

STATE OF CALIFORNIA  
DEPARTMENT OF PUBLIC WORKS  
BEFORE THE STATE ENGINEER AND  
CHIEF OF THE DIVISION OF WATER RESOURCES

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In the Matter of Application 12155 by Mrs. H. J. Gelhaar to Appropriate  
Water from Walker Creek Tributary to Klamath River in Siskiyou County for  
Irrigation, Stockwatering and Domestic Purposes.

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Decision A. 12155 D. 746

Decided May 29, 1952

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In Attendance at Investigation Conducted by the Division of Water Resources  
at Seiad Valley on May 17, 1951 and August 18, 1951:

Mr. and Mrs. C. D. Gard	Applicant's Representatives
Ray Wilkins	Protestant
H. C. Hammon	Protestant
Mr. and Mrs. Bell Chloe Gavan	Walker Creek Water Users
Dave Land	Walker Creek Water User
P. E. Stephenson William B. Shaw John Blair	Senior Hydraulic Engineer, Assistant Hydraulic Engineer, and Junior Civil Engineer, Division of Water Resources, Department of Public Works, Representing the State Engineer.

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OPINION

General Description of the Project

The applicant seeks to appropriate 1.25 cubic feet per second, year-round, from Walker Creek, a tributary of Klamath River, for irrigation, stockwatering and domestic purposes. The proposed point of diversion is

described as being located within the NW $\frac{1}{2}$ NE $\frac{1}{4}$  of Section 19, T46N R11W, MDB&M. Diversion is to be effected by means of a dam, 3 feet high by 20 feet long, constructed of logs and cement. The conduit is to be a 200 foot length of 20 inch diameter riveted steel pipe, followed by 7920 lineal feet of earth ditch. Conduit capacity is stated to be 7 cubic feet per second. Some 56.61 acres of alfalfa, mixed grasses, orchard and garden are to be irrigated, 20 head of cattle, 40 sheep and 20 hogs are to be watered and a domestic supply for one dwelling and an appurtenant half-acre garden, furnished. Irrigation is to begin about April 1 and extend to about October 15. According to the application the land to be irrigated has no other water right or source of water supply. The applicant states that the land to be traversed by the ditch and the land to be irrigated are so porous that the full amount of water applied for will be necessary for proper irrigation.

#### Protests

Roy Wilkins asserts that he will be injured by the proposed appropriation, stating in that connection

"If all rights are fulfilled no water is available July 1 to October 31. 1 $\frac{1}{4}$  sec ft more will make the water in use now unavailable."

Protestant Wilkins states that his diversion heads within the NW $\frac{1}{2}$ NE $\frac{1}{4}$  of Section 19, T46N R11W, MDB&M. He claims a right by agreement dating from 1922 to divert a part of "1000 inches granted 1877 to Steele Lowden & O'Neil."

As to the extent of present and past use of water he states:

"Use on approx. 11 acres - - -. Water used through 5 KW hydro plant before use in irrigation at lower elevation."

He states that the protest may be disregarded and dismissed if "some allocation of the original 1000 inches claim can be made."

H. C. Hammon protests that the proposed appropriation will cause a shortage of water in dry seasons. He claims both a riparian right and appropriative rights based upon Licenses 1956 and 1957. He states that he and/or his predecessors have diverted 1 cubic foot per second from the source in question since about 1910, his points of diversion being located within Section 18, T46N R11W, MDB&M. He states that his protest may be disregarded and dismissed if the application is revised so that amount and season will be commensurate with actual needs and if one M. A. Cox and/or associates on Lot 4, old Jack Lowden mine property, reduce their claim of a mining right to 1000 inches to an amount based upon needs.

#### Answers

The applicant answers the 2 protests by stating in effect that Protestant Hammon has a prior right based upon an early application to appropriate 1 inch of water per acre irrigated but that he is claiming more water than he is entitled to, his maximum cultivation not exceeding about 6 acres; that Protestant Hammon sold the applicant most of the land covered by his applications but omitted mention of water rights in the deed, that Protestant Wilkins has riparian rights to Walker Creek Water, that Protestant Wilkins once had a right to water in Carolyn Creek but dropped it and has since used water from "the old Jack Lowden Placer ditch", that Protestant Wilkins, "has never to our knowledge claimed to be generating more than one to five kilowatts - - - nor to have irrigated more than ten to twenty acres with the water wasted through his

electrical plant reused for irrigation<sup>n</sup>, that Protestant Wilkins, a retired engineer, has stated that he has never seen Walker Creek drop below 80 to 100 inches and that Walker Creek discharges up to 2500 inches or more in winter and spring. The applicant answers, as to references by the protestants to a claim of 1000 inches for the Jack Lowden Placer Patent, that that claim is not valid, because, she intimates, use in that amount can never have been made except in winter and recent mining use from July to December has been prohibited by law.

#### Field Investigation

The applicant and the protestants having stipulated to an informal hearing as provided for in Section 733(b) of the California Administrative Code, Title 23, Waters, a field investigation at the site of the proposed appropriation was begun on May 17, 1951 and resumed and completed on August 18, 1951. The protestants were in attendance on both occasions. The applicant did not attend but was represented at the investigation on August 18, 1951.

