

ORIGINAL

Decision No. 77045

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

JOHN A. GROMALA, EDGAR BRATTAIN,  
ROY GOODNER, DR. GEORGE BROWNE  
and THOMAS I. LINCOLN, )

Complainants,

vs.

ELBERT A. LAND and MINNIE  
THELMA LAND,

Defendants.

Case No. 8938  
(Filed July 22, 1969)

John A. Gromala, for himself, complainant.

Elbert A. Land, for Land Water Company,  
defendant.

A. Terrance Kebort, for Humboldt-Del Norte  
County Health Department, interested  
party.

Tedd F. Marvin, for the Commission staff.

O P I N I O N

After due notice, hearing in this matter was held by  
Examiner Coffey in Fortuna on February 5, 1970.

Complaint

This complaint, filed by five residents of the community  
of Redwood Empire Country Club Estates and vicinity, Humboldt  
County, against Elbert A. Land and Minnie Thelma Land, dba Land  
Water Company, alleges that water service provided them is defective  
in the following respects:

- a. Defendants' 150,000-gallon reservoir has not  
been completed as proposed by defendants in  
Application No. 42752, the request of  
defendants for a certificate of public  
convenience and necessity to operate the  
water system.

- b. The water has become contaminated with bacteria and defendants have disconnected the reservoir from the system.
- c. The only reserve of water presently available is in the water mains and therefore pressure varies considerably and some users have low pressure.
- d. There is no standby well as proposed by defendants in said application and there have been water outages at times.
- e. The water is not potable, and at times is badly discolored.
- f. The water contains an extreme amount of small air bubbles which causes water to spurt from the faucets.
- g. The water samples taken at the residences of complainants show no traces of chlorine.
- h. The defendants have not installed prior to July 15, 1969, a 15,000-gallon tank as promised the Commission.
- i. The mineral content of the water supplied is excessively high and defendants are not taking proper measures to reduce it.
- j. There is not sufficient pressure to operate sprinkler systems for domestic irrigation and there is not sufficient pressure or volume to extinguish even a minor fire.
- k. Defendants proposed to install fire hydrants in said application, have made no effort to install repeatedly requested fire hydrants.

Complainants allege they have been damaged in the following particulars:

- a. Appliances have corroded, become inoperable in some instances and required repairs as a direct result of the high concentration of minerals, sediment and dirt.
- b. Washable items have been discolored, some so badly that they are not usable.
- c. Fire insurance premiums have been higher than necessary because defendants have refused to install fire hydrants.

- d. Complainants have suffered physical discomfort as a result of having to use nonpotable water.
- e. Complainants have suffered considerable mental anguish in worrying over the possibility of exposure to physical ailments as the result of the use of this water.
- f. Complainants have suffered further mental anguish when they had to use brown or yellow water and ice cubes when serving beverages to guests.

Complainants request an order from this Commission requiring the defendants to:

- a. Either complete the existing reservoir or install a new reservoir of sufficient size to service the system.
- b. Take whatever steps the Commission considers necessary to supply potable water to all of the users of the system.
- c. Carry out these demands within 60 days of the date of the complaint.

Answer to Complaint

Defendants in answer to the complaint state the following:

- a. The reservoir was constructed, but not covered and was found to be of excessive size to serve the limited number of customers.
- b. The water is not used fast enough to maintain the fresh taste and the chlorine dissipates quite rapidly.
- c. The water was contaminated to a 240-reading on the Humboldt County scale, the next to the highest reading the Health Department can measure, on February 3, 1969. This 240-reading was sent by the Humboldt County Health Department to the defendants on February 11, 1969, and the defendants immediately corrected the conditions and since that time there has been no trace of any bacteria in the water. The reservoir has been removed from the system as a source of contamination due to its large size. The system is now on an automatic pressure switch.

- d. The water reserves are in the mains which are 6-inch transite pipe and supply approximately 8 hours' water supply under ordinary conditions.
- e. Water pressure is 5-7 pounds less than the reservoir in operation and is controlled by a water pressure switch set to operate in the range between 30 to 45 psi.
- f. The standby well has been drilled to a depth of approximately 247 feet and is not equipped with a pump.
- g. The water was off only two times in 1969 when defendant E. A. Land was out of town and only once in prior years due to pump failures.
- h. The water supplied now is the same as when water supply permit was issued by the Department of Public Health. The discoloration problem is the same as since the commencement of the operation of this system and has improved since the reservoir has been shut off. The complainants are aware and have been told on numerous occasions that the discoloration is due to the iron content in the well water. The original chemical analysis showed a mineral content of iron of 2.2 and manganese of 0.44. On October 11, 1965, after the defendants had installed a calgon and chlorine injector pump and added the calgon and chlorine in the water, the mineral content of the water dropped to iron of 1.2 and manganese of 0.06. The complainants have copies of the chemical analysis of the water.
- i. The pump is too large for the well and does pump some air into the system. This has no adverse effect on the water and could actually be beneficial in that the air tends to dissipate the iron.
- j. The well is approximately 237 feet deep and is fully cased, and there is no sediment or dirt in the well and never has been. The pump has always pumped directly into the transmission lines.
- k. Humboldt County and California Department of Health were contacted years ago and requested to make periodic tests to assure there is no contamination and these tests have been made only sporadically. As long as there is no contamination, no chlorine is required, but the defendants have injected chlorine to help control the iron. The chlorine has been injected for approximately 5 years.

