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

In the Matter of Application 14162 by R. M. Whitehead to Appropriate Water from Curtis Creek, Tributary to Tuolumne River, in Tuolumne County, for Irrigation Purposes.

Decision A. 14162 D. _______ 778_______

Decided October 26, 1953

In Attendance at Investigation Conducted by the Division of Water Resources on September 22, 1952:

R. M. Whitehead       Applicant
Mrs. Whitehead         Applicant's wife
Wm. R. Cambell         Lifelong resident of locality
J. Stuart Moore        Protestant
James R. Hardin        Protestants' Attorney
John W. Hinrichs       Purchaser of protestants' property
M. J. Nichols)         (Observers for Pacific Gas
T. P. Jenkins)         (and Electric Company
Harry Hinckley         County Farm Adviser
A. S. Wheeler          Representing the State Engineer
Senior Hydraulic Engineer
Division of Water Resources

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OPINION

Description of the Project

The application initiates an appropriation of 0.056 cubic foot per second, from April 1 to October 31, from Curtis Creek, tributary via Sullivan and Woods Creeks to Tuolumne River, for the purpose of irrigation. Diversion is to be effected by pumping from the unobstructed channel at a point within the NW\(\frac{1}{2}\) SE\(\frac{1}{4}\) of Section 36, T 2 N, R 15 E, MDB&M, in Tuolumne County. The conduit is to be a 1\(\frac{1}{4}\)-inch pipeline, 200 feet long. The place of use is a 4.5-acre pasture. The applicant asserts no other water right or source of water supply and states that irrigation will extend from some time in April to the end of October.

Protest

J. Stuart Moore and Elsie L. Moore protest the application for the alleged reason that

"during the proposed diversion season . . . Curtis Creek dries up and protestants are required to purchase water from Pacific Gas and Electric Company and applicant at times has tried to pump water so purchased . . ."

The protestants claim a riparian right, also an appropriative right established prior to December 19, 1914. They state that they use water for domestic purposes and for irrigation and that their diversion heads at a point within the NE\(\frac{1}{2}\) of Section 2, T 1 N, R 15 E, MDB&M.

As to terms under which their objections may be satisfied they state:

"The protest may be disregarded and dismissed if applicant would not irrigate more land than presently irrigated; protestants would allow permissive use under private agreement to share cost of water from the Pacific Gas & Electric Company during the dry months."
Answer

No answer to the protest is of record.

Field Investigation

The applicant and the protestants with the approval of the Department having stipulated to the submittal of the application and protest upon the official records of the Department, a field investigation was conducted on September 22, 1952, by an engineer of the Division. The applicant and the protestants were present or represented during the investigation.

Records Relied Upon

Applications 14162, 12257 and 12856 and all data and information on file therewith; also United States Geological Survey Water Supply Papers pertaining to Woods Creek.

Information Secured by Field Investigation

The report of the field investigation of September 22, 1952, contains information as follows:

The watershed, above applicant's intake, is about 4.5 square miles in extent, receives an average rainfall of about 35 inches and is moderately wooded.

Flow, at time of investigation, was approximately 0.15 cubic foot per second at Soulsbyville, some 0.8 mile above the applicant's proposed intake, and flow just above that intake was about 0.30 cubic foot per second, the increase being due to the entrance of waters purchased by applicant and protestants from the Pacific Gas and Electric Company.
Flow at Soulsbyville was said to be slightly above September normal. According to the Pacific Gas and Electric Company representatives who were present, Curtis Creek is normally dry by July 1 at the Company's diversion point, that point being below the protestant's property and some 4 miles below Soulsbyville. According to Protestant Moore the creek is normally dry or nearly dry at his place by August 15. According to lifelong resident Cambell the creek never goes dry except below the protestant's place, and its flow is sufficient to maintain fish life and to allow the applicant to divert one-half miner's inch without interfering with the protestants.

**Foreign water** in varying amounts is present in Curtis Creek during the irrigation season. It results from deliveries from Lyons reservoir, by Pacific Gas and Electric Company, to areas at and above Soulsbyville. Return flow from one such area, concentrated in one small channel was estimated by the investigator to be about 0.05 cubic foot per second.

