

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

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IN THE MATTER OF APPLICATION NUMBER 2925 OF THE TIA
JUANA RIVER IRRIGATION DISTRICT TO APPROPRIATE UNDER-
GROUND WATERS OF THE TIA JUANA RIVER BASIN, IN SAN
DIEGO COUNTY, FOR IRRIGATION AND DOMESTIC PURPOSES

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DECISION NO. 2925 D 84

Decided December 12, 1925

APPEARANCES AT HEARING HELD AT SAN DIEGO, December 14, 1925

For applicant:

Tia Juana River Irrig. District

Geo. A. Maywood

For protestants:

Coronado Water Company
Herbert Peery

R. G. Dilworth
In propria persona

Examiner: Donald M. Baker, Hydraulic Engineer, Division of
Water Rights for E. A. Alnegal, Chief of Division.

APPEARANCES AT HEARING HELD AT SAN DIEGO, August 18, 1925.

For applicant:

Tia Juana River Irrig. District

Geo. A. Maywood
Sloane & Sloane by
H. G. Sloane

For Protestants:

Coronado Water Company
Herbert Peery
S. Holderness
Floyd J. Sniff
Thomas Jensen
George Downe
R. T. Guinn
George Loustalet

R. G. Dilworth
Donald M. Baker
In propria persona
F. B. Andrews
F. B. Andrews
F. B. Andrews
F. B. Andrews
In propria persona
In propria persona

Examiner - Edward Hyatt, Jr., Chief of Division of Water Rights

OPINION

Application Number 2925 was filed on July 12, 1922. It was amended several times before the date of the first hearing but at that time proposed an appropriation of 4.12 cubic feet per second of direct diversion and 224 acre feet per annum of diversion to storage, throughout the entire year the maximum rate of diversion to storage not to exceed 4.12 cubic feet per second, the water to be used for irrigation and domestic purposes within the boundaries of the Tia Juana River Irrigation District, comprising 1254.7 acres. The application was protested by W. E. Stewart, Herbert Feery and the Coronado Water Company and a hearing was held at San Diego on December 14, 1923.

After this hearing had been held it was discovered that the District had inadvertently not advertised the pendency of the application as provided for in Regulation 10 of our Rules and Regulations. An amended application was filed on December 5, 1924, in which the area to be irrigated was increased from 1254.7 acres to 1500 acres, the amount of water to be diverted remaining unchanged.

Although the final boundary of the Tia Juana River Irrigation District as fixed by the Board of Supervisors embraced 1191 acres, the State Engineer's report gave the district the privilege of increasing its acreage to 1500 acres and the amended application was filed to cover the increase in acreage.

The amended application was then advertised and was protested by the Coronado Water Company, S. Holderness, Floyd J. Sniff, Thomas Jensen, Geo. Loustalet and George G. Downs and since additional protests were filed another hearing was necessary under the law.

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 in the Court Room of the Court House, San Diego, at 10:00 o'clock A.M. on August 18, 1923. Of this hearing applicant and protestants were duly notified.

The protest of W. B. Stewart was filed on December 10, 1923.

Mr. Stewart claims that if water is appropriated under this application in any considerable quantity the supply from his wells would be entirely exhausted as the proposed point of diversion was within one thousand feet of his pumping plant.

The protest of Herbert Paery was filed on December 17, 1923.

Mr. Paery contends that the applicant's pumps would lower the water plane underlying his land at times when the water is not running at the surface in the channel of the stream, thus depriving him of the benefit derived from sub-irrigation and increasing his pumping costs; that it would cause a reversal in the direction of flow of the percolating waters and bring in sea water; that the value of his property would be diminished and that his riparian and appropriative rights would be interfered with accordingly.

The protest of the Coronado Water Company was filed December 18, 1923.

The protestant company alleges in effect that the amounts of diversion applied for are greatly in excess of all requirements for the place of use named in the application; that the quantity of water named in the application to be applied to 1254.7 acres

is the equivalent of 2.5365 acre feet per annum per acre, whereas it appears from the opinion of experts contained in the records of Application Number 1851, that the reasonable requirements of lands such as are designated as the place of use in the application amount to 1.074 acre feet per acre per annum; that in accordance with the records of the Sweetwater Company the average use for domestic purposes and irrigation amounts to 0.97 acre feet per annum.

