamber of Commerce led a drive to raise funds for an auto camping facility in Redwood Park (Arcata Union, 11 Oct. 1923). Work on the Auto Park was begun in January 1923 and when completed it was to be the only municipal auto park among the redwoods on the Redwood Highway (Arcata Union, 13 Jan. 1923). Clearing of the area for the Auto Park was progressing in March as plans for the 26' by 60' building were announced. It was to provide kitchen, laundry, shower, and toilet facilities for the auto traveler with hot water, a septic tank system, and oil cooking stoves. Contemplated, at long last, was the erection of a park keeper's lodge for a man and his wife who were to oversee the Auto Park (Arcata Union, 15 March 1923).

By July the Service Building, as it was called, was almost completed and already the new park keeper, A.D. Tenney, reported twenty-two people had slept in the park on one occasion, even without any advertising. However, large signs were being made ready for strategic places on the Redwood, Klamath, and Trinity Highways, advertising the Auto Park and welcoming the traveler to "one of the best located and most sanitary and modern auto camping parks in California" (Arcata Union, 19 July 1923).

Beginning with the 2 August 1923 issue of the Arcata Union, Keeper Tenney kept local residents up-to-date on happenings at the Auto Park in his column, "Notes from the Auto Park." Most of the travelers were from California, some from as far away as Los Angeles. They paid 50 cents per "machine" per night to camp and use the facilities of the Service Building (Arcata Union, 6 Sept. 1923). The dining tables in the kitchen were continually decorated with flowers from local gardens, and donations of furniture for the new accommodations kept coming in (Arcata Union, 16 Aug. 1923; 6 Sept. 1923).

Keeper Tenney was a man attuned to the natural beauty around him. He repeatedly wrote about the plant and animal life he discovered in the Park and asked people to bring native vegetation to the Park for planting. In his 2 August 1923 letter, he wrote:

A few bluejays, robins, and tomtits flit about
and a nest of tiny rabbits found under an old
stump prompts us to ask if anyone can tell us

how to attract more wild birds and animal life to the Park.

What are the very best climbers and creeping vines to plant beside our stumps--vines that will harmonize or contrast with our natural scenery?

Who can furnish us--donate to the Park--bulbs or roots of the many varieties of wild lillies for which Humboldt County is famous...?

We hope that little by little, day by day, in every way, the Park may be made more beautiful and attractive and especially an exposition of Humboldt County's wild life (Arcata Union, 2 Aug. 1923).

In August Nelson Johansen began construction of a social hall and Keeper's house, but apparently the building wasn't completed for some time (Arcata Union, 16 Aug. 1923). Keeper Tenney was a one-man tourist bureau as he visited with the travelers and told them about the Barrel Factory, creameries, Samoa and Korbelt saw mills, the Eureka Stump House, Trinidad Whaling Station, Hoopa Valley Reservation, and the wreck of the Milwaukee. He called for other suggested tourist spots and thought a brochure might be worthwhile (Arcata Union, 16 Aug. 1923).

In his end-of-the-year report to the City, Keeper Tenney noted that since the opening of the Service Building on August 6th, 91 machines with 259 guests had registered at the Auto Park. The first year had been a great success (Arcata Union, 18 Oct. 1923).

The Auto Park continued to provide overnight facilities at least to 1950 (Permit to Darrell Wilson, 25 Jan. 1950). After that the building was used by a variety of community and college organizations and by local people until it was torn down in the early 1970's and replaced with the current community building. The Keeper's house and social hall are still in use today.

City of Arcata Water System

Shortly after the purchase of the Union Water Company by the Public Utilities California Corporation, City officials began investigating the possibility of making the system a municipally-owned utility.

In 1933 the City hired San Francisco engineer Clyde C. Kennedy for \$1250 to "make a complete appraisal of the existing water system serving Arcata for the purposes of purchase...and...a study and report including an estimate of the cost, on the necessary changes, improvement, and extensions of the existing system to serve the present and anticipated future requirements of the city, including sources of supply, storage, and necessary treatment to furnish a satisfactory supply..." (Letter from Kennedy to City, 18 May 1933).

Kennedy submitted his report to the City in October and the City Council decided to make an offer to the Public Utilities California Corporation for the purchase of the water system subject to a vote of the people and the ability of the City to obtain government funding (Arcata Union, 6 Oct. 1933).

In order to prepare an application for the City for a loan and grant to acquire and reconstruct the water system, Kennedy requested some photographs taken of the Gannon Creek reservoir, the Preston reservoir, and the Janes Creek pumping plant to show them in their "unprotected and unclean condition..." He also wanted prints of the photographs City Clerk George Cropley had of the "water dogs" (Letter from Kennedy to City, 31 Oct. 1933).

In October the City made an offer of \$59,752.41 to the Public Utilities California Corporation. In rejecting the offer, the Corporation's spokesman, F.J. Keys, noted that the system had been valued as of 31 Dec. 1932 at \$122,200 by the Corporation's engineer (Letter from Keys to City, 13 Nov. 1933).

Kennedy responded that his report showed how "shamelessly the old value, reported by Mr. Yocom in the days of his ownership, had been padded" by the Public Utilities California Corporation (Letter from Kennedy to City, 17 Nov. 1933). But the City continued its efforts to obtain funds, authorizing Kennedy to proceed with a \$165,000 application to the Federal Public Works Administration and retaining William J. Locke as a special attorney to represent

the City (City Council Resolution, Nov. 1933; Letter from Kennedy to City 28 Nov. 1933).

In January 1934, the City received notice that its application for a loan and grant to purchase and rehabilitate the system had been rejected by the State Advisory Board of the Public Works Administration; the State Engineer suggested that the City provide for two bond issues, one for the amount necessary to purchase the existing system which would be proposed as a general obligation bond issue to be sold in the open market and the other for the amount necessary for rehabilitation of the system less the grant of 30% which would be proposed as a revenue bond issue that the federal government would purchase (Letter from Kennedy to City, 30 Jan. 1934).

