

BEFORE THE DIVISION OF WATER RESOURCES

DEPARTMENT OF PUBLIC WORKS

STATE OF CALIFORNIA

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In the Matter of Application 10873 of Andrew O. Lyall to Appropriate Water from Pauma Creek, Tributary to San Luis Rey River in San Diego County for Irrigation Purposes, Application 11090 of Arroyo Corrido Rancho to Appropriate Water from Paubal Creek (Frey Creek) Tributary to San Luis Rey River in San Diego County for Domestic and Irrigation Purposes and Application 11093 of Irving Salomon to Appropriate Water from Van Meter Creek Tributary to Keys Canyon and San Luis Rey River in San Diego County for Irrigation Purposes.

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Decision A. 10873, 11090, 11093 D. 553

Decided July 28, 1947

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Appearances at Hearing Held at San Diego on May 1, 1946

For Applicants

Andrew O. Lyall

In propria persona

Arroyo Corrido Rancho

Stephens, Jones, and La Fever by Maurice Jones, Jr. and George E. Trowbridge

Irving Salomon

Joe W. Matherly

For Protestants

Fallbrook Public Utility District

No appearance

Carlsbad Mutual Water Company

Ray C. Eberhard

S. D. Fraser

A. L. Sonderegger

Katharine L. (Kate) Johnson

Ray C. Eberhard

S. D. Fraser

A. L. Sonderegger

Harry C. Arthur, Jr.

Phil D. Swing

Examiner

Gordon Zander, Principal Hydraulic Engineer, Division of Water Resources, Department of Public Works, State of California for Edward Hyatt, State Engineer.

O P I N I O N

GENERAL DESCRIPTION OF PROPOSED DEVELOPMENTS

Application 10873 of Andrew O. Lyall was filed with the Division of Water Resources on September 1, 1944. It proposes an appropriation from Pauma Creek, tributary to San Luis Rey River of 1.25 cubic feet per second of water to be diverted at a point within the NE $\frac{1}{4}$  of NE $\frac{1}{4}$  of Section 9, T. 10 S., R. 1 W., S.B.B.&M. from October 1 to August 1 of each season, for the irrigation of 126 acres within Sections 9, 15, and 16, T. 10 S., R. 1 W., S.B.B.&M. It was protested by Fallbrook Public Utility District and Carlsbad Mutual Water Company prior to the hearing and by Harry C. Arthur, Jr. at the hearing.

Application 11090 of Arroyo Corrido Rancho was filed with the Division of Water Resources on June 28, 1945. It proposes an appropriation from Paubal (or Frey) Creek, tributary to San Luis Rey River, of three cubic feet per second throughout the year by direct diversion and 145 acre feet to be diverted to offstream storage between December 1 and March 1 of each season at a rate not to exceed 3 cubic feet per second. The point of diversion for both direct use and storage is within the SW $\frac{1}{4}$  of NE $\frac{1}{4}$  of Section 32, T. 9 S., R. 1 W., S.B.B.&M. The water is to be used for domestic purposes and the

irrigation of 280 acres within Sections 31 and 32, T. 9 S., R. 1 W., and Sections 5 and 6, T. 10 S., R. 1 W., S.B.B.&M. It was protested by Fallbrook Public Utility District, Carlsbad Mutual Water Company, Katharine L. (Kate) Johnson and Harry C. Arthur, Jr.

Application 11093 of Irving Salomon was filed with the Division of Water Resources on June 29, 1945. It proposes an appropriation from Van Meter Creek, tributary to Keys Canyon and San Luis Rey River of 0.5 cubic foot per second by direct diversion from May 1 to October 31 of each season (not to exceed a total of 38.14 acre feet per annum) and 18.86 acre feet per annum to be diverted to storage in Lilac Ranch Reservoir on Van Meter Creek between January 1 and December 31 of each season. The point of diversion for both direct diversion and storage is within the SW $\frac{1}{4}$  of NE $\frac{1}{4}$  of Section 28, T. 10 S., R. 2 W., S.B.B.&M. The water is to be used for the irrigation of 40 acres within Sections 20 and 21, T. 10 S., R. 2 W., S.B.B.&M. It was protested by Fallbrook Public Utility District prior to the hearing and by Carlsbad Mutual Water Company and Harry C. Arthur, Jr. at the hearing.

