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Decision No. \_\_\_\_\_.

ORIGINAL

Decision No. 4426

BEFORE THE RAILROAD COMMISSION OF THE  
STATE OF CALIFORNIA.

Water Users Association  
of the Willow Canal,

Complainant,

v.

Yolo Water & Power Com-  
pany,

Defendant.

Case No. 1011.

Forest A. Plant for complainant.  
Arthur C. Huston for defendant.

BY THE COMMISSION.

O P I N I O N

This proceeding is brought by certain water consumers of the Yolo Water & Power Company, whose lands are located adjacent to the Willow Canal, which canal forms a part of the irrigation system owned and operated by the defendant herein and is located in

the southern portion of Yolo County.

Public hearings in this proceeding were held in Woodland before Examiner Encell on February twenty-seventh and twenty-eighth, March first, second, fifth and twelfth, 1917.

Complainants allege:

1. That during the irrigation season of 1916 an inadequate and insufficient supply of water was furnished by defendant to complainants for purposes of irrigation.
2. That discrimination in water distribution on the part of defendant, which discrimination favored certain rice growers supplied with water by defendant on other portions of the irrigation system, has damaged complainants.
3. That the rules and regulations of the defendant company have been disregarded.
4. That the system of allotment and time of delivery of water as enforced by the company resulted in uncertainty and confusion as well as damage to the crops of complainants.
5. That the irrigation heads furnished were not sufficient to irrigate economically.
6. That the available water supply is insufficient to irrigate the lands which defendant offers to supply during the irrigating season of 1917.
7. That the Willow Canal is not properly cleaned or maintained.

Defendant in its answer denies all the material allegations of the complaint and asks for a dismissal of this proceeding.

The irrigation system of the Yolo Water & Power Company comprises a number of canals and laterals, of which latter the Willow Canal is one. The water

supply is obtained from the Cache Creek watershed in Yolo and Lake Counties. Clear Lake in Lake County is included in this watershed and acts as a storage reservoir. The storage capacity of the lake has been increased to 422,000 acre feet by the construction of a dam, which renders available an additional depth of ten feet over the surface of the lake. Defendant, however, has not acquired all the so-called flowage rights around the edge of the lake, and is compelled to regulate the discharge so as to not interfere appreciably with the normal water storage.

Water is discharged from the lake into Cache Creek, from which it is diverted into two canals by the so-called Capay Dam, located near Capay. The Winters Canal and its laterals supply the larger area irrigated. It carries water from the Capay Dam in a general southerly direction. The main laterals from this canal are the Madison, Capay, Cottonwood, Yolo, Central, Union Slough, Walnut and Willow.

The area north of Cache Creek is supplied by the Adams Canal, which extends from the Capay Dam in a northerly and easterly direction to a point near the town of Yolo. The principal laterals are the Hungry Hollow and the Acacia. The Adams Canal is used at present to carry water to a point some ten miles below the Capay Dam, where it is returned to Cache Creek and re-diverted into the Moore Canal by a dam known as Moore Dam. The Moore Canal extends

in a general easterly and southerly direction and irrigates lands in the vicinity of Woodland.

The canal system is made up of an extensive network of canals and laterals reaching between ten and fifteen times the area at present irrigated. Thus we find a widespread system irrigating a comparatively small area scattered along its canals.

The following tabulation shows <sup>in acres.</sup> the area and crops irrigated by the various canals.

<u>Canals</u>	<u>Total</u>	<u>Alfalfa</u>	<u>Orchard</u>	<u>Grain</u>	<u>Rice</u>	<u>Misc.</u>
Yolo, Central	2016	73.			1943	
Pleasant Prairie	1210				1210	
Cottonwood Slough & Ex.	2693			20.	2573	
Stephens Slough	675				675	
Walnut	723	100.			623	
Willow	1458	1228.	210.			20.
Winters	2625	1895.00	198.	287.	190	55.
Adams	2105.5	869.50	2.50	102.	1030	74.50
Wistaria	176	130.00				46.
Moore	1976.5	1318.50	81.	313.50		263.50
Maple	3024.	2433.75	104.	250.00		236.25
Magnolia	248.	209.50	35.	3.50		
	18830.5	8284.75	630.50	976.00	8244	695.25

At the hearings it developed that all the parties to this proceeding admitted that the service during the 1916 irrigation season was not good, it being the contention of defendant that this was due partially to unusual climatic conditions which existed in the early part of the year and partially to the physical condition of the canal which, it is contended, is impracticable to improve by cleaning and repairing. On the latter point it was, however, contended by attorney for complainant that the Willow

Canal is adequate if properly cleaned and operated efficiently. The fact that adequate service was not rendered during the past year is admitted by both parties and it is, therefore, necessary to find means of improving it.

The complaint of the consumers largely related to the failure of the company to deliver water at the time requested, the small size of the heads furnished and the intermittent flow. To irrigate land expeditiously it is necessary that the irrigator have a uniform head varying from four to fifteen cubic feet per second, depending upon numerous factors, among which are type of soil, crop, moisture content of the soil and condition of the land irrigated. Any method of operation which will give reasonable assurance to the irrigator of an uniform flow and sufficient head to properly irrigate will remedy the existing conditions. Professor S. H. Beckett, of the University of California Farm, Davis, California, and the Commission's engineer testified that a proper schedule of deliveries by the rotation method would accomplish this result. This method of deliveries also aids in the conservation of the water supply.

