

ORIGINAL

Application No. 624.

In the matter of the application
of NORTH COAST WATER COMPANY for
authority to increase the rates for
water charged to BELVEDERE LAND
COMPANY.

Raymond Benjamin for applicant.
Powell & Dow and W. A. Dow for Belvedere Land Co.
J. S. Hutchinson for Town of Belvedere.

THELEN, Commissioner.

O P I N I O N.

This is an application for authority to increase the rate charged by applicant to Belvedere Land Company for water delivered to the latter company at or near the point on the boundary line of the town of Mill Valley where the County Road crosses Blythedale Avenue. The present rate is 20¢ per 1000 gallons. The petition in this proceeding originally asked that this rate be raised to 29¢ per 1000 gallons, but at the hearing the applicant asked that the petition be amended so as to ask for 24¢ per 1000 gallons. In view of the fact that the town of Belvedere, which is supplied with water by the Belvedere Land Company, has heretofore established the rates to be charged by that company for water for the year ending June 1, 1914, applicant stipulated that if an order is entered authorizing it to increase its charge for water delivered to Belvedere Land Company, such order shall not become effective until July 1, 1914, or until this Commission, if it is called upon to act, should establish a rate, prior to said date, for water delivered to the inhabitants of Belvedere.

The applicant secures its water from various small streams and creeks in the water shed on the southerly and easterly flanks of Mount Tamalpais, in Marin county. This water shed is divided by a ridge running in a general north and south direction, and called Mine Ridge. The water shed on the east side of this ridge produces

a part of the water consumed in Mill Valley and vicinity. No portion of this water is furnished to the Belvedere Land Company. It accordingly becomes unnecessary on this hearing to consider this portion of the applicant's watershed.

The water developed in applicant's water shed west of the Mine Ridge is conveyed by pipe line from small masonry checks or intakes, in four small creeks, known as Rattlesnake Creek, Spike Buck Creek and the west and north forks of Laguna Creek. This pipe line consists mainly of 8-inch riveted steel and conveys the water a distance of about two miles easterly to the Belvedere reservoir, which is located on a hill west from Mill Valley. This reservoir consists of an indentation in the hills in which water is stored by means of two riprap earthen dams with clay puddle cores. Its maximum water surface is about 37,000 square feet and its maximum capacity about ten million gallons. The water is conveyed from the reservoir through a 6-inch converse pipe to the aforesaid point of delivery to the Belvedere Land Company, where it runs through a 4-inch meter into a 4-inch converse pipe, which then conveys it for use to the inhabitants of Belvedere. The pipe line between the dam and the boundary line of the town of Mill Valley where the county road crosses Blythedale Avenue was constructed by the applicant at its own expense, but the remainder of the line leading to Belvedere was constructed by and is the property of the Belvedere Land Company. The main leading from the dam is tapped at two places, between the dam and the Belvedere meter, and the water from these two taps supplies a portion of the needs of Mill Valley.

Water was first served by applicant to Belvedere Land Company under a contract dated May 13, 1904, which expired on October 15, 1909. The rate specified in the contract is 20¢ per 1000 gallons. Since its expiration it has been continued in effect by verbal agreement from time to time and the rate charged is the same as that specified in the contract.

I shall now address myself to the proper value to be assigned to that portion of applicant's property which is used in developing and delivering water to the Belvedere Land Company. The evidence shows that applicant owns a total of some 2000 acres in this vicinity. The only portion of this land which may properly be chargeable to the service of the Belvedere Land Company lies west of Mine Ridge. Applicant filed as Exhibit "E" in this proceeding, a map prepared by its engineer, showing its water shed lands in Marin county and showing the acreage of these lands from which water is taken to supply in part the Belvedere Land Company. The acreage so ascertained is 589.21. Applicant's president stated that, in his opinion, two additional parcels should be included, one containing 18.67 acres and the other containing 13.35 acres. As both of these parcels are below the point at which the intakes are located, I am of the opinion that they may not properly be considered as being used or useful in the development of applicant's water supply. Mr. James Armstrong, one of the Commission's hydraulic engineers, who prepared a report which was submitted in evidence and to which reference will hereinafter be made, testified that, in his opinion, a considerable portion of the 589.21 acres is not necessary in connection with the development of applicant's water supply, and that accordingly, the amount of land properly chargeable to applicant's water service is considerably less than this acreage.