#### PROTESTS

The Fallbrook Public Utility District, under its Application 8156, Permit 5227, may appropriate (with certain restrictions set forth in the Permit) an amount of water from the San Luis Rey River not to exceed 10 cubic feet per second from January 1 to December 31 of each season but not to exceed 2500 acre feet per annum. Diversion is made from wells located within the W $\frac{1}{2}$  of SW $\frac{1}{4}$  of Section 11, T. 10 S., R. 3 W., S.B.B.&M. and being within the Bonsall Basin of the San Luis Rey River below its junction with Keys Canyon. Its maximum annual diversion was 1995.55 acre feet for the calendar year 1946. Water is used for irrigation and domestic purposes on 4278 acres within the boundaries of the District. Protestant alleges in effect that if Applications 10873, 11090 and 11093 were approved it would result in materially

reducing the waters of the San Luis Rey River which feed and maintain the underground water basin from which it obtains its supply.

The Carlsbad Mutual Water Company under its Application 8205, Permit 5228 may appropriate (with certain restrictions set forth in the Permit) an amount of water from the San Luis Rey River not to exceed 5 cubic feet per second by direct diversion from January 1 to December 31 of each season and 1022 acre feet per annum by storage to be collected from about November 1 to about April 30 of each season, simultaneous diversions both by direct diversion and storage not to exceed 5 cubic feet per second and not to exceed 750 acre feet in any year beginning April 1 except during any time that such diversion reduces in like amount the water flowing into the ocean. Diversion is made from wells within the NE $\frac{1}{4}$  of SW $\frac{1}{4}$  of Section 18, T. 11 S., R. 4 W., S.B.B.&M. being within the lower Mission Basin of San Luis Rey River. Storage is made in a reservoir on Calavera Creek, the storage dam being within the SW $\frac{1}{4}$  of SE $\frac{1}{4}$  of Section 34, T. 11 S., R. 4 W., S.B.B.&M. Water is used for irrigation and domestic purposes on 10,596 acres within the boundaries of the Carlsbad Mutual Water Company District and on 316.44 acres in Lot H of Rancho Agua Hedionda in projected T. 12 S., R. 4 W., S.B.B.&M. Protestant also claims riparian rights and according to testimony presented at the hearing a "prescriptive right to 5 second feet" (Transcript p. 67).

Protestant alleges in effect that the approval of Applications 10873, 11090 and 11093 would result in depriving it of the water to which it is entitled and would prevent a sufficient amount of water reaching Mission Basin to restrain the intrusion of sea water into this Basin, thereby ruining its present water supply.

Katherine L. Johnson (also known as Kate Johnson) claims rights to the surface and subsurface waters of San Luis Rey River by virtue of riparian ownership and the use of 320 acre feet annually since 1900 on 56.69 acres of

land. Her point of diversion is located in Mission Basin within the NE $\frac{1}{4}$  of SE $\frac{1}{4}$  of Section 5, T. 11 S., R. 4 W., S.B.B.&M. She alleges in effect that if Application 11090 of Arroyo Corrido Rancho is approved it would result in depleting the surface and subsurface flow of the San Luis Rey River at her well and might also result in causing an intrusion of salt water into Mission Basin thereby destroying it as a source of supply.

Harry C. Arthur, Jr. on behalf of himself and his co-owners asserts riparian rights to the surface and underground waters of San Luis Rey River. He pumps from two wells in Mission Basin located at approximately the intersection of San Luis Rey River with the northerly line of Lot 1 of Rancho Guajome and claims that he is soon to increase the 80 acres which he now irrigates to 230 acres. He alleges in effect that the proposed appropriations, if approved, would result in substantially reducing the amount of water necessary for the irrigation of his lands and to which he is legally entitled.

#### HEARING HELD IN ACCORDANCE WITH THE WATER CODE

Applications 10873, 11090, and 11093 were completed in accordance with the Water Code and the Rules and Regulations of the Division of Water Resources and being protested, were set for public hearing in accordance with Chapter 5 of Part 2 of the Water Code on Wednesday, May 1, 1946, at 10:00 o'clock A.M. in Supervisor's Hearing Room, Court House, San Diego, California. Of this hearing, applicants and record protestants were duly notified.

