

Before the Division of Water Resources
Department of Public Works
State of California

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In the Matter of Application 10910 of City of Arcata to
Appropriate Water from Jacoby Creek, Tributary to
Humboldt Bay in Trinity County for Municipal
Purposes

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Decision A. 10910 D. 531

Decided March 4, 1946

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APPEARANCES AT INVESTIGATION CONDUCTED BY THE DIVISION OF WATER
RESOURCES AT THE SITE OF THE PROPOSED APPROPRIATION ON OCTOBER
8, 1945

For Applicant

City of Arcata

Hal Acheson, City Engineer

For Protestants

Homer A. Fisher
Frank McCauley and Guy Fields
Veterans' Welfare Board of the
State of California

In propria persona
In propria persona
Homer A. Fisher

For Division of Water Resources

A. S. Wheeler, Assistant Hydraulic Engineer for
Gordon Zander, Supervising Hydraulic Engineer,
Division of Water Resources, Department of Public Works,
State of California

O P I N I O N

General Description of Project

Application 10910 was filed by the City of Arcata on November
9, 1944. Applicant proposes an appropriation of 0.50 cubic foot per
second from Jacoby Creek tributary to Humboldt Bay in Humboldt County

to be diverted throughout the year at a point within the SW $\frac{1}{4}$ of NW $\frac{1}{4}$ of Section 30, T 5 N, R 2 E, H.B.&M. for municipal purposes within the City of Arcata.

Protests

Homer A. Fisher is purchasing on contract a dairy ranch from the State of California under the provisions of the Military and Veterans Code. He claims a right to the use of the waters of Jacoby Creek based upon "riparian rights and right by adverse possession, water having been used by protestant open and adversely for more than eight years". Protestant states that during the past eight years, during the period from June 15th to October 1st of each season, the waters of Jacoby Creek have been used to the extent of 0.64 cubic foot per second for 176 hours or a total of 405,404 cubic feet per month. This is equivalent to an average rate of 0.156 cubic foot per second during a continuous 30 day diversion. Protestant alleges in effect that there is only enough water in Jacoby Creek to satisfy his rights and those of his neighbors, Messrs. McCauley and Fields. His point of diversion is within the SE $\frac{1}{4}$ of NE $\frac{1}{4}$ of Section 10, T 5 N, R 1 E, H.B.&M. approximately four miles below the proposed intake of the applicant.

The Veterans Welfare Board of the State of California filed a similar protest to that of Homer A. Fisher. It is concerned lest the proposed appropriation by the City will deprive the property, which is being sold to Mr. Fisher under contract, of the water which is necessary for the irrigation of the ranch and thereby reduce the value of the property and the State's security that the contract will be completed.

Frank C. McCauley and Guy Fields in a joint protest, claim rights to the use of the waters of Jacoby Creek based on riparian ownership and licenses which have been issued by the Division confirming their right under Application 3189 to 0.25 cubic foot per second and their right under Application 5089 to 0.05 cubic foot per second or a total of 0.30 cubic foot per second. The protestants claim a total use however of only 405,404 cubic feet per month between June 1st and October 1st pumping approximately 176 hours per month which is equivalent to an average continuous diversion of only 0.156 cubic foot per second during a 30 day period. Their point of diversion is within the SW $\frac{1}{4}$ of NE $\frac{1}{4}$ of Section 10, T 5 N, R 1 E, H.B.&M. approximately one-third of a mile below the point of diversion of protestant Fisher. These protestants allege in effect that there is only enough water in Jacoby Creek to satisfy their rights and those of protestant Fisher.

Field Investigation

Stipulations to an informed hearing under Regulation 12 B of the Rules and Regulations of the Division of Water Resources having been entered into by both applicant and the protestants and the stipulations having been approved by the State Engineer, an investigation was conducted at the site of the proposed appropriation on October 8, 1945 by an engineer of this office, at which the protestants were represented.