The evidence shows that applicant purchased its 2000 acres in July, 1904, from the Mill Valley Water Company, and that it gave in exchange therefor its 4% bonds, (amounting to \$140,000. The bonds were intended to be exchanged at par. On this basis, the average cost per acre was \$70.00. At the hearing applicant testified that the present average value per acre, exclusive of the reservoir site, is \$150.00, and applicant claimed the right to a return on this basis. This valuation was based on the sale of certain villa site property for \$300.00 per acre, for an offer for one parcel as high as \$500.00 per acre and on the sale of right-of-way through

this tract to the Mt. Tamalpais and Muir Woods Railway Company at \$100.00 per acre.

With reference to the remaining property used in whole or in part in the service of the Belvedere Land Company, consisting mainly of the reservoir and the pipe lines leading to and from it to the point of delivery to the Belvedere Land Company, there is but little difference between the engineers with reference to the original cost or the depreciated reproduction value thereof.

The following table shows the original cost of the property and also the estimated depreciated reproduction value, as testified to by applicant's president, Mr. James Newlands, Jr. The table shows first the property which is devoted to the joint use of Mill Valley and of the Belvedere Land Company, and then the property which is devoted to the exclusive use of the Belvedere Land Company:

PROPERTY DEVOTED TO JOINT USE OF MILL VALLEY AND
BELVEDERE LAND COMPANY.

	<u>Original cost.</u>	<u>Depreciated repro- duction value.</u>
Water shed, 620 acres	\$43,400.00	\$93,000.00
Reservoir site, 9.91 acres	693.70	3,954.00
Pipe lines from intakes to Belvedere dam	11,254.60	7,081.86
Belvedere dam	19,370.90	17,046.38
Diverting dams	400.00	323.00
Pipe through dams; fencing, etc.,	689.88	447.24
Lambert meter	175.00	96.25
Total,	\$75,964.08	\$121,963.73

PROPERTY DEVOTED TO EXCLUSIVE USE OF
BELVEDERE LAND COMPANY.

6-inch L.C. Pipe	\$ 1,562.39	\$ 1,093.67
4-inch L.C. "	3,470.45	2,429.33
Total,	\$ 5,032.84	\$ 3,523.00

The foregoing tables were taken from the evidence of the applicant at the hearing without any change whatsoever. It will be noted that the computation is based on a total of 620 acres of land in the water shed instead of a maximum of 589.21/ acres. The computation also

accepts applicant's estimate of the value of this land as being \$150.00 per acre and makes no deduction for any portion of this land which is really not used or useful in the production of water. Applicant admitted at the hearing that it would be fair to count in only 7 acres of land instead of 9.91 acres for the reservoir site. It is probable that the Lambert meter which is included under the heading of property devoted to the joint use of Mill Valley and the Belvedere Land Company should be charged entirely to the Belvedere Land Company. _

The matter deserving the most serious consideration in the foregoing tabulation is the value assigned to the land. The land which cost \$43,400.00 some nine years ago is now claimed to have a value of \$93,000, being more than double the original cost, and a return is asked on what is claimed to be the present value, including what is popularly known as the unearned increment of land. While it is not necessary to decide this point here, for the reasons which will hereinafter appear, I desire at this point to draw attention to this question of the value to be assigned to land in rate fixing inquiries, which question is one of the most important which can possibly arise in a rate fixing inquiry. This question tests squarely the correctness of the so-called reproduction value or present value theories on the one hand and the original cost or investment theory on the other. In this connection I desire to refer to the language of Mr. Justice Van Fleet in San Diego Water Company vs. San Diego, 118 Cal. 556, who expresses what he ~~entirely~~ believes to be the fundamental relationship between the public and a public utility, which is one of principal and agent. At page 570, Mr. Justice Van Fleet says:

"As we have said, it is not the water or the distributing works which the company may be said to own, and the value of which is to be ascertained. They were acquired and contributed for the use of the public; the public may be said to be the real owner and the company only the agent of the public to administer their use."