The protestant company also alleges that any permit issued to the applicant should be subject to the prior right of any permit which may be granted to the protestant in accordance with its Application Number 1851; that the company has Application Number 3304 before the Division for an amount of direct diversion, which in effect is the same water applied for under Application 1851 for the purpose of using such water for agricultural purposes as well as for domestic purposes and the farther right to divert part of the flood waters of the Rio Juana River at the rate of 11.0 cubic feet per second, between November 1st and May 1st of each season, and that the granting of Application 3925 for the amount of water named therein would not best conserve the public interest and that the application should either be denied or be so modified as to reduce the quantity of water named therein to the reasonable requirements for the purposes designated upon the places of use specified in the application.

As a result of the advertisement of the assented application, an additional protest was filed by the Coronado Water Company on March 13, 1925, wherein the protestant further alleges that the proposed diversion of the applicant would intercept the under flow which under normal conditions would reach its wells as well as those of others in the valley, and that the consequent lowering

of the water level would increase the compensation to be made by the Coronado Water Company to these other well owners and increase the amount of water necessary to be purchased in case the pumping lowered the water level in the wells to such an extent that diversion under the terms of the permit could not be possible and that unless applicant was willing to enter into an equitable agreement whereby the added burden caused by the applicant's diversion would be assumed by the applicant, a serious and financial injury and loss would result to protestant and such strife and litigation engendered.

Protestant objects to the increase in acreage to be served under the amended application, and asserts that water for such increase in acreage should be obtained under a new application as such an increase in acreage is in effect an increase of the amount of water originally applied for, which is contrary to law and alleges in effect that the applicant's intent at the time the application was originally filed, was to obtain an amount of water sufficient for a specific acreage and that its application reserved this amount, irrespective of the amount called for in the application, such amount, if excessive, being subject to reduction at time permit or license was issued based upon the acreage irrigated, to the exact amount necessary; that the allowance of this increase in acreage would serve to place such added acreage in a prior position to that to be served under protestant's application Number 3304.

The protestant asks that:

1. The amount of said application be reduced to an amount reasonably necessary to irrigate the acreage originally to be supplied with water under application Number 2925.

3. That if a permit be issued on said application, that it contain clauses (a) specifically making it subject to Application Number 1851, Permit Number 1724 of the Coronado Water Company and stating that no rights are granted under said permit which allow permittee to lower the water level in any well in the Valley through diversion under the permit; (b) that permittee be required to install test wells; measure the water level therein; make analyses of water, etc., in a manner similar to that set forth in Permit Number 1724 of the Coronado Water Company. If applicant is willing to accept such terms in his permit, and will enter into an agreement with protestant covering the matter of increased compensation to other well owners and costs of purchasing water due to applicant's diversion, protestant will waive said feature of its protest.

3. That the increase in acreage applied for be not allowed for reasons set forth above.

4. That if applicant be not willing to comply with the above provisions, the protestant be given a further opportunity to be heard and to submit testimony and arguments in support of its contentions.

The protests of B. Holderness, Floyd J. Sniff, Thomas Jensen and Geo. S. Downs were filed on April 8, 1925, April 8, 1925, April 10, 1925, and April 11, 1925, respectively.

Each of these applicants allege that the proposed diversion would lower the water level under his lands, thereby greatly increasing the pumping costs for irrigation purposes, and that it is very probable that if such ground water is lowered salt water will be brought in; that the increase in acreage asked for in the amended application was in effect to ask for a permit for more

water and was in fact an original application and was an unauthorized application by law as now made; that the applicant be required to install test wells, measure the water level therein, make analyses of water applied for and prepare such other data as will reasonably demonstrate the effect of the permit asked for if granted, before any further action is taken thereon.

Protestants S. Holderness and Thomas Jensen also claim that the proposed diversion would deprive them of surplus underground water which is being used for establishing hunting ponds which are leased and from which a considerable income is derived.

In addition to the formal protests filed, the Mexican Embassy declared to the Division of Water Rights by letter dated April 25, 1922, that Mexico reserves all rights which she has to the waters on the upper part of the Rio Juana River.