The present method of deliveries is by application, under which method the irrigator informs the company as to the date his crop will be ready for irrigation and applies for water at or as near as possible to the time when the water will be needed.

It can be readily seen that if applications were made by irrigators on the opposite ends of a ditch for use of the water at the same time an excessive loss of time and water will result from running the water the entire length of the ditch in order to comply with the applications. A rotation schedule of deliveries will largely overcome such difficulties and give practical assurance to the rancher that he will receive water at fixed intervals in adequate and uniform heads for a stated period of time, and on the other hand, it will insure the company against simultaneous demands for water at distant points on the same canal.

Although it was contended by defendant that it is impossible to adequately serve the area irrigated from the Willow Canal, computations by W. H. Davis, Engineer for the Company, Mr. Beckett, and the Commission's engineer show that even with the canal in its then condition, the area could be irrigated in a maximum of twenty days each month and apparently if repaired and cleaned in a still shorter time.

The Willow Canal is located in close proximity to the Putah Creek, which location causes excessive seepage loss. Because of this fact, it is the opinion of Mr. Davis and the Commission's engineer that this location should be abandoned and a new canal dug to irrigate the same area. A preliminary location of this new canal has been made, which, it

is stated, will reduce seepage losses to a considerable extent. Whether or not it is found advisable to relocate the existing canal or improve it by repairing and cleaning depends upon detailed estimates of the cost. The fact remains, however, that in order to adequately serve complainants it will be necessary to thoroughly repair and clean the existing canal, and in the event of that improvement not providing a remedy for the present inadequate service then to locate and construct a canal of sufficient size to insure proper service to its consumers.

Defendant delivers water to a point on or near the land of the irrigator, at which point the water is measured, although in many instances the laterals extending from the main distribution canals to the irrigator's ranch are owned by groups of consumers and are not under the direct control of the company. This has, in many instances, been found by this Commission to be a cause of controversy between the utility and its consumers in that there is a division of authority between the irrigator and the utility, the utility contending that the irrigator's ditches were not in condition to deliver water and the irrigator contending that the utility failed to deliver water.

The Commission has no jurisdiction over these ditches because they are not a public utility as that term is defined by the Public Utilities Act.

These privately owned ditches are usually in a state of bad repair and are poorly maintained. The defendant herein has been accustomed to measuring the water not at the point of delivery by it into one of these privately owned or mutual ditches but at the place where the water is delivered upon the premises of the individual consumer. Inasmuch as these ditches are not subject to regulation by the company or by any regulatory body, such a condition is manifestly unfair to the utility. The only remedy of such a state of affairs will lie in the company's insisting upon measuring the quantity of water delivered at the point where that water leaves ditches which were owned or controlled by the utility. It is advisable, and best results will obtain, if the utility controls all structures and laterals necessary to deliver water to the lands of the individual consumers rather than the state of affairs hereinabove described. It is suggested that the consumers and utility enter into negotiations whereby these ditch systems will be purchased, leased, or in some manner placed under the control of the utility in order that the entire distribution system may be under the jurisdiction of this Commission. Division of authority must result in confusion and delay.

Notice has been sent by defendant to irrigators upon all the laterals not under its control that water will not be delivered during this year unless



these laterals are put in condition. It is apparent that where water is measured at the irrigator's land, as in this instance, the utility is bearing the loss through excessive seepage caused by failure to clean and repair the laterals, and it cannot be impressed too strongly upon those receiving water through laterals that they must be thoroughly cleaned when needed. It should be provided in the rules and regulations of the company that where laterals not under their control are not cleaned the point of measurement will be changed to the intake of the lateral.

While dealing with the matter of control of the distribution system, we wish to state that the control and ownership of the turnouts in the banks of the canals owned by the company are a part of the distribution system of the company and that the company must install and maintain the same.

Water delivered to consumers in 1916 totalled 68,000 acre feet and 70,000 acre feet additional remained in Clear Lake at the end of the season available for distribution. The Commission's engineer estimated that approximately 74,000 acre feet are necessary to adequately serve the average area now irrigated. The quantity of water available has therefore  
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been sufficient.

O R D E R

Complaint having been made by the WATER USERS ASSOCIATION OF THE WILLOW CANAL against the service and practices of the Yolo Water & Power Company,

And public hearings having been held and the Commission being fully apprised in the premises:

IT IS HEREBY ORDERED that the Yolo Water & Power Company be, and the same is hereby, directed to file with this Commission within sixty (60) days from the date of this order detailed plans for the improvement of its facilities for delivery of water to its consumers on the Willow Canal, either by the construction of a new canal or improvements to the existing canal, whereupon supplemental order will issue indicating the construction or other means of insuring adequate service that the company will undertake.

IT IS HEREBY FURTHER ORDERED that the Yolo Water & Power Company, within thirty (30) days from the date of this order, remove weeds or other obstructions from the Willow Canal, making it of sufficient capacity to provide adequate service during the current year.

IT IS HEREBY FURTHER ORDERED that the Yolo Water & Power Company, within fifteen (15)

days from the date of this order, file a complete schedule of rules and regulations for the approval of this Commission, which rules and regulations are to provide for the delivery of water by rotation.

Dated at San Francisco, California, this 26th  
day of June, 1917.

Max Thelen  
H. H. Boardman  
Oliver Gordon  
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Commissioners.