After referring to the unfairness to the water company of applying the present value or the reproduction value rules

in case prices have gone down, Mr. Justice Van Fleet then refers, at page 569, to the injustice to the consumer if he is compelled to pay a higher rate on the ground of an advance in prices. Referring to this point, Mr. Justice Van Fleet says:

"Nor would it, on the other hand, be just to the consumers to require them to pay an enhanced price for the water, on the ground that it would now cost more to construct similar works. Such a contingency may well happen; but to allow an increase of rates for such reason would be to allow the water company to make a profit, not as a reward for its expenditures and services, but for the fortuitous occurrence of a rise in the price of materials and labor. The law does not intend that this business shall be a speculation in which the water company or the consumers shall respectively win or lose upon the casting of a die, and upon the equally unpredictable fluctuations of the markets."

Mr. Justice Van Fleet then expresses his general conclusions as follows:

"For the money which the company has expended for the public benefit it is to receive a reasonable, and no more than a reasonable reward. It is to be paid according to what it has done, and not according to what others might conceivably do. In effect, the bargain between the company and the public was made when the water works were constructed, and this matter is to be determined according to the state of things at that time."

Finally, at page 572, Mr. Justice Van Fleet states the necessary qualification to this rule as follows:

"It should, of course, be said that it does not follow that in every case the company will be entitled to credit for all of its current expenditures, or to receive a compensation based on the entire cost of its works. Reckless and unnecessary expenditures, not legitimately incurred in the actual collection and distribution of the water furnished, or in the acquisition, construction or preservation of so much of the plant as is necessary for that purpose, cannot be allowed.It is the money reasonably and properly expended in the acquisition and construction of the works actually and properly in use for that purpose, which constitutes the investment on which the compensation is to be computed."

The foregoing conclusion was worked out by Mr. Justice Van Fleet logically and on principle from the fundamental relationship existing between the public and its public utilities. The use of the present value or reproduction value theories does not spring in any way out of that relationship and has no necessary connection with it. As Mr. Justice Van Fleet clearly points out, the use of either the present value or the reproduction value theories may be as

clearly unjust to the public utilities on the one hand, in case prices have gone down, as it is to the public on the other hand, in case prices have gone up. In logic and justice, the public utility should receive a return on the moneys reasonably and properly expended in the acquisition and construction of its works actually and properly in use to carry out its agency - no more and no less. If care is exercised in thus ascertaining the valuation on which a return is to be allowed and if a liberal return is then allowed on that basis, as is the practice of the California Commission, the utility will be receiving full justice while the consumer on the other hand will be paying no more than he ought reasonably to be called upon to pay to his agent.

Before leaving this branch of the case, I desire to add the conclusion of Mr. Franklin K. Lane, formerly of the Interstate Commerce Commission, expressed in the Western Advance rate case, 20 I.C.C. Rep. 307. Referring to the contention of the Burlington Railroad Company that it was entitled to a return on \$150,000,000.00 of unearned increment of land, Mr. Lane at page 347 says:

"The trend of the highest judicial opinion would indicate that we should accept neither the cost of reproduction, upon which the Burlington's estimate of value is made, nor the capitalization which the Santa Fe accepts as approximate value, nor the price of stocks and bonds in the market, nor yet the original investment alone, as a test of present value for purpose of rate regulation. Perhaps the nearest approximation to the fair standard is that of bona fide investment--the sacrifice^{made} by the owners of the property--considering as part of the investment any shortage of return that there may be in the earlier years of the enterprise. Upon this, taking the life history of the road through a number of years, the promoters are entitled to a reasonable return. This, however, manifestly is limited; for a return should not be given upon wastefulness, mismanagement or poor judgment and always there is present the restriction that no more than a reasonable rate shall be charged."