Kennedy filed a revised application for a loan of \$105,000 with a 30% grant for the cost of labor and materials for rehabilitation, omitting the \$60,000 originally requested for acquisition; apparently WPA funds were not for capital expenditures, but for programs which provided work for the nation's unemployed (Letter from Kennedy to City, 9 Feb. 1934).

After reviewing Kennedy's Report, the City's appointed committee composed of five local men recommended that the City proceed with the purchase of the system if a satisfactory price could be agreed upon; if not, the committee recommended purchasing water from the Eureka project if it should ever be constructed (Sweasey Dam on Mad River). In addition the committee felt that any rehabilitation work should be funded as part of the bond issue. Retirement of the bonds should come from revenue derived from the system (Letter from the Committee to City, 15 Feb. 1934).

For the first six months of 1934, there was considerable letter writing between the PUCC, Kennedy, and the City regarding selection of a third party arbitrator to help in arriving at a satisfactory price. Apparently it was as difficult to resolve the arbitrator issue as it was the price.

Meanwhile the City set 2 Oct. 1934 for a special election to vote on a ballot measure which read: "Shall the City of Arcata incur a bonded debt to the amount of \$90,000 lawful money of the United States for the acquisition, construction, and completion of a system of waterworks by and for said City, said debt to bear interest at a rate of not to exceed 5% per annum, payable semi-annually?" (2 Oct. 1934 Ballot).

The City and the Union began a concerted effort to gather public support for passage of the bond issue. Editorial and voter information pamphlets urged a "Yes" vote so that muddy water in the winter and weak water pressure in the summer could become inconveniences of the past. The system to be purchased included the Gannon Creek reservoir with a watershed of 40 acres, the Preston (Jolly Giant) reservoir with 320 acres drainage area, Janes Creek pumping station in a watershed of 480 acres and a pumping unit on a well at Benjamin Dunlap's place on west 11th Street, as well as all the pipe lines (Arcata Union, 14 Sept. 1934; 28 Sept. 1934).

Arcata voters were ready for a change, passing the bond issue with a vote of 399 to 76. Plans called for expenditure of \$37,000 over three years for improvements which included raising the height of the existing dams, building a larger dam and installing a filter system (Arcata Union, 5 Oct. 1934).

In the meantime, the Federal Emergency Administration of Public Works refused to recommend approval of the application for rehabilitating the system because the National Industrial Recovery Act required that all loans made by WPA be "reasonably secured." Since Arcata had not legally pledged all of the revenues from the system to pay off the loan exclusively, the agency was unable to recommend revenue bonds as security for the loan (Letter from WPA to City, 24 Sept. 1934). The City responded by cancelling its application for a loan and asked instead for a \$40,000 grant for improvements. With passage of the bond issue the City had \$75,000 for purchasing the system and \$15,000 left over for immediate improvements. In addition there was to be no maturity of the bonds for the first three years, giving the City water-system revenues for improvements (Letter to WPA from City, 9 Oct. 1934).

The water bonds were sold in December, but the City had yet another disappointment in that the attorney who prepared the resolution stated that the maturity of the bonds would begin 1 December 1935 instead of 1 December 1938 which meant the loss of three years of water system revenues which had been earmarked for improvements (Letter to State Engineer, WPA, from City, 18 Dec. 1934). The City purchased the water system in January 1935 for \$72,969 subject to some adjustments for accounts receivable, materials and supplies (Arcata Union, 4 Jan. 1935).

Efforts began immediately to improve the system with the City first

calling for bids to raise Jolly Giant dam twelve feet (Arcata Union, 15 March 1935). Both bids submitted were rejected by the City Council, which then abandoned that idea and proceeded to develop plans for construction of a second Jolly Giant dam a short distance upstream (Arcata Union, 12 April 1935). The City also withdrew its application to the WPA, thanking the agency for its "patience and courtesy in the prolonged and fruitless correspondence over the Arcata water project" (Letter to WPA from City, 10 May 1935).

It took two to three months to find a suitable dam site which eventually was located 1,500 feet above the first Jolly Giant dam. Another four months were needed to clear the site of stumps and then there were engineering problems, a ditch cave in, road construction, winter rains, and difficulty in selecting and securing a filter site. The labor for clearing the dam site was paid for by State Emergency Relief Administration funds with the City providing the manager, the trucks, steam shovels and other equipment. When SERA ceased to exist, the City was left in limbo for several months until WPA entered the picture, providing partial funding for construction of the dam in the fall of 1935 (Arcata Union, 20 Dec. 1935).

In January 1936 "after a long series of delays and bitter disappointments over which the water department had no control, the dream of the citizens of Arcata for clear, pure and undefiled water as nearly perfect as science and human agents can make it is on the verge of realization. The filter is now fully installed and will be in operation by the 1st of Feb..." (Arcata Union, 31 Jan. 1936). Located 200 feet below the little reservoir, the filter was installed long before the new dam was completed, but it was certainly welcomed as ground disturbances at the dam site were causing muddy water in the City's system. The filter, mounted on a concrete foundation eight inches deep, weighed 60 tons (Arcata Union, 20 Dec. 1935).

In the spring of 1937, the City made application to the Division of Water Resources for a permit to store water in the new reservoir. At that time, only concreting of the spillway remained to be completed (Letter to Division of Water Resources from City, 5 May 1937).

Water Department Superintendent Warren Moulton was finally able to give a water project report to the Chamber of Commerce in May 1937:

Emphasizing the outstanding fact that the City of Arcata has a dam now completed for her water supply which is but four feet lower than the gigantic million and a half dollar Eureka Mad River dam project, Warren Moulton, head of the City's water department, Wednesday night gave a graphic report of the water department before the Chamber of Commerce.

...On October 2nd, 1934 the people of Arcata voted a \$90,000 bond issue 475 to 76 (this should be 399 to 76) to purchase the water system from the Public Utilities California Corporation. The \$90,000 in bonds was sold to the Bank of America on Dec. 28, 1934 and has to be paid off in 30 years or \$3000 per year. The first \$15,000 bear interest at the rate of 5%/annum and the balance at 4%/annum. To date we have paid a total of \$13,525 in bond redemption and interest.

In the 28 months that the City has been operating the system, they have taken in \$37,420.58. The total operating and maintenance costs have amounted to \$17,970.94 in the same period. This gives the City a net return of over \$200 per month on the investment.