The applicant has no dam but uses a natural pool in the creek bed as a sump for a small pump which discharges into a sprinkler irrigation system serving between 0.5 and 1.0 acre. The applicant stated that it is doubtful that he will irrigate more than two acres altogether. The investigator estimated that the applicant's ultimate need for water will probably be of the order of 0.025 cubic feet per second. The applicant claims also a riparian right and he obtains his domestic supply from a well. His object in filing is to establish a right to divert foreign waters as well as natural flow.

The protestors under a riparian claim have been irrigating from 100 to 150 acres of pasture lands from Curtis Creek by means of a sprinkler
system, from May 15 to October 15. During a portion of each season they have augmented their supply with water purchased from Pacific Gas and Electric Company and with water obtained from a 25 acre-foot reservoir. They also water up to 110 head of cattle. A portion of their stockwatering supply and all of their domestic supply are obtained from two wells. The protestants are disinclined to withdraw their protest despite the fact, discussed during the investigation, that applications when approved are approved subject to vested rights.

Streamflow Data

The flow of Woods Creek, to which Curtis Creek is tributary (via Sullivan Creek) has been recorded by the United States Geological Survey since 1925, at a point about 1.5 miles above the junction of Woods Creek with Tuolumne River. The drainage area tributary to the gage is reported to include 98.4 square miles. According to the published records the flow of Woods Creek at the point of measurement has averaged 58.7 cubic feet per second over a 25-year period, which is equivalent to 58.7/98.4 or approximately 0.6 cubic foot per second per square mile of tributary watershed. It has ranged during that period from 13,500 cubic feet per second to zero. Water Supply Paper 1181 states, "no flow at times during summers of 1929-36, 1939, 1940, 1947-50."

No information as to the flow at other points on Woods Creek or tributaries is at hand, other than the information collected during the field investigation and summarized in an earlier paragraph.
Other Applications on Same Stream

Applications by Tuolumne County Water District No. 2, initiating appropriations for irrigation and domestic purposes, include among others the following:

Application 12257, for 20 cubic feet per second from April 1 to October 31, to be diverted from Sullivan Creek at a point within SW\(\frac{1}{4}\) of Section 26, T 1 N, R 14 E and

Application 12856, for 20 cubic feet per second from April 1 to October 31 to be diverted from Curtis Creek at a point within NW\(\frac{1}{4}\) of Section 19, T 1 N, R 15 E; and for 13,000 acre feet per annum to be collected between December 1 and June 30 in "Standard" and "Dunning" reservoirs on Curtis Creek, in Sections 10 and 20 of the same township, respectively.

Applications 12257 and 12856 were protested, and, with other applications by that Water District and applications by Oakdale and South San Joaquin Irrigation Districts, were heard during June and July, 1951. The resultant decision provided among other things that action under certain of the applications, including Applications 12257 and 12856 be withheld "pending the applicant's further negotiations with . . . Fish and Game . . ., further recommendations by the State Engineer to the Department of Finance relative to Applications 5648 and 5649 . . . and pending entry of further order . . .".

Tuolumne County Water District did not protest Application 14162. That said District is not averse to the approval of that
application is indicated by the following extract from a letter dated January 18, 1952, from the District's engineer:

"... I will explain the policy .... The Board of Directors ... are making every effort to encourage the development of water resources within their District. Part of their policy is to assist in the securing of water rights for individuals.

"In the case of Mr. Whitehead they assisted him in the preparation of his application."

Additional Information from Protestant

A memorandum by Engineer K. L. Woodward of this office, dated April 15, 1952 and filed in the folder relating to Application 14162 reads in part as follows:

"Mr. J. Stuart Moore called at the office on April 14 and discussed with the writer the matter of his protest against Application 14162 ....

"Since the filing of the protest ... he had obtained several affidavits from ... old-time residents in his locality certifying as to the use of water which has been made by Mr. Moore or his predecessors. Mr. Moore stated that all of the affidavits had been recorded ... but that he desired to file two ... in the permanent record of Application 14162 ....

"According to Mr. Moore, there is normally more water in Curtis Creek than necessary to satisfy the request under Application 14162 but Mr. Whitehead had recently entered into a contract with PG&E for the purchase of water to satisfy his requirements and that possibly no need existed to pursue Application 14162 further. However, Mr. Moore left with the understanding that the matter would be discussed with Mr. Whitehead and that either a withdrawal of the application or withdrawal of the protest could be expected shortly."