- l. The defendants have planned a small reservoir next to the water supply for the express purpose of experimenting with an aeration system to dissipate the iron. Then the water will be put in a large pressure tank and the usual chlorine and calgon added. If this system works, it will not only reduce the iron, but also eliminate the air bubbles now in the system.
- m. The defendants were informed by the Fortuna Volunteer Fire Department Chief that they would not use the fire hydrants and requested that the defendants not install them.
- n. The only request for a fire hydrant was from Mr. Gromala and he refused to pay for installation and monthly fees.
- o. The Humboldt County Health Department has in no way cooperated in getting a decent system in operation. The defendants have requested their assistance on numerous occasions, but to no avail.
- p. The appliances in one apartment were inspected by the Department of Health and found to have contained an excessive amount of food particles that had nothing to do with the water.
- q. Washable items are discolored by any iron content.
- r. No way is seen that complainants would have suffered any physical discomfort, as this is potable water, even though discolored.
- s. No physical ailments could result from the use of this water.
- t. If the Public Utilities Commission or their representative know of any way to remove the iron from the water without a very expensive filter system, the defendants would appreciate knowing it.

#### Presentations

In support of their allegations, complainants presented testimony by the Chief of the Fortuna Fire District, a public health sanitarian from the Humboldt-Del Norte County Health Department and four customers of the utility.

The fire chief testified that the fire district would pay hydrant charges if hydrants and mains met district standards, including adequate storage. Defendants indicated willingness to install hydrants if material is furnished and hydrant rate of \$3.00 per month is paid. This is not in accordance with defendants' filed tariffs which provide that the cost of installation and maintenance of hydrants will be borne by the utility. Defendants should serve and charge for service in accordance with their filed tariffs until such time as they have requested and received Commission approval of desired tariff charges. We note that defendants are also the developers in the area which they serve. In this dual role it is necessary that customers who purchase lots in defendants' service area not be misled into thinking the protection of fire hydrant service will be available when in actuality it may not because of lack of agreement between the utility and the fire district. Further, we note from defendants' tariffs that public fire hydrant service is available only to municipalities, duly organized fire districts, or other political subdivisions of the State.

Complainants presented testimony relative to quality of water, pressure variations, low pressure, and service failures. Samples were offered of water that were discolored and contained substantial amounts of brown or light tan sediment. A witness reported that the utility was serving two residences through one 3/4-inch service, with resulting pressure variations. Defendants indicated willingness to install individual services.

The sanitarian presented the results of bacteriological tests. He indicated that the system as presently operated, without the large reservoir, meets bacteriological standards, but that the

utility does not have a valid health permit to operate the system. The witness recommended that the roof of the 150,000-gallon reservoir should be completed and the reservoir screened, that the pump house should be completed, and that the well should be completely capped. Defendants indicated willingness to follow these recommendations if they have the money.

The staff in its report of its field investigation of this complaint, Exhibit No. 1, states its conclusions and recommendations as follows.

Staff Conclusions

1. The defendants constructed but did not complete the roof and screen sides of the 150,000-gallon reservoir. The use of this reservoir without being completely covered and enclosed is not recommended because it is possible for rodents or small animals to fall into the water and contaminate it. Also, stored water exposed to sunlight encourages growth of algae and other aquatic plants which sometimes impart color, tastes and/or odors to water.

2. There was only one water sample taken in this system in February, 1969, which showed contamination. Other samples taken after that time did not show contamination.

3. The water mains in this system contain approximately 6,700 gallons of water. Of this, only the water in the transmission main at a higher elevation than the distribution mains can be considered to be effective storage. This amount is approximately 5,000 gallons. The quantity of water in mains is normally not considered to be system storage and the water available in the mains of this system should not be so considered.

4. The defendants have not equipped the standby well, and state in their answer that there were two water outages in 1969. Funds for this purpose could be better used to repair and complete the reservoir.

5. The staff has no reason to believe that water furnished to customers is not potable. The defendants have stated that the water is discolored. The staff engineer observed discoloration. The staff does not know if the defendants proposed water treatment procedure will do any more than reduce the discoloration in the water.