The original system was made up of two small reservoirs feeding into the mains by gravity, another from which the water had to be pumped and a deep well on Arcata bottom. The water from this latter source was very hard and brackish. The power bills for pumping ran as high as \$200 per month during the dry season. The total reserve amounted to a little over one million gallons which would be dangerously low in case of a serious fire. The City Council decided to add a larger reservoir to the system and work was started February 1935.

SERA funds were available at the time and in all \$8,928.37 was secured and the City put up \$2281.38. This alphabetical bank went under about that time and the WPA came into our midst. In all these agencies have paid \$28,622.02 and the City has paid about \$26,835.24, making the total cost approximately \$55,500.

In creating this reservoir, an earth dam had to be built. This dam is 245 feet wide at the bottom, 46 feet high, 17 feet wide on the top and 166 feet long. The front slope is built on a two to one slope and the back on a two-and-a-half to one slope. Most of the material used in constructing this dam was taken from the inside of the reservoir and

for each yard of earth removed we had additional capacity of 202½ gallons of water. The original survey figured an approximate capacity of 15 million gallons but the excavation made in building the dam has increased this to an estimated 23 million gallons. The lake created by this dam has a little over two acres surface and a depth of 35 feet at the dam. The State Dept. has required that a large spill way be installed and the dam carried to five feet above the floor of the spill way. All of this has been done and today the cement has been placed in the part of the spillway which goes through the rock on the south end of the dam.

There is a twelve inch pipe through the dam and a gate valve on the intake end which is operated from the crest. We have placed a moveable screen over the intake so that cleaning or renewing can be done without the use of a diver. An eight inch line carries the water to a point near the filter plant, which has been added to the system at a cost of \$3870, \$2500 has been paid up to this time.

Chemical treatment of the water coming from the new reservoir will be made in the main just below the dam. A sheet iron building 14 feet square will be placed on the west side of the dam in which will be two 500 gallon tanks and one 1,000 gallon tank. It is the department's intention to place an eight foot wire fence completely around the lake. This fence will be supported by steel posts placed in concrete.

The final step to turn the water into the City mains calls for the installation of pressure-reducing valves which will represent an outlay of practically \$800. These valves are to be placed just above the College playground and near the Lester home. The pressure on the upper side of these valves will be approximately 115 pounds, this will be reduced to 45 pounds. Provisions will be made here for four inch high pressure outlet in case that we should desire to carry the full head into Fickle Hill. Mr. Perkins of the State Engineering Department passed the remark on his last visit here that when all is said and done on the Arcata project, Eureka's big million and a half dollar installation will be just four feet higher than ours (Arcata Union, 21 May 1937).

Heavy rains in October and November filled the reservoir which was "functioning very well" in December (Letter to Division of Water Resources from City, 23 Dec. 1937).

In the spring of 1939 a filter was installed on a concrete foundation below the Gannon Creek reservoir so that all City water was treated and filtered, but with better water and some population increase, the City was already beginning to recognize that it would "only be a matter of a very few years before additional sources of supply will have to be provided" (Letter to George Hawley, Deputy in Charge of Dams from City, 27 March 1939).

That same year the City became interested in obtaining the upper Janes Creek watershed (SE $\frac{1}{4}$, Sec. 27) owned by the Reclamation Water Co., which had assumed title to the land from the Arcata Land Improvement Co. in 1902 (Deed Book 82:10, 24 Nov. 1902).

The Arcata Land Improvement Co was incorporated by M.P. Roberts, John Harpst, O.H. Spring, Sylvester Myers, John C. Bull and George Zehndner in April 1893 for the purpose of reclaiming 1,500 acres of bottom land (Arcata Union, 22 April 1893). As the land was cut off from tidal influence, drained, and planted to pasture grasses, it became available for livestock grazing. The well water, however, was too brackish for stock watering so, on 13 June 1896, the Arcata Land Improvement Co. entered into an agreement with the Union Water Co. to extend its pipes into the reclaimed district (Deed Book 82:10, 24 Nov. 1902; Arcata Union, 4 July 1896).

The Reclamation Water Co., incorporated by H.W. Jackson, R.W. Bull, Frank Graham, Paul A. Brizard, and Lorens Petersen, was organized to obtain water for Arcata bottom ranches (Letter from Secretary of State to City, 19 March 1941). Water from the headwaters of Janes Creek was brought by pipe over the ridge into Jolly Giant Creek to become part of the City's system; City mains and distribution pipes then conveyed the water to the Company's 29 Arcata bottom customers (City Memo, c. 1940).

Repairs to the line from the Reclamation Water Company's "dam" to the City's system were made in May 1939 when new two-inch pipe was put in, giving the City 22 $\frac{1}{2}$ gallons per minute and some water was still "going over the spillway at the Reclamation dam" (City Memo, c. 1940). "Dam" and "spillway" are probably misnomers; it may have been nothing more than a deepened hole

for the pump.

As the City began investigating the situation with the Reclamation Water Co., it found that the corporation had been suspended by the State on 6 Jan. 1940 for failure to pay state taxes (Letter to Donald Drew from Secretary of State, 25 Oct. 1940). In addition, a review of City records revealed that between 1 Jan. 1935 and 26 May 1939, 2.6 million acre feet of water had been delivered to the City's reservoir by the Reclamation Water Co. pipe but for that same period, the City determined it had supplied 3.1 million acre feet to the Company's customers. With this overdraft of about 500,000 acre feet, the City figured the Reclamation Water Co. owed it some money (City Memo, May 1939).

In December 1940 the City wrote letters to the Reclamation Water Co.'s owners--Bank of Eureka, Alma Thompson, P.J. Peterson, Lorens Petersen, Carrie Bull, Joe Moranda, Brizard Estate Co., Estate of H.W. Jackson, Alice North, and Ralph W. Bull--proposing cancellation of the debt in exchange for a deed to the land (Letter, 14 Dec. 1940). Negotiations resulted in the City agreeing to also pay other debts, amounting to \$1000, and to repair the distribution system on the lands of the Company's owners and to conduct the system as part of the Arcata water system (Letter to State Railroad Commission from City, 26 Jan. 1942). In June 1941, the Reclamation Water Co. tract became part of the City's property at a cost of about \$2500 (Deed Book 250:499, 10 June 1941).