One of the affidavits mentioned in the preceding paragraph is signed Gardner M. Woodhams, the other, Emily J. Nicholls. Both
affidavits are dated March 25, 1952. The Woodhams affidavit reads in part as follows:

"Gardner M. Woodhams . . . deposes and says:

"... that he is familiar with ... the Joseph Barron Ranch ...; that ... Curtis Creek ... passes through the ... Joseph Barron Ranch; that on said ranch water for more than 9 years prior to 1914 was put to a beneficial use and that said ... property has enjoyed the benefit of the use of said water without intermission since said date down to the present day owners, J. Stuart Moore and Elsie L. Moore; that the said water was used for irrigation and farming purposes."

The Nicholls affidavit is practically a duplicate of the Woodhams affidavit except that Affiant Nicholls avers that she has lived in the locality since 1900 and that water was beneficially used on the Barron Ranch for more than 14 years prior to 1914.

Additional Information from Other Sources

In protesting Application 12856 the Pacific Gas and Electric Company asserted rights to waters of Curtis Creek, based upon appropriation and use prior to the effective date of the Water Commission Act. The rights, and priority dates, asserted in that protest are as follows:

(1) 7.50 cubic feet per second, priority 1866, from Curtis Creek through the Kincaid Ditch, for irrigation purposes.

(2) 10.00 cubic feet per second, priority 1852, from Curtis Creek through the Algerine Ditch, for irrigation and mining.

(3) 48.3 acre feet per annum from Curtis Creek in Kincaid Reservoir, priority prior to 1866, for release through the Algerine Ditch for irrigation and mining.
Lyons Reservoir, referred to in the report of field investigation, is shown on map entitled "Tuolumne County Water District No. 2", filed with Application 10872. According to the map that reservoir lies on South Fork Stanislaus River about 8 miles north and 5 miles east of Soulsbyville. The same map shows a ditch extending from Lyons Reservoir to the vicinity of Soulsbyville. Lyons Reservoir is also mentioned in the Stanislaus River Judgment and Decree, Case 16873, Superior Court, San Joaquin County, November 14, 1929, a right being therein recognized to store 839 acre feet per annum under an 1897 priority, for use for public service purposes.

Material indicative of the status of irrigation in the Soulsbyville area prior to the effective date of the Water Commission Act is contained in "Report of the Conservation Commission ... California ... 1912." An extract from a tabulation on page 230 of that publication is as follows:

"Summary of agricultural land in Sierra foothills ..."

<table>
<thead>
<tr>
<th>Area</th>
<th>County or Counties</th>
<th>Foothill agricultural land - acres</th>
<th>Areas irrigated acres</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
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Between Stanislaus and Tuolumne rivers:
- Lower foothills: Stanislaus and Tuolumne, 46,000 acres, 40
- Vicinity of Sonora: Tuolumne, 81,000 acres, 2,300

As to the area between Stanislaus and Tuolumne Rivers the publication further states (on pages 231 and 232):
"The principal water supply for irrigation is supplied by the Sierra and San Francisco Power Company.... Water is diverted from the South Fork of Stanislaus River and delivered to lands in the vicinity of Sonora, Columbia, Jamestown, Soulsbyville and Tuolumne...."

According to a map which accompanied the Conservation Commission report and is entitled "Irrigation Map of Central California" the irrigated land in the near vicinity of Soulsbyville was but a small percentage, possibly 5%, of the 2300 acres reported in the tabulation as irrigated in the larger area designated "vicinity of Sonora."

**Discussion**

The diminution of flow of Woods Creek in late winter or early spring, the Water Supply Papers indicate, is rapid. In 18 of the 25 years of published record the flow at the USGS gage held above 58.7 cubic feet per second (the 25 year mean) until April 1 or later. Considering those 18 years only, the average date on which flow has fallen below the 25 year mean is April 25; and the date on which it has fallen to half that figure has averaged May 7. Since the river distance downstream from the applicant's proposed point of diversion on Curtis Creek to the USGS gage on Woods Creek scales approximately 14 miles and there is no marked dissimilarity between watershed areas tributary to those points, other than a difference of a few hundred feet in elevation, flow at the parties' points of diversion will probably recede to average and to half of average at about the same time that those stages are reached at the gage. Likewise since the watershed contributing to the protestants scales about 5 square miles and the mean runoff per square
mile of watershed tributary to the gage is approximately 0.6 cubic foot per second, mean flow at the protestants' intake is probably of the order of 3.0 cubic feet per second; half of mean flow, reached about May 7, 1.5 cubic feet per second. If, as the investigator reports, the protestants sprinkle up to 150 acres of pasture they may be supposed to require for that purpose some 1.5 cubic feet per second or possibly more. Since however, as the investigator further reports, they commence to irrigate on May 15 it is not apparent that they will be injured by upstream diversion in small amounts before that date.