#### Records Relied Upon

Applications 7366, 7377, 12155 and all data and information on file therewith.

#### Discussion

According to the report of field investigation the flow of Walker Creek above the applicant's proposed point of diversion was 9 cubic feet per second on May 17, 4 cubic feet per second on August 18 and 2 cubic feet per second on September 24, 1951; on all of those dates water was being diverted through the conduit described in the application, that conduit serving

Protestant Wilkins and Dr. Irving Ewart; the flow through the conduit was 4, 2 and 1.5 cubic feet per second respectively on May 17, August 18 and September 24, 1951; and use by Protestant Wilkins on those dates was about 0.5 cubic foot per second, the rest of the flow in the conduit being diverted through a pond on the Ewart property to Klamath River below the mouth of Walker Creek. Also, according to the report of investigation, beneficial use on the Ewart place is questionable, all water passing the Ewart diversion was available for use on Protestant Hammon's 6.5 acres and for domestic use at the Gavan place, and the flow available to Protestant Hammon and to the Gavans on September 24 was 0.5 cubic foot per second, an amount apparently in excess of those parties' needs.

Downstream from the applicant's proposed point of diversion on Walker Creek are Application 7376 Permit 4053 License 1956 and Application 7377 Permit 4054 License 1957. Of these the former, standing in the names of H. C. and Edna M. Hammon and Belle Chloe Gavan, confirms a right to divert 0.25 cubic foot per second from April 1 to October 1 and the latter, standing in the names of H. C. and Edna M. Hammon, confirms a right to divert 0.67 cubic foot per second from about April 1 to about October 1. These licensed applications also authorize diversions year-round as required for domestic purposes. Both of the diversions under these 2 filings head within the SW $\frac{1}{4}$ NW $\frac{1}{4}$  of Section 18, T46N R11W, MDB&M. According to reports of licensees for the years 1949, 1950 and 1951 about 2 acres are being irrigated currently under Application 7376 and 10 acres under Application 7377.

Information extracted from reports of inspections made in connection with Applications 7376 and 7377, on May 20, 1937 and on May 21, 1936 respectively, is as follows:

From Report on Application 7376:

"Walker Creek - - - heads on the northwestern slope of Lake Mountain in the Marble Mountains and flows north to the Klamath River. The contributory watershed - - - is heavily wooded, has an area of about 11 square miles and an average annual rainfall - - - of about 39 inches. The estimated flow at the time of this inspection was 15 cfs of which - - - 0.24 cfs was being diverted."

"The ditch was dug through sand and gravel and it appeared that heavy conveyance losses were experienced. The place of use is located on a gravel bar - - -."

"The place of use slopes gently - - - and the soil therein is mainly fine sand and gravel. The place of use consists of permittee's 2 room house and about 1 acre of clover."

"The use of water has been for domestic purposes throughout the year and for irrigation - - - from about April 1 to about October 1."

"On the gravel bar areas along the Klamath River in general it has been found that a continuous flow allowance of 1 cfs to each 50 acres has been necessary - - - -."

"In view of the small amount of water involved, the nature of the material through which the ditch passes - - - it is believed that - - - 0.24 cfs is required and is a reasonable headgate allowance - - - ."

From Report on Application 7377:

"The contributory watershed - - - extends to an elevation of nearly 7000 feet - - - ."

"The estimated flow in the source at the time of this inspection was 0.40 cfs of which a measured 0.32 cfs was being diverted."

"The measured amount being diverted - - - was 0.32 cfs and the measured amount delivered at the entrance to the place of use was 0.24 cfs - - - showing a loss of - - - 25% in about 1000' of ditch."

"The entire ditch is through sand and gravel."

"Water is used - - - for domestic purposes - - - and for irrigation of - - - 20 acres - - -."

"Mr. Brickley stated - - - that the 20 acres represented all he proposed to irrigate as the water supply during most of the season would not permit of additional land being irrigated in view of the nature of the soil."

"Irrigation is accomplished by means of furrows and wild flooding and has extended from April 1 to October 1."

"It appeared - - - that the project was similar to others in the - - - gravel bar areas on which an allowance of 1.0 cfs to each 40 acres - - - has been found to be required and reasonable. In view thereof the quantity - - - for the irrigation of the 20 acres - - - would be 0.50 cfs to which should be added a reasonable conveyance loss allowance. - - - it is believed that a headgate allowance of 0.67 cfs would be a fair estimate - - -."