By 1941 the City was exploring the possibility of a water project on Jacoby Creek to include a 50-foot dam, 1.5 miles of road and seven miles of pipeline (Memo from Warren Moulton, 13 Oct. 1941). In the summer of 1944, the City purchased the Jacoby Creek property from J.N. Lentell for \$12,500. The City secured a water appropriation permit from the State in 1946 and despite continued efforts to raise the money, including a bond issue election in 1946, for the development of this project, it was never realized and the permit was revoked on 19 May 1964 (State Water Rights Board Staff Summary, 19 Dec. 1963; Letter from Board to City, 19 May 1964).

Water problems during the summer of 1944 prompted the passage of a resolution by the City Council to authorize purchase of water from Eureka by connecting with Eureka's pipe which passed through Arcata from its Mad River project (City Resolution, 31 July 1944). Water continued to be pumped from Janes

Creek over the hill to the little Jolly Giant reservoir and the Gannon Creek reservoir was also in use. At the time the new dam was built on Jolly Giant Creek, it was believed that there was sufficient storage for many years to come, but industrial needs, particularly Arcata's major employer the California Barrel Company, put severe strains on the system (Letter to Division of Water Resources from City, 10 May 1945).

An acute water shortage in the summer of 1947 put the Water Department in the red due to pumping costs to supply well water; a new source of water had to be found and the voters had decided that it would not be Jacoby Creek.

In 1949 the City contracted with Brown and Caldwell of San Francisco to evaluate the City's water system. The report found significant problems with the quality of the water and recommended chemical treatment, chlorination, meters to monitor the supply and "put the system on a business like basis," and a State permit (Mr. Brown noted that without a permit the City would be in an embarrassing and untenable position in the event of an outbreak of typhoid or dysentery) (Brown and Caldwell Report, 18 April 1949).

That spring the City was forced to run a pipeline to a well on Mad River in an effort to supply the increasing demand for water (Letter to State Dept. of Health from City, 9 May 1949). By 1953 another Mad River well was in use in addition to supplies on Gannon and Jolly Giant Creeks and the pumping site on Janes Creek. The City had also taken Brown and Caldwell's advice and the water supplies were now being treated and chlorinated (Letter to State Dept. of Public Works from City, 29 Oct. 1953).

About this time Humboldt Bay business interests began scouting around for industrial development projects. Pulp mills looked good, but, of course, they needed lots of water; thus, the formation of the Humboldt Bay Municipal Water District which undertook the development of a large water project on the Mad River. In July 1959 the District signed contracts with Georgia Pacific and Simpson to supply their pulp mills beginning 30 June 1962 (Arcata Union, 31 July 1959). Construction of Ruth Dam began in September 1960 (Arcata Union, 23 Sept. 1960; 30 Sept. 1960).

After much study and discussion, the City Council decided in December 1960 to enter into an agreement with the District for the purchase of water (Arcata Union, 16 Dec. 1960). Construction of the Ranney wells at Essex commenced in June 1961 and the City set April 10, 1962 as the date for a

\$900,000 revenue bond election to finance a new water system (Arcata Union, 9 June 1961; 12 Jan. 1962).

An information paper supplied to the Citizens' Water Committee, appointed by the City Council to get voter support for the bond issue, revealed that the City's water system, valued at \$933,680, was not dependable, storage was insufficient, and maintenance costs were high due to old, eroded pipelines and obsolete facilities.

The City's primary source of water was the four Mad River wells, but the old system was still in use. Water from Janes Creek was pumped into the big Jolly Giant reservoir, which also stored runoff from the watershed. The water was piped to the little Jolly Giant reservoir where it was treated with alum to remove sediment and limed to raise the pH, before passing through the filter and chlorinator. Tanks provided storage for about 300,000 gallons and the City had 26 miles of transmission and distribution mains. (The wooden flume which crosses the little reservoir, carried winter overflow for release into the creek below the dam.) The water in the Gannon Creek reservoir was also treated with alum and lime before passing through the filter and chlorinator, located below the dam (the filter's concrete foundation can be seen above the creek along 14th Street). From the filter, the water was pumped up to the storage tank on a redwood stump near the Scout Hut in the Park (Personal Communication with Lawrence Banducci, 27 August 1985).

The bond issue passed and in June 1962 the City began construction of its new water system, signing a 40-year contract with the Humboldt Bay Municipal Water District on 18 Sept. 1962 (Arcata Union, 22 June 1962; 21 Sept. 1962).

A City of Arcata News Release, 30 Jan. 1964, invited the public to an open house at the Arcata main water pumping station on Alliance Road on 12 February 1964, marking the beginning of a new era in the history of the Arcata Water System.

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From: History and Business Directory of Humboldt County. November 1890,
Daily Humboldt Standard, Eureka, California.

...Most of the timber is now felled with saws instead of axes, as hitherto, it being found that the tree jumps better from the stump, and causes less waste by breakage, than when the ax is used. The trees are then barked and a fire run over the ground to burn up the bark and rubbish. Green redwood burns with such difficulty that the good logs are rarely affected by the fire. And now, when all that will burn has been consumed, begins the real labor of getting out the logs. For handling these monsters no ordinary road will answer. It must be wide, and smooth as a turnpike, all rocks and roots must be carefully removed, all hollows and gullies filled up; if the road is unlevel or soft, skids must be laid down. If the logs are small, of course, such care need not be taken, but for large timber it requires good engineering and much hard work even to build a good logging road. With the road built, comes the labor of rolling the logs into it. Cattle alone would be useless, except for the smaller logs. Blocks and tackle, often double, and sometimes triple blocks are needed to roll them out of their beds. Nor will any ordinary teamster answer to handle the cattle. He must be a man of judgment and skill. The best teamsters command a salary of \$100 to \$150 per month. The "bull whacker" is usually the highest priced man in camp.