Without at this time going further into this question and meeting such objections as may be raised to the views taken by Mr. Justice Van Fleet and Mr. Franklin K. Lane, with which views I heartily concur, I shall pass on to the consideration of other features of this application.

As hereinbefore stated and as will hereinafter appear, it is not necessary in this proceeding to pass on the question whether applicant shall be allowed a return on the greatly increased value of its land. Applicant has asked for an increase in rates. In order to decide this application it is necessary simply to ascertain whether such increase is justified without going into the further question of whether or not the present rate is higher than it might reasonably be if the entire situation were investigated with the intention of establishing at this time a rate to be charged by applicant. The following table represents the depreciated reproduction value of the property of the applicant devoted to the joint use of Mill Valley and the Belvedere Land Company and also devoted to the exclusive use of the Belvedere Land Company as estimated by Mr. Armstrong on the basis of 600 acres of land in the water shed at a unit present value of \$150.00 per acre and 7 acres in the reservoir site at a unit present value of \$400.00 per acre:

PROPERTY DEVOTED TO THE JOINT USE OF MILL VALLEY
AND BELVEDERE LAND COMPANY.

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Depreciated re- production value.</u>
<u>Land</u>			
Water Shed	600	acre	\$ 90,000.00
Reservoir Site	7	"	2,800.00
<u>Pipe Lines</u>			
8" Riv. St. Pipe	12008	feet	5,302.14
#14g.			
6" " " "	2187	"	1,041.36
4" W.I. Casing	5082	"	2,051.13
Fittings for above		total	364.74
<u>Belvedere Dam</u>			
Earth	33100	c.y.	10,048.01
Clay Core	4500	"	3,903.03
Riprap	1217	"	2,638.69
12" W.I. Pipe	30	feet	35.46
10" I.C. "	360	"	345.91
Fencing#	1370	"	74.28
Fittings		total	106.20
<u>Miscellaneous</u>			
Diverting Dams	4	each	299.20
Gate Valves		total	339.19
			<u>\$119,349.34</u>

#Fencing quantities cut down to fit reduced Reservoir Site Area.

NOTE: Lands given no overhead charges.

PROPERTY DEVOTED TO EXCLUSIVE USE OF BELVEDERE

LAND COMPANY.

<u>Item</u>	<u>Quantity</u>	<u>Unit</u>	<u>Depreciated Re-</u> <u>production value.</u>
6" L.C. Pipe	2300	feet	\$ 1,322.35
4" " " "	7870	"	2,881.05
Fittings for above		total	97.71
4" Lambert meter	1	each	99.00
			<hr/>
			\$ 4,400.11

The next question to be considered is to ascertain the proportion of the property devoted to the joint use of Mill Valley and Belvedere Land Company which is properly chargeable to the water delivered to Belvedere Land Company. It is clear that the proper method would be to ascertain the quantity of water which is delivered to the Belvedere Land Company and also the quantity of water which is delivered to Mill Valley through this portion of the system and then apply the ratio thus secured to all the property which was jointly used to serve Mill Valley and the Belvedere Land Company. It is impossible, however, on the evidence in this proceeding, to use this method, for the reason that no record is available showing the amount of water which goes to Mill Valley from the property devoted to this joint use. While meter records show accurately the amount of water delivered to the Belvedere Land Company, no meters have been installed to measure the water which goes to Mill Valley from this portion of the system. In the absence of data on this point both the applicant and this Commission's hydraulic department adopted a method which each declared to be illogical and unsatisfactory. Under this method, the amount of water flowing into the intakes of applicant's pipe line in the territory west of Mine Ridge is first ascertained; estimates are then prepared to show the percentage of this water which is lost between the intakes and the point of ultimate delivery by reason of leakage,

