

Decision No. _____

BEFORE THE RAILROAD COMMISSION OF THE STATE OF CALIFORNIA.

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J. W. LEGGETT and certain other residents of Menlo Park, San Mateo County, and vicinity,

Complainants,

-vs-

BEAR GULCH WATER COMPANY,

Defendant.

Case No. 419.

JOHN BILLESBACK, et al.,

Complainants,

-vs-

BEAR GULCH WATER COMPANY,

Defendant.

Case No. 718.

C. L. Harkins, for John Billesback, et al.
Warren Olney, Jr., of McCutchen, Olney & Willard,
for Bear Gulch Water Company.

LOVELAND, Commissioner.

O P I N I O N.

The defendant in these cases, the Bear Gulch Water Company, is a public utility supplying water for domestic and commercial purposes to the residents of Menlo Park and the vicinity thereof.

The complaint in Case 419 was filed with this Commission on June 30, 1913. This complaint alleged that the water supplied by defendant was impure, injurious to health,

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of an offensive odor, and inadequate in amount. Defendant's answer, filed shortly thereafter, denied that its water so supplied was impure or injurious to health, but admitted the offensiveness of its odor and the inadequacy of the supply, claiming that such conditions were the result of natural causes and beyond its power to foresee, but that they were taking immediate steps to better and increase the supply.

The causes which led up to the filing of these complaints are so intimately connected with the physical and financial aspects of the defendant's water system that before proceeding to a discussion of the merits of these complaints, a brief exposition of these features seems advisable. A very thorough study of all the features of this particular property is shown in defendant's Exhibit 2, Case 718, prepared by Herbert B. Foster, Engineer for the Administration Department of the University of California, Mr. James Armstrong, one of the Commission's Engineers, has prepared and submitted a report in the same case, which covered practically the same field. It seems necessary therefore to set forth only the most vital points.

Little information can be obtained as to the very early history of this property. The first Company of record was the Corte Madera Water Company, incorporated October 28, 1863. The property of this Company was sold to Milton S. Latham under bankruptcy proceedings in 1873, at which time there were seventeen consumers. Later in the same year the property was transferred by Latham to the Menlo Park Water Company and operated by them until 1890, at which time it was sold to the present corporation. At the present time no parts of the original plant are in use, nor are there any records to show the cost of this original work, which has been abandoned, or of the present structures now in use that were constructed prior to 1906. The Bear Gulch Water Company was incorporated in October, 1889, with an authorized stock issue of 5000 shares of the par value of \$100.00 per share, all outstanding.

No dividends have ever been paid upon this stock. It has a funded debt of \$205,000. in the form of First Mortgage Five Per Cent Thirty Year Gold Bonds maturing in 1950. The University of California holds four-fifths of the capital stock, but prior to 1913 took little or no part in the management of the property. Since the ^{recent} death of Senator C. N. Felton, ~~Senator Felton~~ who was then President, and controlled the remaining one-fifth of the stock, the University has assumed direct and active charge of affairs. As indicative of the policy of the present management, it is interesting to note that no charges appear on this Company's books for the service of President, General Manager, Engineer, or Counsel. These services have been supplied free of charge to the Company by various officials and employees of the University.

The supply is gravity, and its source the waters of Bear Gulch Creek emerging from the hills directly west of Menlo Park. Water is diverted by a small dam on this creek and conveyed about 21,000 feet through a 15" main, to an earthen storage reservoir at an elevation of about 210 feet above sea level, and having a maximum capacity of about ninety-seven million gallons. From this reservoir the supply is distributed throughout the territory served. The area of the water shed tributary to the diverting dam is about 1640 acres, and is typical of the rolling hills extending North and South on the peninsula between San Francisco Bay and the Pacific Ocean, being heavily covered with thick growths of brush and trees. From both conservation and sanitary standpoints, the water shed is excellent. Prior to June, 1913, the system depended wholly for its supply upon the run off from this water shed. Very meager information is available for the determination of the quantity of water flowing from Bear Gulch Creek at the diverting dam, though Mr. Foster has made an extensive examination of such records as exist. During the summer of 1913 a very serious shortage of supply occurred,

occasioned by a considerable period of drought in common to the whole State, prior to this time. The following tabulation showing the seasonal precipitation in inches for Palo Alto and vicinity, will make this condition at once plain:

Season 1911 - 1912	26.42
" 1912 - 1913	7.94
" 1913 - 1914	24.84

As the inevitable result of these conditions the Bear Gulch Water Company entered upon the summer season of 1913 with practically no supply in its reservoir. Due to the resulting low state of the water in the reservoir, and the failure to clean same for a number of years prior to this time, algal growths developed. The two conditions most favorable to the growth of these micro-organisms are sun light and water rich in mineral constituents. While the appearance of these organisms has no especial sanitary significance, many of these minute plants and animals produce, both in their growth and decay, peculiarly characteristic odors and tastes which are exceedingly disagreeable to the consumer, and no doubt provoked the complaints filed with this Commission.

Shortly after the filing of the complaint in Case 419 it was found that defendant had already taken steps to secure additional supply, having on June 20th, 1913, entered into a contract with Mary Kellogg Hopkins to pump water from three wells situated on her property. Briefly this contract provided that the Water Company should install its own plant, removing same upon the termination of the contract, and should pay for all water pumped at the rate of Five (5¢) Cents per 1000 gallons with a minimum charge of not less than \$1500. per annum for the years 1914 and 1915. The contract extended from June 20th, 1913, to January 1st, 1916, with the privilege of renewal.

On August 7th, 1913, a hearing was held on Case

419. At this hearing it developed that the defendant had practically completed the pumping plant at the Hopkins Wells, and within a very short time would be able to sufficiently augment its supply to meet all demands. The plant was placed in operation on August 17th, 1913, at a cost of \$6800.00, its maximum capacity being seven and a half million gallons daily. The water is hard and somewhat undesirable for domestic purposes however. Defendant immediately began pumping water from these wells into its system, and by December^{31st} of 1913 had delivered nearly Thirty million gallons for the use of its consumers. In view of these facts the Commission was of the opinion that the complaint in Case 419 had been satisfied. It was thought best however, to await the outcome of another season before ordering its dismissal. Now that two periods of maximum demand have been very creditably met by defendant, and as will hereinafter appear, the service is satisfactory not only to the complainant in Case 419, but to defendant's other consumers, I am of the opinion that the complaint in Case 419 may now be dismissed, and so recommend.

The complaint in Case 718 was filed October 27th, 1914. It alleged the water at times to be unfit for use, and the rates to be excessive and unreasonable. This Commission was requested to modify the rates to conform to the service rendered, and in particular to reduce the minimum rate. Preliminary hearing on this complaint was held on December 4th, 1914, and an adjourned hearing on January 22nd, 1915, time intervening being allowed to defendant for the completion of certain investigations and reports. At this adjourned hearing defendant submitted the report of Mr. Foster, heretofore mentioned, admitted the previous unsatisfactory condition of its water supply, and outlined its plans for betterment. Believing the quality of the service rendered was of greater importance to the consumers at this particular time, than the rates to be paid, it was decided to postpone rate adjustment until the Company had completed its improvements.

From time to time the Commission's representatives have made informal investigation of the progress of these improvements, and of the quality of service being rendered defendant's consumers. The report of the General Manager of the Company, made on June 7th, 1915, is indicative of the good faith in which defendant has proceeded to improve service conditions. This report shows the following immediate improvements to have been carried out:

Supply reservoir thoroughly cleaned; Screen installed in gate house tower to prevent foreign matter from passing into the pipe system; Systematic sampling schedule of the waters in the reservoir established to determine its biological character; A supply of copper sulphate purchased and local marginal treatments given to the reservoir to kill off the algal growths; A weir box installed on Bear Gulch Creek at the divering dam in order to have some definite records of the run off; Uniform Rules and Regulations for consumers devised, and records of the Company's operations systematized.