Once in the road, several logs are fastened together to make a "train," and are hauled to a landing to be loaded on the cars, or to the stream to be floated to the mill. The train of logs once started, there must be no stopping if it can be avoided. All along the road are stationed barrels of water. As the train moves a man runs along beside it, and, filling and re-filling his pail from the barrels, throws water in front of the train, that there may be as little friction as possible. The loads hauled are sometimes enormous. One train of seven logs hauled on Humboldt Bay in 1887 by A.A. Marks, teamster, with five yoke of oxen, scaled, collectively, 22,500 feet, board measure, of merchantable lumber. No wagons are used in the woods; the logs are simply "snaked" on the ground.

Until within the last few years, all this labor of handling logs in the woods was done with cattle, but now they are in many places using steam for the purpose. The machine used is "Dolbeer's Patent Steam Logging Machine." It consists of an upright boiler and engine, somewhat similar to a portable hoisting engine, except that instead of a reel to wind the rope on, it has two "gypsy heads," one on each end of the reel shaft. It sits on a strong frame, the sides of which are like sled runners. It has a strong purchase from the engine to the "gypsy" shaft. To move the machine around in the woods, they run a line ahead, make it fast to a tree or stump, take two or three turns around the "gypsy" and start up the engine. In this way it hauls itself wherever wanted. When the machine is in place it is made fast to a tree or stump, and a line run to the log to be removed, and by means of snatch-blocks the log is hauled in any direction desired. By the use of this machine heavy logs are brought out of ravines and bad places where it would be almost impossible to get them with oxen or horses. The wooden railroad or tramway, is used in many places for transporting the logs to the stream, or to the mills, but as the more accessible timber is being cut off these are being supplanted by iron and steel rails and locomotives.

...we will give a description of the logging camps, where from 80 to 200 men are engaged, according to the period of the year and the capacity of the mills. In the Mad river country the land is comparatively level, while in the Eel River, Freshwater, Ryan's Slough, Jacoby Creek, etc., the timber grows on steep hills, which form narrow canyons. Those who own level timber land claim it is the best, and others who have steep hillsides are loud in their praises of that form of country, following the saying that "every crow thinks her own young the blackest," but to an impartial judge both have their advantages and disadvantages. In the level country there is less loss of timber than that which grows on the hillsides, but again it is more difficult to haul the logs than in a rough locality where shutes can be used. After the rainy season the felling term commences, which is followed up with more or less vigor until the winter months. After a large area has been cut from--or rather sawed--the weeds and branches of the trees are set on fire so that when the cutters are through the charred trees lying butt downward are ready to be sawed into logs ranging in lengths of from twelve to twenty-four feet and longer. Then the swampers begin their work by cutting skid roads, building landings, bridging over creeks and making shutes. This is very expensive. As the roads and shutes are advancing a small army aided by several donkey engines engage in hauling these monster logs to the shutes where they are slid down to a point accessible for a team of from twelve to sixteen oxen, and are then hauled to the railroad landing place for transportation to the Bay. The work in the logging camps is really the most important, for here an immense amount of money may be lavishly expended, or a great saving made. So the most experienced men are engaged for this work. It is a most picturesque scene to witness the operations in a logging camp. The giant redwoods, forming the outer boundary, towering for 200 feet in the air as if looking solemn and sad at the destruction of their comrades, which are lying prone, cut into logs, charred and divested of their foliage. The donkey engine puffs and blows as it hauls the stubborn logs towards the shute. A boy leading a horse with canvass bags filled with water on his back threads in his way up along the hillsides. He carries the water to tubs placed at intervals of fifty feet along the shutes. The logs which the donkey engine was hauling arrives at the shute; it begins to slide, and men with tin pails in their hands run along dashing water in front of the logs. A loud crash is heard--it has struck a log gone before it. A sullen and powerful train of oxen are slowly hauling several timbers over the greased skids; they arrive at the landing place and the logs are rolled by jackscrews and a donkey engine, with block and tackle, onto the short logging trucks. A train of twelve or fourteen cars is rapidly loaded, the engine whistles and goes thundering on its way to the log dump. This scene goes on without intermission from 6 a.m. until 6 p.m., except for a half hour at noon time.

The men engaged in logging have their cabins and cookhouse, barns, blacksmith and carpenter shops in the near neighborhood of where they are at work, and these camps have all the appearance of thriving villages. The eating-houses are under the charge of a good cook--a woman usually--and the food is always of the best, though plain; plenty of meat, vegetables, bread, coffee, tea or milk with cakes and pastry, well cooked and wholesome...

ADDENDUM TO LOGGING SECTION

Prepared by

Dale Thornburgh

Rough Draft

Logging of the Gannon Tract

1869 - 1876

Based upon written records and archaeological evidence

In 1860 before this area was logged, the tract was covered with an old growth redwood forest. There were from 10 to 15 large redwoods per acre with the size varying from 4 to 20 feet in diameter with an average size of 8'. Old growth Douglas-fir, sitka spruce, grand fir and western hemlock also occurred in the forest. The understory was a carpet of oxalis and swordfern.

In 1869 the logging of these old growth forests started with the felling of the large trees. The trees were cut with long crosscut saws and axes. The fellers worked from staging boards from 8-12 feet above the forest floor. As can be seen in the forest, at the ... undercuts were started on some of the large trees but not completed. This left the forest full of high stumps and a few uncut old growth trees. All trees were felled uphill. Following the falling the trees were stripped of their bark and bucked into even lengths from 12 to 20 feet. After the logs were bucked the area was burned to remove the bark and other slash in order

to ease the moving of the large logs to the skid roads.

