

STATE OF CALIFORNIA
STATE WATER RIGHTS BOARD

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In the Matter of Application 16589 by Daniel Meaney to Appropriate from
Reggiardo Creek, Tributary via Laguna Creek to Pacific Ocean in
Santa Cruz County for Domestic, Irrigation and Recreational Purposes

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Decision No. 875

Decided September 6, 1957

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In Attendance at Investigation Conducted by the Division of Water Resources
on June 1, 1956:

Daniel Meaney

Applicant

Weston L. Webber,
Water Superintendent,
City of Santa Cruz

Representing the Protestant

E. C. Johnson,
Assistant Hydraulic Engineer,
Division of Water Resources,
Department of Public Works

Representing the State Engineer

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DECISION

Substance of the Application

The application initiates an appropriation of 2,000 gallons per day, year-round, and 25 acre-feet per annum, collected between January 1 and April 30 of each season, from Reggiardo Creek, in Santa Cruz County, for

domestic, irrigation and recreational purposes. The water is to be diverted at a point within the SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 25, T10S, R3W, MDB&M, pumped to an off-stream reservoir, 3 acres in surface area, 30 acre-feet in capacity. The project includes a pump, 100 gallons per minute in capacity, 900 lineal feet of 2-inch or 2 $\frac{1}{2}$ -inch pipe line and a perimeter dam (around the reservoir) 12 feet high, 2,500 feet long. The water is wanted for domestic use at two houses and for the irrigation of 30 acres of orchard, alfalfa, general crops and pasture, the irrigation season extending from about May 1 to about November 30. The applicant states that he owns both the land at the proposed point of diversion and the land upon which the water is to be used.

Protest

The City of Santa Cruz protests the application, stating that it diverts from Reggiardo Creek at a point within the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 30, T10S, R2W, MDB&M, that during the winter of 1954-55 it diverted and used the entire flow of Reggiardo Creek, and that if the applicant diverts, during a dry winter, at the rate of 100 gallons per minute that he proposes, he will exhaust the entire flow of that stream. The protestant City states further that it diverts at times the entire flow of Reggiardo Creek, that the water so diverted is used for municipal and irrigation purposes, that its use of said water began in 1890, that its right to so divert is based upon ownership of riparian rights between its diversion point on Reggiardo Creek and Pacific Ocean.

Answer

No answer to the protest is of record.

Field Investigation

The applicant and the protestant with the approval of the Division of Water Resources stipulated to the submittal of the application and protest upon the official records and a field investigation was conducted on June 1, 1956 by an engineer of that Division. The applicant and the protestant were present or represented at the investigation.

Records Relied Upon

Applications 15686 and 16589 and all relevant information on file therewith; Santa Cruz quadrangle, United States Geological Survey; pertinent Geological Survey Water Supply Papers of "Part 11 - Pacific Slope Basins in California."

Information Obtained by Field Investigation

Extracts from "Report on Investigation of Application 16589"(filed with the application) are as follows:

"Reggiardo Creek originates ... within Section 24, T10S, R3W ...at an altitude of about 1,500 feet and flows ... southerly ... to its confluence with Laguna Creek near the SW corner of Section 30, T10S, R2W ... The watershed area contributing to the flow at the applicant's point of diversion is an estimated 2.5 square miles. The elevation at the proposed point of diversion is about 700 feet.

"... intermittent measurements of the flow of Reggiardo Creek and Laguna Creek ... were made by the City of Santa Cruz at its diversion dams ... The results of the measurements made (at Reggiardo Creek diversion dam) during ... 1941 are ...as follows ...

<u>Date</u>	<u>Discharge (cfs)</u>
5-41	1.4
6-41	0.6
7-41	0.2
8-41	0.1
9-41	0.1
10-41	0.2
11-41	0.2

"The stream bed of Reggiardo Creek at the applicant's point of diversion consists of a rather shallow layer of gravel lying over limestone bedrock ... At the time of the investigation there was no surface flow occurring through the gravel ... but about 0.20 cfs was flowing over the bare limestone and about this amount was reaching the diversion dam of the City of Santa Cruz about 1/4 mile below.

"The applicant presently uses water from the creek as his only source of supply for household use and irrigation of a small flower garden and a few trees at his summer home. Water is diverted by means of a small centrifugal pump ... which takes water from a small sump dug in the gravel of the channel into about 500 feet of 1 1/2 inch diameter galvanized pipe with a rise of approximately 175 feet to a 9,000 gallon capacity redwood regulatory tank. According to the applicant the tank is ordinarily filled about once a week during the summer.