At the hearing held on the amended application on August 18, 1922, the applicant agreed to amend its application to a direct diversion of 4.12 cubic feet per second to be diverted throughout the entire year the total amount diverted during any one year not to exceed 1600 acre feet per annum, which amount is to include 224 acre feet per annum of regulatory storage. (See Pages 59 and 60 of transcript of hearing) The application has been amended accordingly. The area to be irrigated has also been amended to 1515.45 acres at the request of the District.

A review of all material available including both that submitted in the hearing held in San Diego on September 8, 1922 on application Number 1861 of the Coronado Water Company, the hearing held in San Diego on December 14, 1922 on application Number 2875 of the San Ysidro Irrigation District, on application Number 2925 of the Rio Juana River Irrigation District and on ap-

plication Number 3904 of the Coronado Water Company, and the hearing held in San Diego on August 18, 1925 on application Number 2925 of the Tia Juana River Irrigation District and information contained in Government reports, indicates that the watershed of the Tia Juana River embraces approximately 2075 square miles ranging in elevation from sea level up to about 5,000 feet and from the character of the watershed and records of water crop upon adjacent watersheds, it would yield in normal years more than ample water for the present and future demands upon it provided all the water could be conserved.

A large portion of the watershed lies within Mexico and the Mexican Embassy has formerly declared to the Division of Water Rights by a letter dated April 25, 1922, that Mexico reserves all rights to the waters on the upper part of the river. Little is known of the possibilities of irrigation development from that portion of the stream which lies in Mexico, but even by making due allowance for water devoted to such use, there would still remain out of the average flow of the river more than an ample amount to supply the present and future needs in the United States.

After leaving its canyon several miles south of the International Boundary in Mexico, the Tia Juana River, flows through the Tia Juana Valley which is a sunken valley cut in pre-historic times through the older alluvial formation and later filled with coarse sedimentary material.

During the winter months and after heavy rains the water flows on the surface into the Pacific Ocean. At other times there appears to be a small inflow into the head of the valley, and due to the slope of the same, a slow movement of underground water

down the valley towards the ocean, the water either passing out underground or rising to the surface to be lost by evaporation or running off through the lagoons in the lower areas.

It is a recognized fact among all who are interested in water supply problems that, particularly in Southern California, wide variations occur from year to year in the water crop of any stream and that such extremes, above and below the average, may occur for several years in succession.

The question of interest in the determination of the existence of unappropriated water is not so much the normal flow of the stream as the underflow supply available, and this will depend upon the annual flow of the stream, the duration of such flow through the valley, the draft during previous years, the possible storage capacity of the valley fill and other similar factors.

In normal years, the above factors are such that the diversion proposed by the applicant may possibly result in a small lowering of the water level in nearby wells, and in a period of dry years this lowering may and probably will affect wells at some distance from the applicant's pumps. The vast capacity of the gravels in the valley fill, compared with the annual draft by pumps of present users and that proposed by the applicant however and the certainty of replenishment by a recurrence of wet years following a dry period are assurance that the effect by the proposed diversion, as stated above, will be small ^{and} probably not permanent.

If the development of the water resources of the State was confined only to the amount of water available during seasons of drouth, practically no future development could be expected. The wealth and prosperity of the State depends upon the use of its waters and the stream flow should be utilized to such an extent as to reduce the waste to a minimum.

It would appear therefore that there is unappropriated water in the Rio Juana River which is available for appropriation. Any permit issued upon this application will be issued subject to prior vested rights and the owners of such rights are adequately protected under the law.

The probability of an influx of salt water from the Pacific Ocean at times when the water supply of the Rio Juana River becomes deficient, appears to be slight and can only be determined by future observation as little is known of the underground geological conditions at the mouth of the valley beyond the fact that in all probability there is some impervious barrier extending underground across its mouth. It is likely however before the slope of the water table would be reversed, due to pumping and lack of runoff so as to cause an influx of salt water, cessation of pumping would occur from other causes.

The Coronado Water Company claims that the area of the place of use named in the original application was 1804.7 acres and that since the area in the amended application has been increased, that amended application should have a priority as of the date of filing of the amended application which date is subsequent to the filing of application Number 2304 of the Coronado Water Company.

As a matter of fact the application originally filed on July 12, 1922, by the trustees of the district was for 10 cubic feet of direct diversion and 9.21 acre feet of storage to be used for irrigation and domestic purposes on 3,000 acres of land.

