

BEFORE THE DIVISION OF WATER RIGHTS
DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

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IN THE MATTER OF APPLICATION No. 5221 OF SOUTHERN
CALIFORNIA EDISON COMPANY TO APPROPRIATE WATER
FROM FALL CREEK, TRIBUTARY OF TUJUNGA CREEK
IN LOS ANGELES COUNTY FOR DOMESTIC PURPOSES.

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Decision A 5221 D 157

Decided June 14, 1927

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APPEARANCES AT HEARING HELD JANUARY 5, 1927.

For Applicant:

Southern California Edison Co.

G. E. Trowbridge.

For Protestants:

City of Los Angeles

W. B. Mathews, Special
Counsel.

by Kenneth K. Scott, Deputy City
Attorney.

Monte Vista Pipe Line

No appearance.

EXAMINER:

Harold Conkling, Hydraulic Engineer, for
Edward Hyatt, Jr. Chief of the Division of
Water Rights, Department of Public Works,
State of California.

O P I N I O N

Application 5221 was filed September 27, 1926. It proposes an ap-
propriation of 0.0031 of a cubic foot per second throughout the entire year
from Fall Creek, a tributary of Tujunga Creek in Los Angeles County for domes-

tic purposes and a limited amount for incidental garden use. The application was protested by the City of Los Angeles and the Monte Vista Pipe Line.

The application was completed in accordance with the Water Commission Act and the requirements of the Rules and Regulations of the Division of Water Rights, and being protested was set for a public hearing at Room 1026 Sun Finance Building, Los Angeles, at 10:00 o'clock A. M. on January 5, 1927. Of this hearing applicant and protestants were duly notified.

The protest of the City of Los Angeles was filed October 30, 1926.

The city alleges in effect that it is the owner of the paramount right to take and use all of the waters flowing or to flow in the Los Angeles River, as the same may be required for the use of the city for domestic and municipal purposes; that at the present time the city has need for all of the waters of the Los Angeles River and since all water flowing in Fall Creek and Tujunga Creek are tributary to and constitute a part of the flow of the Los Angeles River, none of the waters of said river or its tributaries are unappropriated and therefore the proposed diversion if approved would interfere with the vested rights of the city.

The protest of the Monte Vista Pipe Line was filed November 29, 1926.

The protestant claims the right to divert 1.2 second feet from Tujunga Creek near Trail Canyon in the E $\frac{1}{2}$ of the SE $\frac{1}{4}$ of Section 32 T 3 N. R 13 W. S.B.B.& M. from 8 to 12 months during the year for domestic and irrigation purposes by virtue of a notice of appropriation posted in 1884 and continuous use thereafter and alleges in effect that the surface water during the summer months is already frequently insufficient to supply the water under this appropriation.

Description of Applicant's Project

The water which the applicant seeks to divert under Application 5221

is to be used for domestic purposes and incidental garden irrigation at applicant's Tujunga Patrol Station, located in the vicinity of the confluence of Fall Creek with Tujunga Creek, at which station three cottages will be maintained for housing men who will patrol and repair applicants transmission line extending from its power plants at Big Creek to Los Angeles.

It is intended to divert water from Fall Creek through a pipe line approximately 4500 feet in length and collect it in a 3,000 gallon tank located in the immediate vicinity of the station, which tank will be connected by pipes with each of the cottages and used merely for regulatory purposes. The overflow from this tank will be returned directly to Tujunga Creek through a pipe line extending from the tank. All of the water not actually used will therefore be returned to the stream without loss.

Description of Source and Water Supply

From the testimony presented at the hearing and information on file in this office, the facts in the case appear to be as follows as to the source and condition of water supply:

Fall Creek, the source of the proposed diversion of the Southern California Edison Company, is tributary to Tujunga Canyon at a point about 10 miles north of the City of Pasadena. It is a live stream throughout the entire year and the flow is continuous on the surface from the proposed point of diversion of the applicant to the junction of the stream with Tujunga Creek. The canyon through which Fall Creek flows is very rocky and precipitous and there are no indications of a sub-surface flow. The summer flow of the creek is apparently about four times the amount which the applicant proposes to divert.

Tujunga Creek, to which Fall Creek is tributary is a rising and falling stream throughout its length. During the summer months, in some places,

all the flow is beneath the surface, at other places it is partly beneath and at other places where an underground dike or wall intercepts the sub-surface flow it apparently is entirely on the surface. During the winter and spring the flow is occasionally continuous to a point about three to five miles above the San Fernando road bridge, very seldom passing the bridge except during flood periods, but during the summer months it is always a continuous stream at the intake of the Monte Vista Pipe Line which is located just below the junction of Trail Canyon and Tujunga Creek.