6. When the water is pumped directly from the well into the system it contains some air bubbles because the pump is of greater capacity than the well to produce water. Use of the aeration and pressure tank facilities will remove air bubbles from the water.

7. When water is not contaminated, there is no need for chlorine residuals at customer services.

8. The defendants informed the staff on June 5, 1969, that they were considering installation of a 5,000- or 10,000-gallon storage tank before the end of July, 1969. This was not done. Funds for this purpose could be better used to repair and complete the reservoir.

9. The mineral content of the water is approximately the same as when defendants were granted a water supply permit by the county. Defendants have had, since 1965, facilities to treat this water with calgon and chlorine for the reduction of the minerals. Such treatment reduces the iron from 2.2 to 1.2 milligrams per liter and the manganese from 0.44 to 0.06 milligrams per liter which still exceeds the Public Health Service Drinking Water Standards.



10. The water pressure at the time of the field investigation was within the limits prescribed by General Order No. 103. If the pressures drop below the requirements of General Order No. 103 during a peak use period, they can be increased by two methods. The first is the adjustment of the pressure switches in the present pumping system to provide for a higher range of pressure than is required by General Order No. 103. The second would be to rehabilitate and complete construction of the 150,000-gallon reservoir and place it in operation. With respect to water for fire protection, the utility's tariff Schedule No. 5, Public Fire Hydrant Service, shows in Special Condition No. 4:

"The utility will supply only such water at such pressure as may be available from time to time as the result of its normal operation of the system."

11. The defendants' answer shows that they have not received a request to install any fire hydrants. If the complainants are willing to pay for the entire cost of private fire protection facilities to their premises on a nonrefundable basis, the defendants and complainants should be able to negotiate a monthly charge for the service. Any such arrangements should be included in an agreement and four copies filed with the Commission for its approval in conformance with Section X.A. of General Order No. 96-A.

Staff Recommendations

The staff recommends that the defendants:

- a. Immediately set and maintain their pressure switches in the present pumping system to provide adequate pressure to all customers.
- b. Continue with their water treatment including their proposed aeration of the water.

- c. Flush their mains at least once each month and, if necessary, more often in the summer-time, to remove any oxidized iron, manganese or iron bacteria in the mains.
- d. Within one year complete construction of and rehabilitate the 150,000-gallon reservoir.
- e. Provide, if requested, private fire hydrant service under an arrangement whereby customers will pay in advance the entire estimated cost of installation of the facilities and a negotiated monthly charge for the service. Any such arrangements should be set forth in an agreement, four copies of which should be filed with the Commission for its approval in conformance with Section X.A. of General Order No. 96-A.

Defendants stated they were willing to comply with the staff recommendations, including completion and rehabilitation of the reservoir. They wish to avoid expensive experiments, they are short of funds, and they have sufficient financial resources to implement staff recommendations.

Complainants indicated that implementation of the staff recommendations would substantially satisfy their complaints.

#### Findings and Conclusions

The Commission finds that:

1. Defendants have constructed the 150,000-gallon reservoir but have not completed the roof and screens.
2. Sampling of system water indicates some past bacterial contamination, but the most recent samples indicate potable water.
3. Water furnished complainants is at times discolored and contains dark brown or tan sediments.
4. The staff conclusions and recommendations set forth above are reasonable.
5. Defendants are endeavoring to improve the quality of water and are willing to implement staff suggestions.

6. Staff recommendations will improve the quality of water, but will not remove all discoloration.

7. Defendants have not offered public fire hydrant service in accordance with their filed tariffs.

The Commission concludes that defendants should be required to improve their water service.

O R D E R

IT IS ORDERED that:

1. Elbert A. Land and Minnie Thelma Land, defendants, on or before October 1, 1970, shall complete the construction and rehabilitation of the 150,000-gallon reservoir, including new roof, screens, and piping and valves to form a settling basin.

2. Defendants shall, on or before June 1, 1970, rearrange the service of all customers being served through a common water service pipe so that all customers have an individual service pipe.

3. Defendants shall continue to set and maintain water pressure switches to provide adequate pressure to all customers.

4. Defendants shall continue their present water treatment and prior to October 1, 1970, shall aerate the water as they have proposed.

5. Defendants shall at least once a month and, if necessary, more often in the summertime, flush their system water mains.

6. Upon written application, defendants shall provide public fire protection service in accordance with their filed tariffs.

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7. Defendants, on or before June 1, 1970, shall file with the Commission two signed copies of their 1968 annual report.

The effective date of this order shall be twenty days after the date hereof.

Dated at Los Angeles, California, this  
7th day of APRIL, 1970.

William Sproule Jr.  
President

Augusta

Michael J.

Thomas J.

Vernon L. Sturgeon  
Commissioners