

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 14912 by George G. Trout and Catherine
A. Trout to appropriate water from Three Unnamed Springs Tributary
via an Unnamed Stream and West Ravine to Arroyo Seco in Los Angeles
County for Domestic Purposes.

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Decision A. 14912 D. 796

Decided August 2, 1954

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In Attendance at Investigation Conducted by the Division of Water
Resources at the Site of the Proposed Appropriation on May 29, 1953:

George G. Trout

Applicant

Duncan A. Blackburn, Chief Engineer)
and General Manager)
City Water Department)
and)
Elmer J. Smith)
Assistant Chief Engineer)
City Water Department)

Representing the City of Pasadena

J. J. Heacock)
Senior Hydraulic Engineer)
and)
L. B. James)
Associate Engineering Geologist)

Representing the State Engineer

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OPINION

General Description of the Project

The applicants seek to appropriate 100 gallons per day from each of three springs, located within the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 33, T2N R12W, SBB&M, year-round, for domestic purposes. The springs lie along the course of an unnamed stream that is tributary via West Ravine to Arroyo Seco, the latter a tributary of Los Angeles River. The water from the springs is to be collected and piped some 300 feet to the applicants' home. According to the application, the applicants own the place of use but not the land on which the springs are located. Application to the forest service for access to that land is said to have been made.

Protest

The City of Pasadena protests the application, stating as follows:

"Water is pumped from wells in Raymond Basin

"The surface flow and underflow of West Ravine and tributaries thereto is contributory to the water supply of the Raymond Basin and all of the waters in Raymond Basin are now being used. The rights to the underground water in the Raymond Basin are set forth in the judgment of the Superior Court in case No. Pasadena C-1323. The City of Pasadena is a party to the Raymond Basin Water Agreement."

Answer

Applicant George G. Trout answers the protest, his answer containing, among others, the following statements:

"The water from my proposed spring area can hardly reach Raymond Basin because

- (a) Mr. Gulio Nuccio, who owns the land below the spring area, has a 575' shaft into the mountains about 1000' down the Canyon from the springs and his shaft was dry when I located the springs last summer. I checked this area for a number of days during the summer, digging in various likely spots, and found no trace of water.
- (b) Mr. Gulio Nuccio has a well several hundred feet deep in this same canyon about another thousand feet down the Canyon from his shaft or tunnel. He told me recently that he pumps this well dry daily.
- (c) Between Mr. Nuccio's water shaft and well and the Pasadena Raymond Basin are the Lincoln Company wells which furnish all the water used in the Lincoln Water Company District.
- (d) Mr. Gulio Nuccio whose water supply is nearest my springs has expressed the belief that the water source will not be affected by my taking water from the springs.
- (e) A representative from the Lincoln Water Company whose water supply is between the springs and the Pasadena Water Supply, or next in line to be affected, has inspected the springs as they are now developed and has expressed his personal opinion that they would not affect Nuccio's water supply or the Lincoln Water Company's supply.
- (f) The City of Pasadena does not pump water from its Monk Hill area which is immediately affected by the West Ravine water shed, and the only part of the Raymond Basin that is affected by the West Ravine water shed. Since they pump no water from the West Ravine area which is a part of the Raymond Basin, how can the Pasadena Water Department be affected by any springs in a tributary canyon to West Ravine and how can they protest the use of the water when they don't even use it themselves."

Field Investigation

The applicants and the protestant 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 at the site of the proposed appropriation on May 29, 1953, by an engineer of the Division. The applicant and the protestant were present or represented during the investigation.

Records Relied Upon

Application 14912 and all data and information on file therewith; records of the discharge of Arroyo Seco near Pasadena as published in Water Supply Papers of the United States Geological Survey and/or in unpublished records (advance sheets) of that agency.