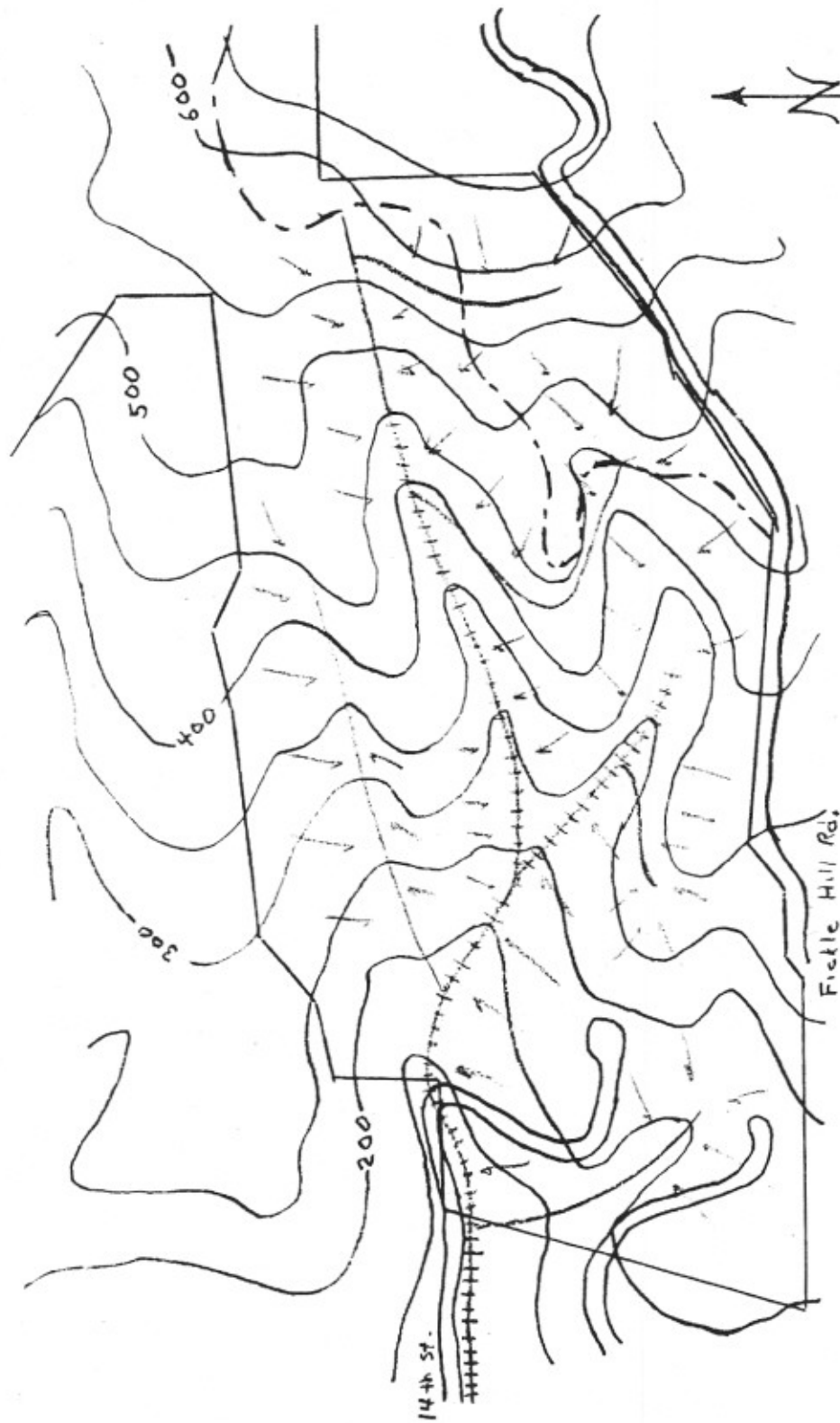
The large logs were moved (snaked) to the skid roads by hand using a combination of jack screws and block and tackle. This was slow and difficult work to move the large logs. In order to reduce the snaking distances, skid roads were constructed in most of the creek bottoms and lateral skid roads were built partway up the longer slopes. Animal teams were used to pull the logs along the dirt skid road down to the log conduroy skid roads. Once the logs were on the main skidroads the logs were made into trains and pulled by teams of oxen down to the landing, where the logs were placed on railroad trucks and pulled by a four horse team to Embarcadero Slough.

As stated in a 1874 newspaper article "during the winter the heavy rains and falling trees damaged the roads, and it took a great deal of labor to repair them". Since the skidroads were build in the bottom of the creeks, the heavy rains probably washed out some of the "skids" and deposited eroded soil on the "roads".

Following the completion of the logging of this tract in 1876, it probably was very unsightly compared to today's standards; high burned stumps, large numbers of burned dead snags, a few scraggly burned old growth trees with broken tops and large number of eroded skid roads. The logged area

was burned frequently until about 1900.

Logging of the Gannon Tract 1869-1974



PAVED ROAD
 Logging Road
 400-Contour line (Ft)

Scale 1" = 500'



Over-shaded with circ. skid.

Over-shaded with dot skid.