#### GENERAL DISCUSSION

In 1935, the City of Oceanside, Carlsbad Mutual Water Company and the County of San Diego, realizing that the draft on the San Luis Rey River was approaching the maximum safe yield of that stream, requested the Division of Water Resources to sponsor an investigation of the River from which the City and the Water Company were obtaining their water supply.

The investigation was made and the results incorporated in Bulletin 48-A of the Division of Water Resources dated 1936. This Bulletin was introduced at the hearing as an exhibit by Carlsbad Mutual Water Company.

According to Bulletin 48-A San Luis Rey River drains a basin of some 565 square miles in area of which 206 square miles are above the Henshaw Dam at the lower end of Warner Valley. Only in the wettest years will any uncontrolled flows pass the Henshaw Dam and for all practical purposes it may be assumed that the only flow available to the lower users is that drained from the remaining 359 square miles of watershed.

The mean seasonal full natural runoff from the 312 square miles between Henshaw Dam and the gaging station near Bonsall for the 48 year period 1887 to 1935, inclusive, was 28,400 acre feet varying from a minimum of 4510 acre feet during the season 1920-21 to a maximum of 172,660 acre feet during the season 1915-16.

According to Bulletin 48-A, had the existing upstream diversions at the time of the report been in effect during the 48 year period designated above, the mean seasonal flow past the Bonsall dam site which is about two miles west of Bonsall and approximately on the dividing line between the Bonsall Basin and Bonsall Narrows would have been approximately 23,170 acre feet varying from a minimum of 1350 acre feet in the season 1898-99 to a maximum of 160,970 acre feet in the season 1915-16. That this variation is periodic as well as annual is shown by a comparison of the seven-year means for the period 1897-1904 when the mean flow was 4,300 acre feet and the period 1913-1920 when the mean flow was 44,540 acre feet which indicates that the wet phase of the cycle of rainfall produced over ten times the runoff produced by the dry phase of the cycle of rainfall.

The San Luis Rey River in its course from Rincon to the ocean passes through a series of basins which have been filled to varying depths with sand

gravel and clay and which provide underground storage from which the major part of the supply used along the stream is pumped. There are three major basins; the Pala Basin, extending from Rincon to Monserate Narrows; the Bonsall Basin, extending from Monserate Narrows to the upper end of Bonsall Narrows; and the Mission Basin, extending from the lower end of Bonsall Narrows to the ocean.

The ground water moves downslope through each of these basins, the unconsumed portion passing from one to the other as underflow or as rising water at Monserate and Bonsall Narrows. This flow at the latter point, together with percolation in the upper portion of Mission Basin at times when surface flow is continuous from Rincon to the ocean, constitutes the greater part of the supply to that basin.

Pauma Creek, from which applicant Lyall proposes to appropriate water is tributary to the Pala Basin of the San Luis Rey River. Only in times of flood do the surface waters reach the river, these waters usually sinking into the gravels between applicant's proposed point of diversion and the river. Water is usually available at applicant's intake, which is approximately  $1\frac{1}{2}$  miles from the river, intermittently between December and June but in particularly good years may be available from October into July. Applicant testified at the hearing that July is the last month that he has had water and that up until that time, water is running into the ocean. (Transcript p.8) Records of stream-flow measurements by the U.S.G.S. between 1931-32 and 1940-41, inclusive, show flow into the ocean up to July 8 in one year, through most of June in two years, nearly through May in five years, nearly through April in one, and no flow at all in one. At the time of the hearing (May 1, 1946) the average flow in the creek at the applicant's point of diversion was about 30 inches, which he claims if not used sinks into the stream-bed before reaching the river. Although the night flow is twice as much as the daytime flow,

it also does not reach the river. Mr. Lyall was of the opinion that most of the water is lost by evaporation.