In arriving at a decision in the matter reliance is placed upon the following:

Application 10324	Entire file
Application 3189, License 500	
Application 5089, License 1210	

General Discussion

At the time of the field investigation, it was found that the use of water by the protestants differed materially from that claimed in the protests. It was found that protestant Fisher irrigates a maxi-

mun area of 44 acres with a 5" centrifugal pump having a capacity of about 1.5 cubic feet per second and by means of a spray irrigation system and that protestants McCauley and Fields irrigate a maximum area of 46 acres with a 4" centrifugal pump having a capacity of about 1.0 cubic feet per second by means of the flooding of his lands but proposes to install a spray irrigation system. A total area of 90 acres is irrigated which on the basis of 1 cubic foot per second to each 80 acres, which is considered a reasonable headgate duty for ordinary crops, would require diversion at the rate of 1.125 cubic feet per second during the month of maximum use. The use of water, however, is rotated by the protestants who pump daily for 17 hours per day. The irrigation season normally extends from about June 15th to about October 1st.

The irrigation of 44 acres (on a 1 to 80 basis) would require a continuous flow of 0.55 cubic foot per second for a 30 day period. If the water is applied to the land by a pump having a capacity of 1.5 cubic feet per second the irrigation during the month of maximum use can be completed in 11 twenty four hour days or if the pump is operated only 17 hours a day, the irrigation can be completed in $15\frac{1}{2}$ days.

The irrigation of 46 acres (on a 1 to 80 basis) would require a continuous flow of 0.575 cubic foot per second for a 30 day period. If the water is applied to the land by a pump having a capacity of 1.0 cubic foot per second, the irrigation during the month of maximum use can be completed in $17\frac{1}{4}$ twenty-four hour days or, if the pump is operated only 17 hours a day, the irrigation can be completed in $24\frac{1}{2}$ days.

At the time of the field investigation, measurements of the flow in Jacoby Creek indicated 1.1 cubic feet per second at a point about one-half mile below the proposed point of diversion of the applicant and 1.55 cubic feet per second at a point just above the diversion points of the protestants.

During the year 1944, the applicant maintained a weir at its proposed point of diversion and the records of flow obtained indicated that the low flow during the month of August was 0.963 cubic foot per second and the low flow during the month of September was 0.918 cubic foot per second.

Statements by the interested parties and the measurements reported indicate that the flow in the creek during the extreme low flow period, which normally extends through the months of August and September, was fairly constant. All parties present agreed that normally the applicant could divert the amount of water applied for during the period from October 1st to August 1st without interfering with the use of water by the protestants.

At the conclusion of the field investigation a conference between the interested parties was held at which protestants' attention was directed to the fact that any permit issued in approval of Application 10910 would be issued subject to vested rights and it was suggested that a permit be issued for the amount and season applied for. To this proposal, objections were received from the protestants who stated that they were agreeable to the issuance of a permit provided that the applicant be denied the right to divert during the months of August and September.

Mr. Acheson, engineer for the applicant, stated that while the applicant would prefer a permit covering diversion throughout the entire year if such a permit was possible, he felt, from his studies of the stream, that it was probable that normally the applicant could not divert during the months of August and September without interfering with the protestants and that if the Division decided to issue permit for the period from October 1st to August 1st, it would be satisfactory to the applicant. He also stated

that if the season of diversion were so limited, the applicant could possibly provide for its August and September requirements by not releasing any stored water under its present rights until August. The conference was concluded with the understanding on the part of both the applicant and the protestants that Application 10910 would be approved for diversion from October 1st to August 1st of each season only.

Subsequent proposals were made as to how the use of water by the applicant should be restricted which proposals did not meet with the approval of both the applicant and the protestants and since the interested parties were in agreement as to the reduction in the season of diversion it is the opinion of the Division that Application 10910 should be approved and permit issued subject to such of the usual terms and conditions as may be appropriate but with the season of diversion limited to the period from about October 1st to about August 1st of each season.

O R D E R

Application 10910 for a permit to appropriate water having been filed with the Division of Water Resources as above stated, protests having been filed, stipulations under Regulation 12 B of the Rules and Regulations of the Division of Water Resources having been received, a field investigation by the Division of Water Resources having been made and the Division now being fully informed in the premises:

IT IS HEREBY ORDERED that Application 10910 be approved and permit issued subject to such of the usual terms and conditions as may be appropriate but with the season of diversion limited to the period from about October 1st to about August 1st of each season.

WITNESS my hand and the seal of the Department of Public Works of the State of California, this 4th day of March 1946.




EDWARD HYATT, STATE ENGINEER