After the commencement of irrigation, the flow of Curtis Creek appears to be made up in part of foreign water, i.e., return flow from lands which drain into Curtis Creek but are supplied from South Fork Stanislaus River. The protestants' alleged riparian right obviously does not authorize the diversion of foreign water. The protestants claim an appropriative right based upon diversion and use of water from Curtis Creek for more than 5 years prior to December 19, 1914, and they submit affidavits in purported support of that claim.

The affidavits submitted by the protestants indicate that some use was made of water flowing in Curtis Creek prior to 1914 but they are silent as to the amounts so used or the acreage served. The information contained in the Conservation Commission Report indicates that in 1912 irrigation on or near the property now owned
by the protestants Moore was negligible. It may be inferred therefore that the protestants' claimed appropriate right, allegedly initiated prior to 1914, does not extend to any substantial degree to return flow of foreign water imported for upstream irrigation.

Inasmuch as the return flow from one particular area near Soulsbyville, supplied from a foreign source, was estimated by the observer on September 26, 1952 to amount to approximately 0.05 cubic feet per second there evidently was at least that much water flowing in Curtis Creek on that date to which the protestants have no discernible claim. It may be supposed that small, like accretions of foreign water enter Curtis Creek at other times also and, possibly, at other places. The investigator states that to be the case. Also on September 22, 1952, the investigator observed 0.30 cubic foot per second to be flowing just above the applicant's intake. Half of that flow, the investigator explained, was purchased water, and the other half presumably included the return flow of foreign origin.

In view of the statement by a Pacific Gas & Electric Company representative that Curtis Creek is normally dry by July 1 at that company's intake (four miles below Soulsbyville), it is evident that neither the company nor users below it can be affected after approximately that date by a diversion such as that proposed by the applicant.

Inasmuch as the applicant informed the investigator that he does not expect to irrigate more than two acres, for which the investigator deemed 0.025 cubic foot per second sufficient, it is evident
that in any permit issued the amount of the appropriation should be reduced to 0.025 cubic foot per second.

Applications 12257 and 12856, by Tuolumne County Water District No. 2, prior to Application 14162, initiate appropriations which exceed at least the summer flow of the stream system of which Curtis Creek is a part. Inasmuch as development under Applications 12257 and 12856 may be long deferred, and in view of the friendly policy of the district as expressed in a letter quoted in an earlier paragraph, the existence of those prior filings does not appear to bar the approval of Application 14162.

Summary and Conclusions

The data indicate that unappropriated natural flow exists in Curtis Creek at the applicant's proposed point of diversion until about May 15 of an average season, but not thereafter and that after about May 15 unappropriated foreign waters probably exist in the same stream in small and variable amounts. The data indicate also that the applicant has applied for a larger amount of water than is appropriate to the acreage which he proposes to irrigate and that the amount authorized in any permit issued him should be reduced to 0.025 cubic foot per second. It is the opinion of this office that the above mentioned natural flow and foreign water to the extent of 0.025 cubic foot per second may be taken and used in the manner proposed by the applicant without injury to the protesters and that Application 14162 in the reduced amount of
0.025 cubic foot per second should therefore be approved and permit issued subject to the usual terms and conditions.

ORDER

Application 14162 having been filed with the Division of Water Resources as above stated, a protest having been filed, stipulations having been submitted, a field investigation having been conducted and the State Engineer now being fully informed in the premises:

IT IS HEREBY ORDERED that Application 14162 be approved in the reduced amount of 0.025 cubic foot per second and that a permit in that reduced amount 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 26th day of October, 1953.

[Signature]

A. D. Edmonston
State Engineer