Precipitation has been recorded at Happy Camp Ranger Station, some 12 miles westerly of Walker Creek, since 1915. According to US Weather Bureau records such precipitation has averaged 45.6 inches. For the years (ending on June 30) when the flow of Walker Creek was observed, in connection with Applications 7376, 7377 and 12155, precipitation is reported to have been as follows:

<u>Year</u>	<u>Total Precipitation</u>	<u>Precipitation in Percentage of Normal</u>
1935-36	49.65	108
1936-37	36.83	80
1950-51	67.64	147

The discharge of Klamath River at Somesbar which is roughly 35 miles southwesterly from the mouth of Walker Creek, during the 3 corresponding

water-years, is recorded as having been as follows:

<u>Year</u>	<u>Yearly Mean * Runoff (cfs)</u>	<u>Runoff in Percentage of Normal</u>
1935-36	6773	102.5
1936-37	5611	85.6
1950-51	unavailable	

\*19 year mean: 6563 cfs

The observation on May 21, 1936 of a flow in the source of 0.4 cubic foot per second, in a season when rainfall and runoff were moderately above normal, is indicative, considered by itself, of non-existence of unappropriated water. However, a considerable head of water may have been diverted at that time at a point upstream, for hydraulic mining.

The observation on May 27, 1937 of a flow of 15 cubic feet per second, in a season of subnormal rainfall and runoff indicates that water is in abundant supply, at that time of year, when upstream diversions are inconsiderable.

The observations on May 17, August 18 and September 24, 1951 of 9, 4 and 2 cubic feet respectively, when rainfall (for the year ending June 30) was well above normal, point to the probability that unappropriated water exists at times, under current conditions, but that it may be in very meager supply if not non-existent, after about mid-summer.

While the applicant seeks to appropriate 1.25 cubic feet per second year-round, she proposes to irrigate only from about April 1 to about October 15. Her requirements before April 1 and after October 15, being for domestic purposes and stockwatering only, may be supposed relatively small.



The only protestants against her proposed diversion are Protestants Wilkins and Hammon. From the report of field investigation (in 1951) Protestant Wilkins uses some 0.5 cubic foot per second; Protestant Hammon under 2 early, licensed applications may divert a total of 0.92 cubic feet per second. Only at times (during irrigation seasons) when the flow of the source exceeds 1.42 cubic feet per second therefore may unappropriated water be considered therein to exist. The observations in 1951 suggest that the flow of the source may have fallen below 1.42 plus 1.25 or 2.67 cubic feet per second (enough to satisfy both the protestants and the applicant) at about mid-September and that a partial supply would have been available to the applicant somewhat longer. The data are too few to support a conclusion as to whether such supply extends through or into October. No October gagings of the flow of Walker Creek appear to have been made, and the flows of other streams of the same region do not invariably average more in October than in September, although usually they do. Streams considered in the latter connection and the variation of their flows by months, from June through November are as follows:

<u>Stream</u>	<u>Percentages of Total Seasonal Runoff*</u>					
	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>
Smith River	3.5	1.9	1.0	1.4	1.6	10.9
Klamath River	5.2	3.6	1.3	1.8	2.2	1.9
Shasta River	9.6	7.0	6.9	1.5	5.1	8.2
Scott River	18.6	7.3	4.2	2.6	2.8	4.2
Salmon River	12.8	3.8	1.6	1.6	1.2	5.7
Trinity River	8.2	2.8	1.5	1.4	1.3	4.9

\*Data from Bulletin 5 - "Flow in California Streams".

#### Summary and Conclusions

The data indicate that unappropriated water usually exists in the source from which appropriation is sought under Application 12155 but that the supply of such water is not firm, diminishes to low values and sometimes fails entirely. The data further indicate that times of shortage or failure of

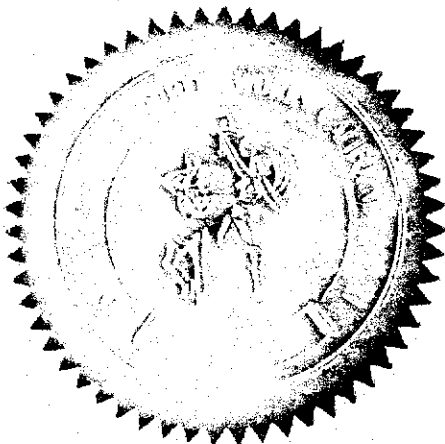
supply are not closely predictable but that when unappropriated water does exist beneficial use may be made of it in the manner that the applicant proposes, without injury to other users. In view of all the circumstances it is the opinion of this office that Application 12155 should be approved subject to the usual terms and conditions. Because of the variability of the times when unappropriated water is non-existent it is impracticable to limit diversions under the application to calendar dates. Protection to the protestants is contained in and must rest upon the provisions in all applications and permits to the effect that diversions sought thereunder are restricted to unappropriated water and may only be made when supply exceeds amounts necessary to satisfy vested rights.

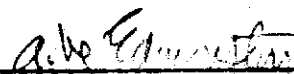
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ORDER

Application 12155 for a permit to appropriate water having been filed with the Division of Water Resources as above stated, protests having been filed, a stipulated hearing having been held and the State Engineer now being fully informed in the premises:

IT IS HEREBY ORDERED that Application 12155 be approved and that a permit be issued to the applicant, subject to such of the usual terms and conditions as may be appropriate.

WITNESS my hand and the seal of the Department of Public Works of the State of California this 29th day of May 1952.



  
A. D. Edmonston  
State Engineer