Paubal (or Frey Creek) from which applicant, Arroyo Corrido Rancho, proposes to appropriate water is also tributary to San Luis Rey River within the Pala Basin. Its point of diversion is about  $1\frac{1}{2}$  miles from the river at a dike where the water is brought to the surface. Testimony presented at the hearing indicated that on or about May 1, 1946, the water disappeared in the gravels of the stream-bed during the daytime at a distance of about 500 feet below the proposed point of diversion, and at night the flow disappeared at a distance of about 1300 feet below the same point. Applicant claims that by diverting water through a steel pipe which it proposes to install, water would be conserved which would otherwise be lost by evaporation. The lands which applicant is proposing to irrigate are in part riparian to Paubal Creek and San Luis Rey River and it claims an adjudicated right to 30 miner's inches as a result of a court decision involving riparian rights.

Considerable discussion was had at the hearing as to whether one could apply for an appropriative right when he already had a water right which was adequate to meet the requirements of his land. In this connection, it may be said that another and additional right to use water may be initiated through the filing of an application by one who claims a riparian or other vested right, but a valid riparian or appropriative right will not in itself be strengthened or impaired by the filing of an application. (Barr v. Branstetter, 42 Cal. App. 725, 184 Pac. 409)

Van Meter Creek from which applicant Irving Salomon proposes to appropriate water is tributary to Keys Canyon which enters San Luis Rey River at a point overlying Bonsall Basin. His point of diversion is about 5 miles above the junction of Keys Creek with San Luis Rey River. Some 20 or 25 years ago a dam was constructed across Van Meter Creek at applicant's



proposed point of diversion and from about 15 to 40 acres have been irrigated apparently without any color of right. He was advised to file an application to appropriate the water by an engineer of this office. Applicant intends to replace an existing concrete pipe with a steel pipe and use the water partly on non-riparian lands.

Pauma Creek and Keys Canyon to which Van Meter Creek is tributary are two of the major tributaries of San Luis Rey River. Former State Engineer Ham. Hall in his "Irrigation in California (Southern) Sacramento, 1888" p. 46 describes Pauma Creek as "being one of the few never failing streams of the county."

Testimony was presented at the hearing to the effect that there is already an overdraft in Mission Basin during a dry phase of the rainfall cycle and any additional diversions above would increase the overdraft and subject Mission Basin to the danger of infiltration of salt water thereby destroying it as a source of water supply; also, that any diversions above of water which otherwise would flow into Bonsall Basin would affect Mission Basin inasmuch as 80 or 90% of the water entering Mission Basin comes from Bonsall Narrows. (Transcript p. 98)

Based upon conditions existing in 1936 when Bulletin 48-A was published, Mr. Sonderegger estimated that during the dry phase of the rainfall cycle, 1895 to 1904, the average annual recharge to Mission Basin might have been 7500 acre feet. This amount would not have met his estimated present draft on the Basin of 8000 acre feet. (Transcript, p. 99)

Since Bulletin 48-A was prepared, a permit has been issued to Fallbrook Public Utility District for the extraction of 2500 acre feet per annum from Bonsall Basin and according to Mr. Sonderegger a San Luis Rey River development is under way which may increase the use of water by another 2000 acre feet or more, which would indicate that of the 7500 acre feet

available from Mission Basin under 1936 conditions there might only be about 2500 acre feet available in the future; so in a drouth such as occurred during the period 1895 to 1904, Mission Basin might be depleted at the rate of about 5500 acre feet per year. (Transcript p. 100)

Realizing the danger of saline intrusion from the ocean into Mission Basin, special clauses were inserted in the permits issued in approval of Applications 8205 of Carlsbad Mutual Water Company and Application 8418 of City of Oceanside providing that the permittees cease operations under these filings if diversions at any time reduce the static water table at their wells to less than 10 feet above mean sea level unless the static water table shall be at least 10 feet above mean sea level at the lowest point along some cross section of the alluvial bottoms between permittees pumps and the ocean. This condition was barely satisfied in June 1947.

In the permit issued in approval of Application 8156 of Fallbrook Public Utility District to divert in Bonsall Basin, special clauses were inserted in recognition not only of the necessity of maintaining water levels in Mission Basin, but also of the effect of upstream diversions on the supply to that basin and of the fact that the supply is limited. One of these clauses requires that under certain conditions, the permittee must pump to Mission Basin an amount of water equal to that by which the natural supply has been decreased by its diversion. The application was for 5,000 acre feet per annum, but pending further order, diversion was limited to 2500 acre feet per annum.