Information Secured by Field Investigation

Extracts from the report covering the field investigation of May 29, 1953, are as follows:

"The sources of the proposed appropriation are three small developed seeps in the bottom and near the head of a steep boxed unnamed canyon in southerly slope of the San Gabriel Mountains. The watershed includes about ten acres of steep rough mountain side, having a heavy covering of chaparral. Average annual precipitation over the watershed is about 25 inches. The drainage area is bisected by a paved road so a portion of the surface drainage is intercepted and enters the canyon channel below the point of diversion.

"The Lincoln Avenue Water Company, one of the parties in the Raymond Basin Reference, has a small reservoir at the highest point on the watershed. There is no information available as to leakage from the reservoir but if there is leakage it would contribute to the source of the proposed diversion.

"The source has been developed by a covered inlet box in the thread of the channel and two small caverns excavated in the left bank about at flow line. The three excavations fall within about 40 feet, they are connected by one-half inch pipe, and the common discharge is about 40 feet of one-inch pipe that empties into the bottom of the canyon. Measured combined flow from the one inch pipe was one gallon in four minutes and 43 seconds, or about 305 gallons per day.

"The springs proposed to be utilized by the applicant are located in the bottom of the canyon. Their development to date has consisted of removal of surface soils and of shallow excavation into loose bedrock. These springs appear to be supplied chiefly by seepage through the soil mantle covering the slopes and to some extent flow through local fractures of shallow depth in the bedrock.

"At several points downstream from the applicants' proposed diversion outcrops of bedrock were observed on the floor and walls of the canyon. Two such outcrops are shown in Photos #1 and #2 attached hereto"

The report then displays two photographs which bear footnotes as follows:

On Photo #1 -

"Outcrop of granitic rock in bottom of canyon about one-half mile downstream from proposed point of diversion. Rock is massive though slightly decomposed to a shallow depth. No prominent fracture systems are apparent. No surface flow existed."

On Photo #2 -

"Outcrop of fresh granitic rock in canyon bottom. Rock is massive and fresh. No surface flow existed."

The report continues:

"The walls and floors of the canyon are covered with native vegetation including green leaf shrubs, toyon, grasses and wild flowers. Several small sycamore trees exist near the applicants' springs. Existing foliage was of sufficient density to make walking difficult.

"Field observations have led to the following conclusions:

- '1. The existence of exposure of fresh, massive bedrock in the walls and floor of the canyon indicates that water emanating from the applicants' springs does not ultimately reach Raymond Basin as subsurface flow.
- '2. The foliage along the canyon floor lying between the applicants' proposed point of diversion and the alluvial Raymond Basin is capable of consuming the entire discharge of these springs.'

"The City of Pasadena has the largest rights in the Raymond Basin, and their protest was made and considered by them to cover all the other parties. Their position is that any water diverted to use in the tributary mountain area will diminish the supply to the basin in a like amount

"During the inspection of the site it was apparent that probably very little more water would be developed"

* * *

"The applicant has excavated a bench or a ridge below the road, and hopes to start construction of a residence for himself in the near future. His property appears to be riparian to the canyon below the springs and if necessary to obtain water, he will probably drill a well and pump the water to the place."

* * *

"It does not appear that the appropriation ... can materially affect the Raymond Basin water supply."

Information from Other Sources

Arroyo Seco, to which the source filed upon is indirectly tributary, has been gaged and the results recorded in Water Supply Papers of the United States Geological Survey, since December, 1910. During the period of record, surface flow has ranged from practically

nothing for several months of some years to a maximum of 8,620 second-feet and has averaged 10.0 second-feet. The drainage area tributary to the point of measurement is 16.4 square miles in extent and therefore yields an average of $10.0/16.4$ or about 0.61 second-foot per square mile, equivalent to about 615 gallons per day per acre.