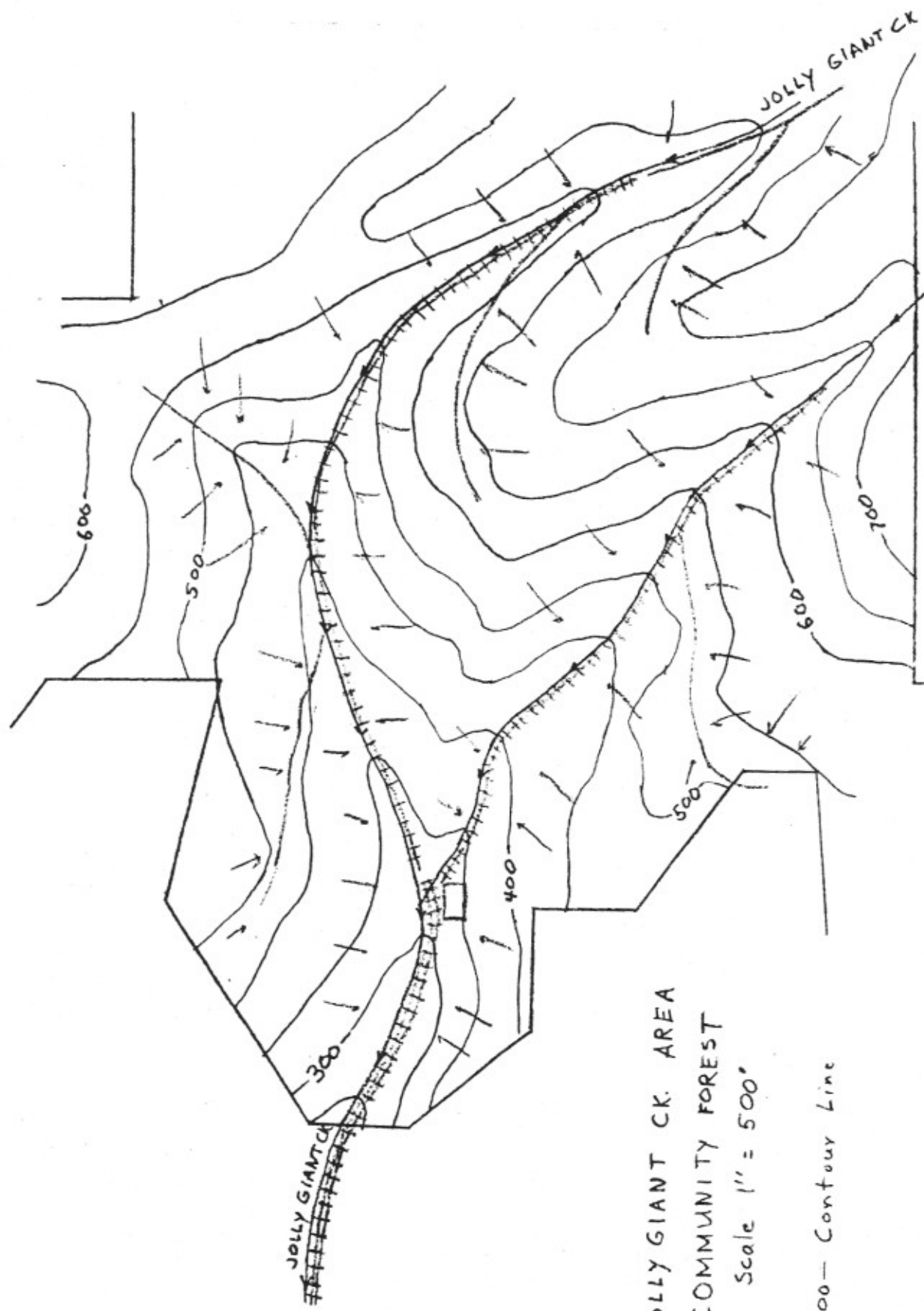
Skidding

Rough Draft

Logging of the Preston Tract

1873 to 1883

The logging of this tract was the same as the logging methods used on the Gannon tract, except that an iron track railroad was built from the mill up Jolly Giant Creek to a landing and logging camp located run the big Rock on Jolly Giant Creek.



JOLLY GIANT CK. AREA
COMMUNITY FOREST

Scale 1" = 500'