Nothing has occurred since these permits were granted to indicate that the estimates of supply upon which the special clauses were based were too low or that the estimates of demand were too high. The conclusions that the supply to the ground water of Mission Basin is limited and that it should not be so decreased as to result in further permanent lowering of the water table

there still appears to be sound.

The protestants are not concerned with the proposed appropriations during periods in which the diversions will not result in such lowering, but maintain that Mission Basin must have all the contributions of the upper stream basins during the dry phase of a rainfall cycle such as occurred during the period 1895-1904. They are of the opinion, and testimony was introduced at the hearing to support it, that a considerable portion of the water which applicants are seeking to appropriate would, if not diverted from the stream, sink into the underground gravels and contribute to the water supply of the several basins.

Although some of the water is lost by evaporation and transpiration as it flows downstream, there is little evidence that the proposed diversions would significantly reduce this natural waste. Testimony presented at the hearing indicated that approximately 75 per cent of the water diverted would be consumed by the crops, so the loss to lower users would be greater if the water were diverted as proposed for irrigation use. (Transcript pp. 105,106).

The testimony presented at the hearing, and the several reports and studies which have been prepared in connection with investigations of the San Luis Rey River indicate that in some wet periods of years all basins fill to capacity after which the stream-flow wastes to the ocean.

Were it not necessary to severely restrict the development of storage capacity in Mission Basin because of the danger of intrusion from the ocean, diversions throughout the entire precipitation cycle might result in the salvage of a part of this waste equivalent in amount to the water diverted. Even with the storage capacity restricted, water might be diverted throughout the wet phase of a cycle without injury to Mission Basin, if the time of filling and the amount of the resulting waste could be foretold. However, this is at present impossible, and without a large amount of surface storage, increased

diversions made under the assumption that the basins will later fill might result in a lower water table at the end of the next dry period.

On the other hand, diversions of the magnitude proposed by the applicants, will have little effect on the supply to the ground water if restricted to times when water is actually wasting through to the ocean. At such times, amounts diverted and reduction in waste will not be significantly different.

Although the protestants have asked that the applications be dismissed, we are of the opinion that this would be contrary to the policy set forth in Section 100 of the State Water Code which provides in part as follows:

"It is hereby declared that because of the conditions prevailing in this State the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such water is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare."

In view of the above provision, we are of the opinion that the public interest and welfare will best be served by approving the applications subject to a special term or condition to the effect that diversions may be made only at such times as there are surface waters flowing into the ocean in San Luis Rey River. Such a condition will allow the applicants to appropriate water which would otherwise waste into the ocean and, at the same time, will afford the protestants protection to which they are entitled against the danger of a permanent injury to Mission Basin through salt water intrusion.

By safeguarding the interests of those who appropriate water from

San Luis Rey River in Mission Basin, the interests of those who divert water in the Bonsall Basin are also protected.

#### SUMMARY AND CONCLUSIONS

There are, at times, unappropriated waters in the several streams from which applicants propose to appropriate which may be taken and used without injury to the protestants, and in view of the provisions of Section 100 of the State Water Code, the Applications should be approved.

There is, however, danger of permanent injury to Mission Basin through salt water intrusion during a dry phase of a rainfall cycle. In order to protect the protestants and lower users against any lowering of the underground water level in Mission Basin below the danger point, a special condition should be incorporated in the terms of any permits which may be issued in approval of the applications to the effect that water may be diverted only at such times as there are surface waters flowing to the ocean in San Luis Rey River.


#### ORDER

Applications 10873, 11090 and 11093 having been filed with the Division of Water Resources as above stated, protests having been filed, a public hearing having been held and the State Engineer now being fully informed in the premises

IT IS HEREBY ORDERED that each of Applications 10873, 11090 and 11093 be approved and that permits be issued to the applicants subject to such of the usual terms and conditions as may be appropriate and subject to the following special term and condition to wit:

"Diversions under this permit may be made only at such times as there are surface waters flowing to the ocean in San Luis Rey River."

WITNESS my hand and the seal of the Department of Public Works of the State of California this 28<sup>th</sup> day of July 1947.

  
Edward Hyatt, State Engineer