"Mr. Meaney indicated that the previous owner ... had originally owned only the land in the W 1/2 SE 1/4 ... and later in order to obtain a water supply for the summer home purchased the portions of SE 1/4 NE 1/4 and NE 1/4 SE 1/4 ... through which the creek runs. All of the applicant's present use occurs within the NW 1/4 SE 1/4 of Section 25.

"The diversion dam of the City of Santa Cruz on Reggiardo Creek is a concrete structure ... from which leads a steel pipe line about 1000 feet ... to the City's diversion dam on Laguna Creek ... a short distance above the confluence of the two creeks. The only visible portion of the pipeline is the lower approximately 100 feet, the remainder is buried. This visible portion is 8-inch diameter, and contains a valve so that the Reggiardo diversion may be turned off or on when desired. At the time of the investigation all of the flow of Reggiardo Creek except a small amount of seepage past the dam was being diverted to the pool formed behind the dam on Laguna Creek. From this dam the water is taken ... on to the City's transmission lines.

"Mr. Webber indicated that Laguna Creek is used by the City as a source of water year round but that the water of Reggiardo Creek becomes muddy during and immediately after heavy rains and is ordinarily not used while in this condition. He did state however that during dry seasons such as that of 1954-55 Reggiardo Creek is used the entire winter. Records of the amount of water diverted from Reggiardo Creek are not maintained by the City. The times when the valve on the pipeline is opened or closed is noted by a City employee and a copy of these records covering the period from July 1, 1953, to August 27, 1954, was obtained from Mr. Webber. The number of hours that the valve was turned off and the number of hours it remained open for each month during the period of record is as follows:

Date	On	Off	Date	On	Off
7-53	744	0	1-54	398	346
8-53	744	0	2-54	349	332
9-53	700	20	3-54	200	544
10-53	683	61	4-54	159	561
11-53	517	203	5-54	655	89
12-53	594	150	6-54	704	16
			7-54	744	0
			8-54	637	11

According to Mr. Webber the diversion on Laguna Creek has been in operation since 1890 and that on Reggiardo Creek since March, 1912."

Information from Other Sources

The upper portion of the Laguna Creek watershed (which includes the area drained by Reggiardo Creek) adjoins the larger San Lorenzo River watershed. San Lorenzo River, like Laguna Creek, discharges into Pacific Ocean, the mouths of the two streams being some 8.5 miles apart. The Water Supply Papers, United States Geological Survey, contain a record of the flow of San Lorenzo Creek, since 1937, at a gaging station designated "San Lorenzo River at Big Trees." That gaging station is located about six miles above the mouth of San Lorenzo River and commands a drainage area of about 110 square miles. Calculations based upon the data contained in the Water Supply Papers indicate that flows passing "San Lorenzo River at Big Trees" during January, February, March and April, 1954 were respectively 30.7%, 44.5%, 65.8% and 81% of the 17-year averages for those months.

Information as to diversions by the City of Santa Cruz and the utilization by that City of waters of Laguna Creek was secured by field investigation on April 21, 1954 by an engineer of the Division of Water Resources in connection with earlier Application 15686. Extracts from the report covering that investigation are as follows:

"The City of Santa Cruz normally depends on San Lorenzo River water only during the period of from March through November and exports its water during the remainder of the year from Laguna Creek and other sources ... According to Mr. Webber (City Water Superintendent) the City's filtration plant is inadequate to handle water from San Lorenzo River during the high flow period due to its muddied condition.

"The (San Lorenzo) river rises near the crest of the Coast Range Mountains and flows in a southerly direction for some 25 miles into Monterey Bay at ... Santa Cruz. Along its course are popular vacation resorts ... This is strictly a recreational area..."

Discussion

The contiguity and the somewhat similar topography of the Reggiardo Creek and San Lorenzo River watersheds suggest that a relationship may exist between flows passing the applicant's proposed point of diversion on the former stream and flows passing "San Lorenzo River at Big Trees." A comparison of reported monthly mean flows at the protestant City's diversion dam on Reggiardo Creek in the months of May to November, 1941 (tabulated above) with mean flows during the same months passing "San Lorenzo River at Big Trees" (as reported in the Water Supply Papers) indicates that the former averaged about 0.5 per cent of the latter, during that period. On the assumption that the same percentage relationship may hold, roughly, at other times also, and that the flows passing the applicant's proposed intake and the flows reaching the protestant's dam on Reggiardo Creek are substantially the same, the following rough values of monthly flows in cubic feet per second to be expected at the applicant's proposed intake may be derived:

Month	Flow	Month	Flow
January	1.63	July	0.15
February	2.16	August	0.11
March	1.71	September	0.10
April	0.98	October	0.11
May	0.40	November	0.30
June	0.23	December	0.90

That unappropriated water exists at times in Reggiardo Creek is apparent from the information as to the opening and closing of the valve regulating flow through the protestant's pipe-line. When said valve is closed, protestant can have no valid objection to the diversions that the applicant proposes. During the period from January 1 to April 30, 1954, according to the information supplied as to the opening and closing of protestant's valve, the applicant might have diverted for a total of 1,783 hours without apparent injury to anyone. That number of hours is equivalent to about 74 days, yet 57 days would have sufficed for the diversion to storage, at the rate the applicant proposes, of the 25 acre-feet per annum sought for that purpose. During the remaining eight months of the year the applicant seeks to divert at a much lesser rate, i.e., at a rate of 2,000 gallons per day, which is equivalent to about 1.4 gallons per minute or about 0.003 cubic foot per second. The data suggest that during most of those eight months, while unappropriated water is at times extremely scarce, as in July and August, it nevertheless exists intermittently, in small amounts; they suggest that by diverting only when protestant's valve is shut the applicant can pump enough water into his storage tank to meet or to partially meet his domestic requirements, with great

benefit to him and without detriment to the protestant.

The protestant appears to have established a right to divert the flow of Reggiardo Creek up to the capacity of its pipe-line and the latter appears of ample capacity to accommodate the flow of the creek most if not all of the time. For the protection of that apparent right any permit issued in favor of the applicant should be so conditioned as to limit diversions thereunder to times when the existence of unappropriated water is evidenced by the continuation of flow in the channel of Reggiardo Creek past the protestant's intake on that stream.

Conclusion

The Board finds that there is unappropriated water in Reggiardo Creek available to supply applicant which water may be appropriated to a substantial extent in the manner proposed in the application without injury to any other lawful user of water, that the intended uses are beneficial, and that said application should be approved and permit issued to the applicant subject to the usual terms and conditions and subject to an additional term and condition indicated in this decision for the protection of prior rights. The Board further finds that as so conditioned, the appropriation will best develop, conserve and utilize in the public interest the waters sought to be appropriated.

ORDER

Application 16589 for a permit to appropriate unappropriated water having been filed with the former Division of Water Resources, a protest having been filed, stipulations having been submitted and jurisdiction of the administration of water rights including the subject application having been subsequently transferred to the State Water Rights Board and said Board now being fully

informed in the premises:

IT IS HEREBY ORDERED that Application 16589 be approved and that a permit be issued to the applicant, subject to vested rights and to the following terms and conditions, to wit:

1. The amount of water appropriated shall be limited to the amount which can be beneficially used and shall not exceed:

A. Two thousand (2,000) gallons per day by direct diversion to be diverted as follows: (a) from about May 1 to about November 30 of each year for irrigation purposes and (b) throughout the year as required for domestic and recreational purposes; and

B. Twenty-five (25) acre-feet per annum by storage to be collected from about January 1 to about April 30 of each year; all as more explicitly set forth in Paragraph 2(b) of this approved application.

The equivalent of such continuous flow allowance for any thirty-day period may be diverted in a shorter time if there be no interference with vested rights.

2. The maximum amount herein stated may be reduced in the license if investigation so warrants.

3. Actual construction work shall begin on or before June 1, 1958, and shall thereafter be prosecuted with reasonable diligence, and if not so commenced and prosecuted, this permit may be revoked.

4. Said construction work shall be completed on or before December 1, 1960.

5. Complete application of the water to the proposed use shall be made on or before December 1, 1961.

6. Progress reports shall be filed promptly by permittee on forms which will be provided annually by the State Water Rights Board until license is issued.

7. All rights and privileges under this permit including method of diversion, method of use and quantity of water diverted are subject to the continuing authority of the State Water Rights Board in accordance with law and in the interest of the public welfare to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of said water.

8. Diversion under said permit shall be limited to such times as the existence of unappropriated water is evidenced by the continuation of flow in the channel of Reggiardo Creek past the intake of the City of Santa Cruz on that stream.

Approved as the decision and order of the State Water Rights Board
this 6th day of September, 1957.

/s/ Henry Holsinger

Henry Holsinger, Chairman

(Absent)

John B. Evans, Member

/s/ W. P. Rowe

W. P. Rowe, Member