The Tujunga Creek debouches into San Fernando Valley, a detritus filled basin or lake which forms a natural reservoir discharging into the Los Angeles River.

Impeded by the detrital matter in the San Fernando basin the underground waters move very slowly in a general southeasterly direction a distance of twenty to twenty-five miles through this valley to the "Narrows" of the Los Angeles River just north of the North Broadway bridge where they are intercepted by an underground barrier or dike and forced to the surface.

Effect of Appropriation Upon Supply of City of Los Angeles

The first diversion of the City of Los Angeles is a series of wells in the San Fernando Valley along Van Owen Street and Lankersheim Boulevard. These wells are used only in case of emergency because the water not diverted at that point would normally, if undisturbed, be available a few years later at the south end of the valley.

The next diversion is known as the head works diversion in the upper end of Griffith Park at a point some 7 to 10 miles above the "Narrows" which diversion works consist of approximately nine wells operated by air lift, and three infiltration galleries.

The next diversion point is known as the Crystal Springs diversion

and is an infiltration gallery paralleled with a series of drilled wells, 16 and 20 inch, drilled to bedrock. These wells are operated during the summer season with pump and motor on each well. During the winter season, when the ground water rises and the plants are shut down, they act as flowing wells into the gallery. At the lower end of the plant there is another string of wells that cross bores Glendale operated by air lift, which wells also flow during the winter season. At this point there is an underground dike across the river bed, that intercepts that flow and forces it to within approximately 40 feet of the surface and forms two separate basins. Any water passing there flows into the lower basin which is formed by the next dike at the Narrows which is about one-quarter of a mile above North Broadway.

In this basin the city has three large wells 20 inches in diameter, sunk to bedrock which keep the basin pumped down. The water that is returned from commercial use along the bed of the stream and some water coming in from the Arroyo Seco, practically all disappears by the time it reaches 39th Street, or the Union Stock Yards, and it is assumed that most of the water flows off to the south and to the west. In the southwest and the southeast the city has a series of pumping plants, one at Slauson and Compton Avenue, another at Figueroa and Slauson, which consists of a string of wells running east and west, another at 62nd and Manhattan and at the present time it is drilling at 99th and Wadsworth.

The city claims that it has used and is now using all the waters of the Los Angeles River and while the appropriation applied for is very small and it is impossible to say that such a small amount would result in depletion down at its galleries, a continued approval of applications in the canyon is bound to effect the supply in time.

In the case of the City of Los Angeles vs. Hunter (156 Cal. 603) it was held that the City of Los Angeles, as the successor of the original Pueblo had the paramount right to the use of all the waters of the Los Angeles River, for legitimate uses either within the limits of the old Pueblo or upon annexed territory not within such limits and having decreed that the paramount right to the use of the water was in the city, the court by its injunction restrained the defendants from diverting water from the river at any time when the city was taking the entire surface flow for the purposes for which the city and its inhabitants required the water.

From the testimony presented at the hearing by the City of Los Angeles it would appear that when the water was flowing on the surface at the Narrows, the supply was greater than the demand and no objection could be made to users above. (Page 22 of transcript)

These Narrows as stated above, are located just above the North Broadway Bridge and from testimony presented at previous hearings it would appear that during a year of normal runoff there is water passing the Narrows. For instance according to the transcript of the hearing held on Applications 3603 etc. page 41., Mr. Lynch testified that he had been an engineer in that district for 15 years and during that time there had never been a time when there was not surface water passing the lowest intake of the city at the Narrows or in other words there had never been a time in that period when the city had used all the water.

Again on page 65 of the same transcript Mr. J. E. Phillips a witness called in behalf of the City of Los Angeles testified that he had never known any time when there was no surface water at the Narrows as there was an underground dike at that point which forced the water to rise near the surface and if there was any water at all it was almost bound to appear as a surface flow.

Mr. Phillips claimed, however, that the city was using all of the water of the Los Angeles river and more too, as the city was drawing on the underground basins, both in the San Fernando and in the coastal plain south of the city.

Again on page 17 of the transcript of the hearing held on Application 4855 of J. A. Sullivan et al. Mr. T. G. Anderson witness for the City of Los Angeles, stated that it was his understanding that the City of Los Angeles was taking all the water that they could from the Los Angeles River but that he supposed there was bound to be some which got by. On page 19 of the same transcript he stated that he thought it would be almost impossible to capture all the waters.

Testimony was presented by the City of Los Angeles at the hearing on Application 5221 to the effect "that when the water was flowing on the surface at the Narrows, there would be no restriction of water by the users above." (Page 22 transcript)

The city claims that during a period of drouth such as has occurred during the last three years there had been practically no water passing by its lowest intake and that during the year 1924 there was no surface flow from the Tujunga River to the Los Angeles River.