In order to give these improvements a thorough test through the late summer and fall, matters were not brought to a final hearing until November 4th, 1915. All the Commission's informal investigations, and numerous letters from the consumers themselves, indicate that the service is now satisfactory. At this final hearing Mr. Bilkesback and other complainants stated that they were now thoroughly satisfied with the quality and quantity of the water supply, and I see no reason for further entertaining these particular complaints, and recommend that they be dismissed. This leaves for adjudication the question of the reasonableness of the present rates.

Defendant's present rates on file with this Commission are as follows:-

For unmetered services:- \$2.00 per month flat rate.

For metered services:-

25¢ per 1000 gallons for water used up to 100,000 gallons;

20¢ per 1000 gallons for water used between 100,000 and 300,000 gallons;

15¢ per 1000 gallons for water used in excess of 300,000 gallons;

Monthly meter minimum of \$2.00 for 8000 gallons, or less.

The complainant's chief objection is to the minimum monthly rate of \$2.00. While it is not necessary for me to discuss in detail the justice, or injustice of these present rates, for reasons which will hereinafter be set forth, I desire to present certain figures relating to the physical operations of this Company in order that the situation may be entirely clear to all concerned. The tabulations which follow have been taken directly from the various reports and exhibits on file in these cases, and from the corrected annual reports submitted by defendant to this Commission.

	<u>1913</u>	<u>1914</u>
Income from Water Sales:	\$22,485.76	\$19,676.57
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Operation Expenses:		
General Plant Expenses	\$ 5,059.34	\$ 4,192.57
Hopkins Water Contract	1,493.00	1,500.00
Taxes	<u>2,633.90</u>	<u>2,830.25</u>
	\$ 9,186.24	\$ 8,522.82
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The engineers for both this Commission and defendant have made estimates of the probable cost and depreciation annuities upon the physical properties only of this Company. The

figures are as follows:

	<u>Reproduction Cost</u> <u>New</u>	<u>Amorties</u> <u>4% Sinking Fund</u>
By Company's Engineer	\$256,782.00	\$2,968.00
By Commission's Engineer	249,253.00	2,635.00

In addition to these physical properties, defendant owns 2497.74 acres of land, 1466.03 acres of which is used exclusively for water utility purposes. It also holds deeds to approximately 18,700 lineal feet of right of way for pipe lines totaling 4.28 acres in area. Beyond certain statements appearing in defendant's exhibit No. 2 in Case 718, and the Supplement thereto filed at the hearing on December 4th, very little evidence was submitted as to the value of these lands. The majority of this land either lies in or adjacent to the water shed area. Concerning the value of these lands Mr. Foster, for the Company, reported: That lands in the vicinity of the reservoir were held for sale from \$500 to \$1500 per acre, but that the actual value of the land was between \$350 and \$500 per acre. That a ranch of mountain land adjacent to the Water Company's property was sold in 1912 for \$90.00 per acre. That the Water Company paid \$80.00 per acre for about 250 acres of the Summit Road Ranch in 1900. Mr. Foster presented a table in his report showing the assessed valuation of these lands for the year 1914. 38 acres in the reservoir site were assessed for \$263.20 per acre, while the average assessment per acre for the total 2498 acres was \$26 per acre. In the supplementary report to defendant's exhibit No. 2, Mr. Foster has estimated the total market value of these lands at \$180,730 and the various rights of way at \$2640. 1355.12 acres of water shed lands, claimed to be used exclusively for public utility purposes are valued by Mr. Foster at \$100 per acre, the reservoir lands at \$500 per acre, the Mezes Ranch lands at \$350 per acre, and the

right of way is estimated on a basis of \$500 per acre. Beyond the statement that water rights in Bear Gulch Creek were purchased by the original owners of this property in 1867 for \$3250.00, and by virtue of assignment now the property of this Company, defendant did not present during the course of this complaint any claims for water rights, going concern, or franchise values. I do not believe there is sufficient evidence in this case upon which to base any estimates as to the worth of these lands or water rights, and for reasons which will hereinafter appear, it does not seem necessary to further indicate such values as may or may not exist in this Company's land holdings or intangibles.