evaporation and seepage; the proportion which the water delivered to the Belvedere Land Company--a known quantity--bears to this amount is then ascertained, and this percentage is then applied to the value claimed for the property jointly used in the service to Mill Valley and the Belvedere Land Company. The applicant estimated this percentage to be 28½%, while this Commission's hydraulic department estimated it as 23.4% but used 24% in its computations. That this method of computation is clearly incorrect results from the fact that during the winter months, the amount of water taken in at the intakes is large and the amount consumed is small, while in the summer the amount of water flowing through the pipe line is relatively small and the amount of water consumed relatively high. Consequently, the percentage to be charged to Belvedere Land Company will vary with the season of the year, if this method is pursued, varying from a relatively small percentage during the winter months to a relatively high percentage in the summer months. No data is available from which to secure an average percentage on this theory. The applicant and this Commission's hydraulic department agree on two of the three items in the ultimate calculation, viz., the amount of water going into the intakes ^{during certain months in the summer time} and the amount of water delivered to the Belvedere Land Company. The difference in their conclusions results from a different estimate of the amount of water chargeable to leakage, evaporation and seepage. The applicant's estimate is based on the calculated loss from these items in certain water delivered through applicant's local distributing system to Mill Valley consumers. Applicant claimed to have found the loss to have been 17%, but then, realizing that this percentage is certainly not correct, as applied to the delivery to the Belvedere Land Company, applicant reduces this percentage to 12%, without any basis on which to determine what the reduction, if any, should be from the percentage of loss thus claimed to have been found in Mill Valley. It must be evident that accurate conclusions cannot be ascertained on this calculation. This Commission's hydraulic department estimated the loss from leakage, evaporation and

seepage, per month, as follows:

	<u>Gallons</u>
Transmission losses, estimated at 3% of gross	223,470
Evaporation losses at Belvedere reservoir on basis of 5½ inches per month on 37,000 square feet of exposed water surface	127,000
Seepage loss at Belvedere reservoir, estimated at	<u>100,000</u>
Total losses	450,470

Mr. Armstrong was quite positive that the first two items of this table are approximately correct. He admitted frankly that the item with reference to seepage was a guess but that if more than the amount estimated were lost from seepage, it would exceed a reasonable loss for a domestic reservoir, and decrease the efficiency of the dam. Mr. Armstrong's total, amounting to 450,470 gallons, represents a loss of only about 6% as contrasted with applicant's estimate of 17% for Mill Valley and its allowance of 12% for the whole system.

The following table shows the value of the property employed in the joint use of Mill Valley and the Belvedere Land Company, computed on the different bases and the different percentages hereinbefore referred to:

28½% on original cost	\$21,655.46
24% " " "	18,236.18
28½% " applicant's estimated depreciated reproduction value	34,759.66
24% on hydraulic department's estimated depreciated reproduction value	28,643.84

Mr. Howlands testified at the hearing that, in his opinion, a return of 7% would be fair. The hydraulic department used 6%. The following tables show the return on the different bases therein appearing:

1. Original cost joint property chargeable to	
Belvedere on 28½% basis	\$21,655.46
Original cost exclusive Belvedere property	<u>5,032.84</u>
Total,	\$26,688.30
7% on total	1,868.18
6% " "	1,601.30

2.	Original cost joint property chargeable to Belvedere on 24% basis	\$18,236.18
	Original cost exclusive Belvedere	<u>5,032.84</u>
	Total,	\$23,269.02
	7% on total	1,628.83
	6% " "	<u>1,396.14</u>
3.	Applicant's estimated depreciated reproduction value joint property chargeable to Belvedere on 28 1/2% basis	\$54,759.66
	Applicant's estimated depreciated reproduction value exclusive Belvedere property	<u>3,523.00</u>
	Total,	\$58,282.66
	7% on total	2,679.79
	6% " "	<u>2,296.96</u>
4.	Applicant's estimated depreciated reproduction value joint property chargeable to Belvedere on 24% basis	29,271.30
✓	Applicant's estimated depreciated reproduction value exclusive Belvedere property	<u>3,523.00</u>
	Total,	\$32,794.30
	7% on total	2,295.60
	6% " "	<u>1,967.65</u>
5.	Hydraulic department's estimated depreciated reproduction value joint property chargeable to Belvedere on 28 1/2% basis	\$34,014.56
	Hydraulic department's estimated depreciated reproduction value exclusive Belvedere property	<u>4,400.11</u>
	Total,	\$38,414.67
	7% on total	2,689.03
	6% " "	<u>2,304.88</u>
6.	Hydraulic department's estimated depreciated reproduction value joint property chargeable to Belvedere on 24% basis	\$28,643.86
	Hydraulic department's estimated depreciated reproduction value exclusive Belvedere property	<u>4,400.11</u>
	Total,	\$33,043.97
	7% on total	2,313.08
	6% " "	<u>1,982.64</u>