While this may be true, it is believed that during a normal season of runoff there is water which passes the Narrows and enters the coastal plain south of the city and although the city has wells and pumping plants in this coastal plain it is hardly conceivable that all of the water passing the Narrows is recaptured by the city and therefore at such seasons of normal runoff there is water which is unappropriated.

A witness called in behalf of the City of Los Angeles in the matter of Application 4855 testified that he had read or heard that it takes water

12 years to traverse the San Fernando Valley (See page 18 transcript on Application 4855.) Whether this may be the case or not, the underground water travels very slowly through the basin and because of the slow rate of movement of the water from the upper end of the detrital filled basin, the effect of any diversion above the valley will not be felt for a long time at the diversion points of the city.

In consequence of the slow movement and delayed effect of diversion above on the surface flow below it appears very possible that the rains and flood waters will again fill the underground reservoir before the effects of diversion above is felt. This possibility increases to a probability as the time interval of flowage between the upper and lower points increases. The fact that this underground basin is replenished each winter season is demonstrated by the fact that the wells near the Narrows which are pumped during the summer become artesian or flowing wells in the winter. It is our conclusion therefore that the proposed diversions of the applicant will not interfere with the water available to vested rights of the City of Los Angeles.

Effect of Proposed Appropriation on Monte Vista Pipe Line

The Monte Vista Pipe Line has appeared as protestant to several previous applications to appropriate at points upstream on the Tujunga and tributaries and did not appear at the hearing on this application.

However, in the hearing on Application 4641 of Trail Canyon Water Company, held in Los Angeles Sept. 7, 1926, H. B. Lynch testified on behalf of protestant Bernhard for the Monte Vista Pipe Line, that the Monte Vista Pipe Line has maintained a pipe in the Tujunga River taking from the bed of the Tujunga River approximately 60 inches when it is available for something over 40 years and that during several of the summer seasons of the last five

years the amount of water flowing had been entirely insufficient to fill that pipe line and there had been times when there was only a small portion of a pipe line full. Therefore the company felt that it was in effect an application for the Monte Vista Pipe Line to donate this water or most of the water to the applicant. He stated that the company diverted the surface flow only and as the surface flow decreases they "lose out".

It is a distance of some eight to ten miles measured along the stream channel from applicants' point of diversion to the intake of Monte Vista Pipe Line. Throughout this distance the flow in Tajunga Creek is a rising and falling stream, in places flowing all or for the most part on the surface and again in times of low flow practically disappearing, the sub-surface flow at recurrent intervals being forced to the surface by underground barriers or dikes which act somewhat as a weir. The flow over and past the weir in each case is of course dependent upon the depth of the water in the basin above it and this water level is established by a meeting of the surface water level in the stream and the sub-surface water level in the corresponding basin.

Under such circumstances it will be readily seen that a draft upon the surface flow in the stream or from the sub-surface water in the corresponding basin is not at once reflected in a corresponding diminution of flow past the next weir, underground barrier, or dike below. The flow past the next weir or dike below is created by the depth of water on the overflow lip and is effected by diversions above only to the extent that such diversions lower the water level in the basin, and the water level in the basin may well be established by the recurrent flood flows of winter to a far greater degree than by the diminished summer flow which in large part travels the greater distance underground. The protestant at least has submitted no conclusive evidence on this

point and in the absence of such showing we are forced to the conclusion that domestic use within the watershed with appropriate provision for return of waste to the surface stream flow or the underground water will probably have an altogether negligible effect upon this protestant.


A prompt return of such wastes to the stream channel or the underground waters we believe a reasonable requirement of this prospective appropriator and to be dictated by considerations of economy in the use of water as well as personal and public health. The resultant draft upon the waters passing the intake of Monte Vista Pipe Line will we believe as in the case of the waters passing the several intakes of the City of Los Angeles be replenished by the recurrent storms and floods of the succeeding winter before it can be felt by protestant.

O R D E R

Application 5221 for a permit to appropriate water having been filed with the Division of Water Rights as above stated, protests having been filed, a public hearing having been held and the Division of Water Rights now being fully informed in the premises:

IT IS HEREBY ORDERED that said application be approved for an amount not to exceed 0.0051 cubic foot per second and that a permit be issued thereon subject to such of the usual terms and conditions as may be appropriate and subject to the special condition that such disposal shall be made of the sewage and other wastes of water appropriated under the application as will insure the maximum practicable return to the stream flow of Tujunga Creek at points downstream from the junction of Tujunga and Fall Creeks.

Dated at Sacramento, California, this fourteenth day of June 1927.



(Edward Hyatt, Jr.)
CHIEF OF DIVISION OF WATER RIGHTS