A little study of the tabulations just given indicates that defendant has barely been able to meet the interest upon its outstanding bonds, and has been unable to lay aside any reserve for accrued depreciation.

As is natural, the consumer is as a rule only vitally interested in the direct result as applied to his own individual case. In this particular instance he has drawn an unfavorable comparison between the rates as charged by defendant, and those charged by the Municipal Water Plants of the two neighboring Cities of Palo Alto and Redwood City. In this regard I desire to point out that no two water utilities operate under the same set of conditions, and this particular utility has certain features which are unique and peculiar to itself. The table which follows, while only approximate, gives a fair comparison of the distinctions between water service conditions of Menlo Park, Palo Alto and Redwood City.

	<u>Menlo Park Bear Gulch Water Co.</u>	<u>Palo Alto Municipal Plant</u>	<u>Redwood City Municipal Plant</u> *
Approximate area served sq. mi.	8	1	1.5
Miles of pipe line	44.8	20	40
Number of services	450	1382**	700**
Number of Services per sq. mi.	56	1382	466
Number of services per mile of pipe line	10	69	18
Approximate cost physical equipment per service	\$550	\$72	
Average pressure in distributing system, lbs. per sq. inch	60	35	70
Quality of water	Soft	Hard	Hard

* Water purchased wholesale from the Redwood City Water Company. Distribution System only owned by Municipality.

** All commercial services metered.

An analysis of these statistics shows that the defendant is operating under conditions very unfavorable for profit. The territory served by the Bear Gulch Water Company consists largely of large estates, which are unlikely to be subdivided, and the number of consumers will increase very slowly. The increase in the number of active services in the past five years has been less than at the rate of eight per year. The scattered location of these consumers demands an extensive distributing system, resulting in unusually high installation cost per service. The Water System of the Cities of Palo Alto and Redwood City attempt to sell water to consumers at cost, thus attracting new residents and manufacturing interests, and encouraging those present in the community to use water abundantly, and make their surroundings beautiful with lawns, shrubs and trees. In contrast to this, defendant is a privately owned corporation endeavoring to earn sufficient money to pay the

regular maintenance and operation expenses, taxes, depreciation, and interest on its bonds. That the Company however realizes that it has an unusually large investment for the consumers it serves, is indicated by its desire to adjust its rates in any manner which will result in the greatest benefit to its customers, and at the same time not impair such income as it believes absolutely necessary to meet its fixed annual charges. Its tacit waiving at this time of any return upon such investment as it has in its water shed lands, its water rights, going concern, and other intangibles, seems to me to be an admission that it cannot burden, under the conditions as they now exist, its present limited number of consumers with an investment, which, measured by comparative standards, would result in unreasonable and excessive rates. On the other hand, it is the duty of the consumers, if they are so situated that this investment is absolutely necessary to render them the service which they desire, to bear a reasonable share of the burden until the settling up of the community, and the consequent increase in the number of consumers, results in a lower cost of rendering service to each individual consumer.

The principle of the minimum charge seems so firmly established that any discussion of its justice is unnecessary here. It has been the policy however of this Commission, to fix the amount of such minimum charge so that the results for which it is necessarily established, may be obtained, and at the same time render equity to those customers whose needs are either satisfied by a small amount of water, or who, for reasons of economy, restrict their use of water. Defendant's monthly minimum rate of \$2.00 is in excess of the great majority of the minimum rates charged by Water Companies throughout the State, and the amount of water allowed for

this minimum is also in excess of the needs of many of its consumers. A thorough study of water use under this system has been made by both the engineers of the Commission and the Company, a continuous twelve months record, ending November 1st, 1915, of each individual consumer's use, having been obtained and tabulated. These records show that the average number of consumers for this period was 385, of which 248 were metered and 137 on the flat rate. Of the metered consumers 131, or 55 per cent, did not pay on an average, in excess of the minimum charge of \$2.00, while 118 of them, or 48 per cent, used on an average 750 cubic feet or less per month. While it is true that about 36 per cent of all of defendant's customers are flat rate users and as such, pay only a minimum monthly rate of \$2.00, and that it is impossible to accurately estimate what such customers would pay if their use was metered, it is equally true that this Company has made a very careful endeavor to meter any and all customers, whose use they have good reason to believe will exceed \$2.00 under the metered rate, and I am convinced from a careful study of these records of use, that fully 70 per cent of this Company's consumers would be materially affected by any change in the minimum rate. These records indicate that the majority of these consumers do not use the amount, and in many cases no where near the amount which they are allowed under the minimum rate. That this situation is manifestly unjust to these consumers, and should be remedied, provided it does not work any injustice to the utility in question, goes without saying. In view of all the statistics which I have heretofore presented relative to the operations of this Company, I do not feel it incumbent upon me to reduce the total gross income which