~500- Contour Line

Logging of the Preston Tract 1873-1883

the Iron track railroad

the Open railroad

Slit trail

Shading

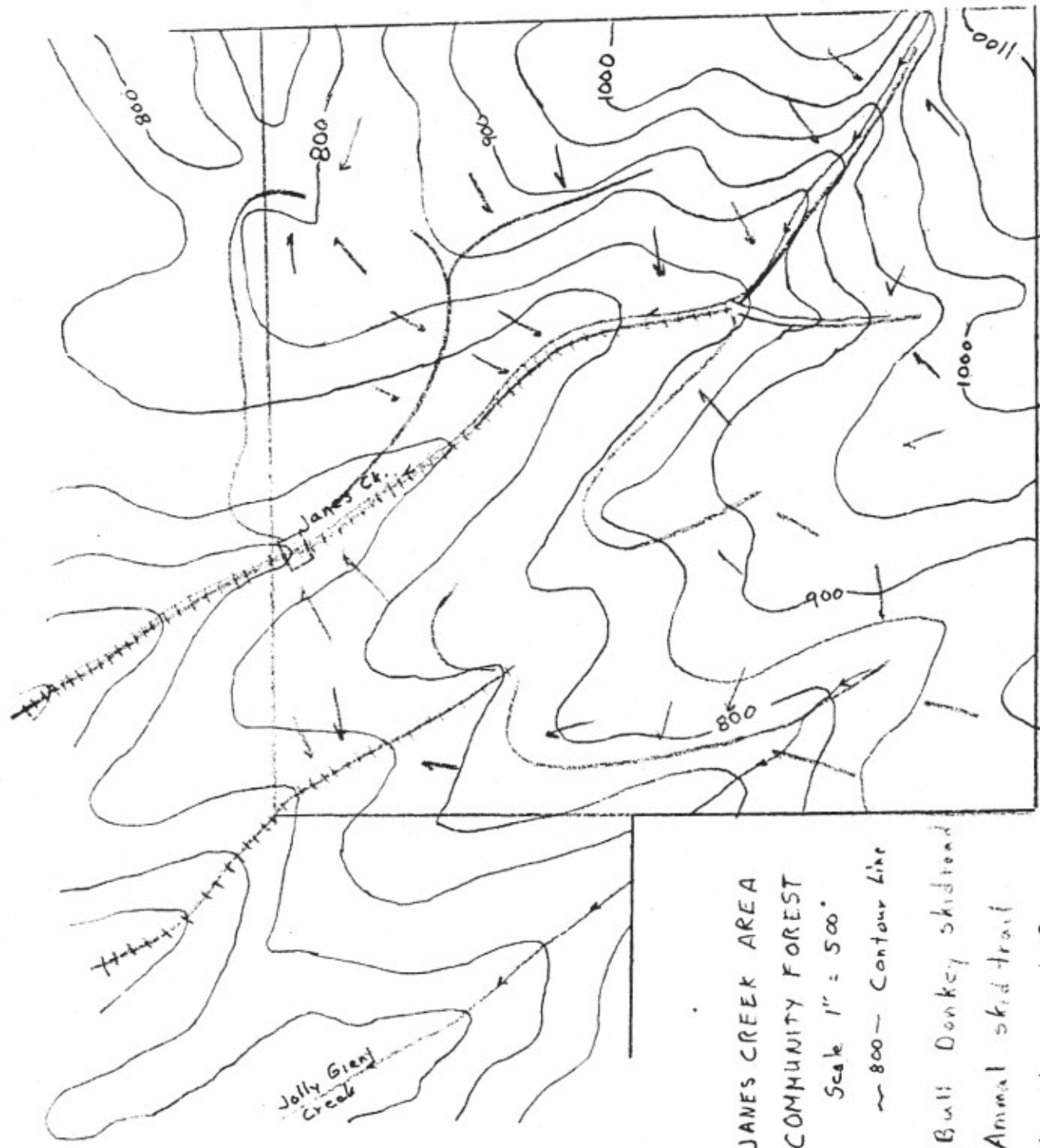
□ Logging Camp
and landing

Rough Draft

Logging Of the Reclamation Water Co. Tract

1880 to 1887

The large trees in this tract were felled by hand with crosscut saws, the bark was peeled followed by burning. The large logs were yarded to the skid roads by small movable stream donkeys set on skids. Horse teams were used to skid the logs down to both forks of Janes Creek, to the main corduroy skidroads. Bull donkeys were used to cable skid trains of logs down to the Janes Creek mill. An 1880 photograph of the Janes Creek mill shows a train of logs on a corduroy skidroad with a bulldonkey in the background (Susie Fountain collection).



JAMES CREEK AREA
COMMUNITY FOREST

Scale 1" = 500'

~ 800 - Contour Line

+++++ Bull Donkey skidroad

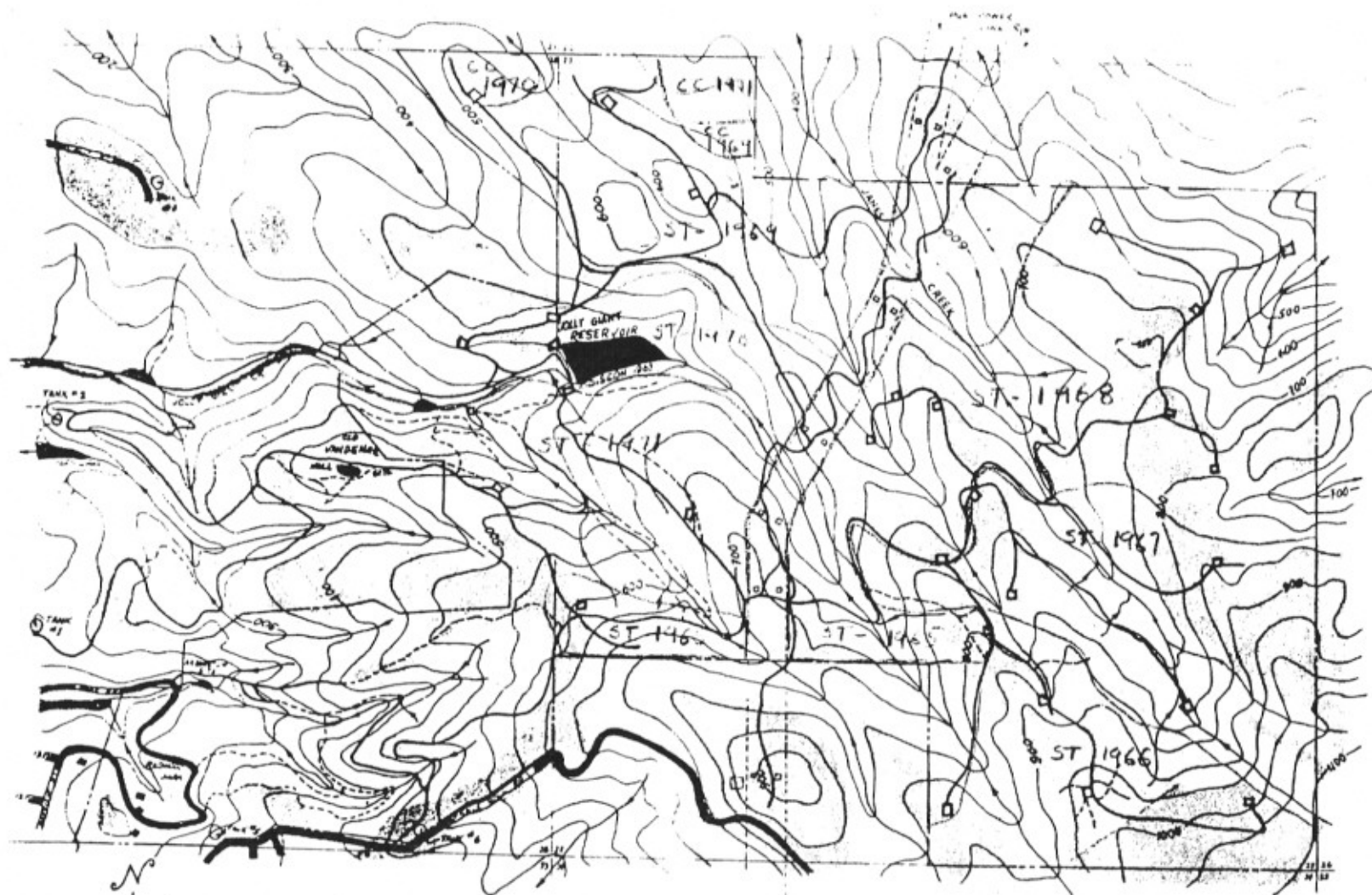
——— Animal skid trail

□ Landing and Camp

→ stream/donkey yarding

Reclamation Water Co. tract

Logged 1880-1887



SCALE



CONTOUR INTERVAL = 50'

TRACED MARCH 26, 1974
HUMBOLDT STATE COLLEGE
ARCATA, CALIFORNIA

ARCATA COMMUNITY FOREST

1966-1971 Logging

AND VICINITY

INCLUDING PORTIONS OF SECTIONS 27 & 28,
T. 6 N., R. 1 E., HBM

*(ST 146) See time then
and see it again
(CC 146) Logcut*

LEGEND

- CONTOUR LINES (FT)
- COMMUNITY FOREST BOUNDARY
- SECTION LINES
- EXISTING BUILDING
- PAVED ROAD
- DIRT ROAD (WITH LANDING)
- TRAIL
- STREAM (WITH POND OR LAKE)