Raymond Basin, mentioned in the protest by the City of Pasadena and in the report of field investigation, is evidently intended to mean Raymond Basin Area, the name given to that portion of San Gabriel Valley which is separated from the remainder of that valley by the so-called Raymond Fault. Raymond Basin Area contains the City of Pasadena and is bounded on the north by the San Gabriel range of mountains, the drainage from which includes, among other streams, Arroyo Seco and its tributaries. Raymond Basin Area is highly urbanized. As population grew, local water resources became insufficient, streams and springs of the adjacent mountains were exploited and importation from more distant sources began. In February, 1939, the Superior Court in and for the County of Los Angeles referred Case No. Pasadena C-1323-City of Pasadena v. City of Alhambra- to the Division of Water Resources for investigation and report. The case

involved rights to divert from the ground water underlying Raymond Basin Area, embraced an adjudication of the rights of the defendants inter se and the rights of each and every party as against each and every other party, and resulted in a judgment dated December 23, 1944. The judgment and decree among other things declares that the demand upon the basin greatly exceeds safe yield, proclaims what it terms the unadjusted right of each of the parties, imposes limitations upon the exercise of the unadjusted rights so that takings will not exceed safe yield, reserves jurisdiction and authority to the Court to review its determination of safe yield or of the parties' aggregate rights as well as jurisdiction and authority in certain other matters, and provides for the appointment of the Division as watermaster to administer the takings under the adjusted rights. Watermaster service has been furnished in accordance with the judgment and decree continuously since April 5, 1944.

Discussion

Topographically the springs from which the applicants seek to appropriate are tributary via an unnamed stream, West Ravine and Arroyo Seco to Raymond Basin Area where it is well

known that demand exceeds natural supply. Actually however the effect of the springs upon the water supply of Raymond Basin Area appears negligible. In dry weather, which predominates, the water that feeds the springs does not reach Raymond Basin Area, being lost en route by evapo-transpiration. In wet weather there are times undoubtedly when surface flow occurs in the unnamed stream and continuously therefrom to Arroyo Seco. However, surface flow in the unnamed stream, described as a steep, boxed canyon draining some 10 acres of steep, rough mountain side, dry at the time of the investigation, floored with foliage capable of consuming the discharge of the springs, may be supposed to occur mainly during and for a short time after storms, seldom if at all at other times.

Summary and Conclusions

The applicant seeks to appropriate 300 gallons per day from springs located along the course of an unnamed stream, tributary via West Ravine to Arroyo Seco, in Los Angeles County, for domestic purposes.

The application is protested by the City of Pasadena which secures water by pumping from wells located in Raymond Basin Area. The protestant contends that it would be injured

by the proposed appropriation inasmuch as West Ravine and its tributaries contribute to the water supply of Raymond Basin Area, that all waters in that Area are already in use and that any diversion such as proposed by the applicant would lessen the over-all supply.

Field investigation discloses that the watershed above the proposed point of diversion is not over 10 acres in extent, that the yield of the springs at the time of the investigation was at the rate of 305 gallons per day, that the springs are in a canyon, that the canyon supports a considerable growth of natural vegetation, that outcrops of bed rock occur in the canyon, that there was no surface flow in the canyon at the time of the investigation, that the outcrops appear capable of preventing the passage of underflow and that the canyon supports a growth of vegetation extensive enough to consume, ordinarily, the water discharged by the springs.

Supplementary information is to the effect that discharge from the watershed above a gaging station on Arroyo Seco averages approximately 615 gallons per day per acre, that the demand within Raymond Basin Area exceeds the safe yield thereof, that the watershed tributary to Raymond Basin Area has been exploited and that importation of water from more distant sources has begun.

The circumstances summarized point to the conclusion that the water emanating from the springs upon which the applicants have filed does not ordinarily reach Raymond Basin Area, that its diversion as proposed by the applicants cannot materially injure the protestant or any other downstream user and that it is therefore subject to appropriation. In view of the circumstances it is the opinion of this office that Application 14912 should be approved and permit issued subject to the usual terms and conditions.

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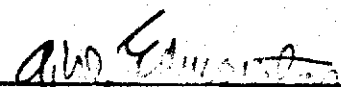
ORDER

Application 14912 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 14912 be approved and that a permit be issued to the applicants 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 2nd day of August, 1954.




A. D. Edmonston
State Engineer