this Company must necessarily receive in order to meet its fixed annual charges, for the purpose of rendering adequate service, but on the other hand, I am of the opinion that a more equitable distribution of the charges for the service rendered, can be secured by an adjustment of the present rates.

Before proceeding to set forth the rates which I shall recommend, I desire to call attention to a certain situation affecting the annual revenues of this Company. In pursuance of a certain deed between James Flood and the Bear Gulch Water Company, and for consideration received, the Water Company has agreed to furnish Mr. Flood his heirs and assigns forever, without charge, such water as is necessary for certain specified uses. I am of the opinion that when a free use of any such commodity is furnished in return for property used by a public utility, (which class of property was the consideration in this particular case) such free use being a continuing use, a value should be placed upon the property so acquired by the utility, independent of the arrangements made for this continuing use, and if the property so involved and valued is necessary to the operation of the utility, it should be considered a portion of the entire value of the utility's plant, and the commodity delivered for the service rendered annually under such arrangements, should be computed at the same rate as other services of like nature and considered as part and parcel of the utility's income. Following the reasons set forth above I have included in the gross annual income, which defendant derives from the sale of its water, such revenues as it would derive from the delivery of its water under the agreement heretofore mentioned, and at the rates charged for like service.

The rates which I shall recommend at this time are for the purpose of meeting the present conditions. The conditions under which this water plant is operated are gradually changing, and no doubt at some future time the rates which I recommend will have to be modified to meet the conditions then existing.

I submit herewith the following form of order:

O R D E R

Public hearings having been held in the above entitled proceedings, and the matters contained therein being now submitted and ready for decision;

The Commission hereby find as a fact, that the rates herein established are just and reasonable rates to be charged by the Bear Gulch Water Company for water, and that the existing rates of said Company are unjust and unreasonable insofar as they differ from the rates so established.

And the Commission further finds as a fact, that the Bear Gulch Water Company has made certain improvements in its system, leading to the conservation and protection of its water supply, and that it has in its possession a sufficient supply of potable water to meet the needs of all its consumers, provided that reasonable care is taken for the further protection and conservation of such supply.

Basing its order on the foregoing findings of facts, and the further findings of fact contained in the opinion prededing this order,

IT IS HEREBY ORDERED by the Railroad Commission of the State of California, that the Bear Gulch Water Company establish and file with the Railroad Commission, within thirty days from the date of the order herein, the following rates for water:

For unmetered services: - \$1.50 per month flat rate

For metered services:-

25¢ per 100 cubic feet for water used up to 15,000 cubic feet;

20¢ per 100 cubic feet for water used between 15,000 and 40,000 cubic feet;

17½¢ per 100 cubic feet for water used in excess of 40,000 cubic feet;

Monthly meter minimum of \$1.50 for 650 cubic feet, or less.

Provided, that based upon the size of meter service and connection, the following schedule of minimum monthly rates shall apply:

For 5/8" or 3/4" meter and service	\$1.50
For 1" meter and service	2.50
For 1½" meter and service	3.50
For 2" " " "	4.50
For 3" " " "	6.00

For meters and service connections larger than shown herein, minimum monthly rates in proportion

And it is further ordered, that in all other respects the complaints herein are hereby dismissed.

The foregoing opinion and order are hereby approved and ordered filed as the Opinion and Order of the Railroad Commission of the State of California.

Dated at San Francisco, California, this 23rd day of November, 1915.

Max Heller
H. J. ...