Applicant, using the same percentages for depreciation for the different classes of material as that used by the hydraulic department, reaches a total of \$406.94 on the larger estimated value of its property, while the hydraulic department reaches a total of \$352.00. There is also only a slight difference with reference to operating expenses and taxes properly chargeable to that portion of

the joint property which is used in the Belvedere service and that portion which is used exclusively to serve the Belvedere Land Company. The Company on its basis estimates a total of \$669.22 for these items and the hydraulic department estimates a total of \$637.17. The above totals depend in part on the total value assigned to the property and in part on the percentages of operating expenses and taxes chargeable in part to Mill Valley and in part to Belvedere. The difference in the estimates is so slight that it will not be advantageous to apply to the item of depreciation and to the item of maintenance and operation and taxes all the different bases hereinbefore used in ascertaining what would be a fair return over and above these items. Suffice it to say that the applicant estimates a total on its higher value and its higher percentage chargeable to Belvedere, for these two items, of \$1076.16, while the hydraulic department estimates a total of \$989.17.

Applicant has submitted the total annual income derived from the Belvedere Land Company at the rate of 20% per 1000 gallons as follows:

1908.....	\$3097.55
1909.....	3304.70
1910.....	3017.35
1911.....	3149.25
1912.....	3430.05
Average.....	3199.78

It appears from the foregoing computations that on each computation based on the original cost of the property, applicant is now receiving a return in excess of that to which it would be entitled if the original cost or investment is used as the basis of return. Again, it appears that on a 6% return, applicant is now receiving more than it is entitled to under four of the six computations hereinbefore given. Taking the 7% return, it appears that applicant is receiving a return greater than that to which it is entitled if the original cost is taken as a basis, although on the depreciated reproduction value theory applicant would be entitled

to a greater return, if the hydraulic department's estimate of depreciation, maintenance, operation and taxes is accepted as correct, varying from an additional sum of \$385.00 per year to a maximum additional amount of some \$487.36. But even so, an increased return would be allowable only on the basis of 600 and 620 acres of land, respectively, which amounts are undoubtedly in excess of the amount of land properly chargeable to this public use.

Under all the fact of this case, I am of the opinion that applicant has not made out a case for an increase in its rate charged to the Belvedere Land Company. If the original cost or investment theory, which I consider to be the correct starting point in all these investigations, is accepted, applicant's return should be reduced. If the depreciated reproduction theory is accepted, while applicant would be entitled to an increase of return on certain of the foregoing computations, it would be denied an increase under others. If applicant desires to make good on a claim to an increased rate, it must establish the facts justifying such claim. In this case, its estimate of 22½% on joint property chargeable to Belvedere is frankly based on a guess with reference to the amount of water lost by transmission, evaporation and seepage. An order authorizing an increase in rates cannot be based on such a showing.

I recommend that the application be dismissed, and submit herewith the following form of order:

ORDER.

A public hearing having been held on the above entitled application, and the matter having been submitted and being now ready for decision, and the Railroad Commission finding that applicant has not established a case for an increase in its rates now charged

for water delivered to Belvedere Land Company,

IT IS HEREBY ORDERED that said application be and the same is 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 3rd day of December, 1913.

A. J. Loveland
W. L. Gordon
Max Thelen

Commissioners.