The application was amended on March 15, 1923, to 4.12 cubic feet per second of direct diversion and 224 acre feet per annum of diversion to storage to be used for domestic and irrigation purposes on 2,000 acres of land.

On June 28, 1923, the application was again amended by reducing the area to be irrigated to 1250 acres and again on July twelfth by increasing the area to 1254.7 acres, and by the addition of the statement that the 224 acre feet of diversion to storage was to be diverted at the maximum rate of 4.12 cubic feet per second.

In this latter form a hearing was held but since it appeared that the application had not been duly advertised it was necessary that the application be advertised and another hearing held.

Attention is directed to the fact that on March 17, 1923, the date of the filing of application Number 3304 by the Coronado Water Company application Number 2985 of the Tia Juana River Irrigation District proposed the irrigation of 2000 acres of land which is an area almost one-third greater than that which it is proposed to irrigate under the present amended application and therefore it would appear that between the District and the Company the District had the priority of filing on as much of the 2000 acres as could be brought within the District prior to issuance of permit.



The amount of water named in the last amended application has been limited to a total diversion of 1600 acre feet per annum. This amount is not considered to be excessive even if it were to be applied only to the 1254.7 acres, named in the earlier amended application, for according to Bulletin No. 6 of the Division of Engineering and Irrigation, Department of Public Works, State of California, entitled "Irrigation Requirements of California Lands", the acreage net duty of water for agricultural purposes in this locality is about 1.25 acre feet per acre per annum.

As it is almost impossible for an Irrigation District, in process of formation to determine with any degree of accuracy the acreage which will ultimately be irrigated, it is not an uncommon practice among Irrigation Districts to change the area which it is proposed to irrigate from time to time with the consent of the Division of Water Rights, provided that it can be shown that such a change will not operate to the injury of any legal user of the water applied for.

As the quantity of water has been limited to 1600 acre feet per annum which amount as shown above is not excessive for the 1254.7 acres named in the earlier amended application, this office is satisfied that the increase of the acreage named in the last amended application will not operate to the injury of any of the protestants.

Attention is also directed to the fact that the intent of the District to ultimately include more area within its boundaries was clearly manifested at the time the area named in the application was reduced from 2000 acre to 1230 acres at which time the District requested that the amount of water applied for in

the amended application remain unchanged as the District would probably require all of the water applied for as there was considerable land not included in the district that would eventually ask for admission.

In view of the situation as above outlined the Division of Water Rights believes it proper to consider application Number 2925 in its present amended form.

As to the restrictions which certain of the protestants wish to be placed upon the proposed diversion of the applicant it would appear reasonable that any permit which may be issued to the Tia Juana River Irrigation District should contain special clauses similar to those contained in Permit Number 1724 issued on Application Number 1951 filed by the Coronado Water Company.

O R D E R

Application Number 2925 having been regularly filed with the Division of Water Rights, protests having been filed, a public hearing having been held, and the Division of Water Rights being now fully informed in the matter,

IT IS HEREBY ORDERED that Application Number 2925 be approved and permit issued subject to such of the usual terms and conditions as may be appropriate and with the following special terms and conditions:

(1) Prior to the time diversion is commenced under this permit, permittee shall put down test wells in sufficient number and in such locations, and equip same in such manner as in the opinion of the Division of Water Rights will allow measurements of the fluctuations of the subterranean water plane, with reference to the United States Geological Survey datum, within the Tia Juana Valley

to be made with reasonable accuracy, and will allow the taking of samples of underground water for chemical analysis in order to determine whether or not such diversion by permittee is causing or may cause influx into the subterranean waters of the Rio Juana Valley of waters of such chemical content as to cause the waters naturally occurring therein to be unfit for use by the owners of rights thereto.

(8) If in the opinion of the Division of Water Rights it shall become necessary to install additional test wells from time to time in order to better determine the above, same shall be installed and equipped in the same manner as the aforesaid wells.

(9) The permittee herein shall cause measurements to be made of the elevation of the subterranean water plane in said test wells, and in such other wells as may, in the opinion of the Division of Water Rights, appear necessary in order to determine the effect of diversion by applicant, upon the elevation of the water table in other wells in the Rio Juana Valley, on or about the fifteenth day of March, June, September and December of each year, and permittee shall cause samples of water in said wells to be taken and chemical analysis made thereof on or about the fifteenth day of June and September of each year. Additional measurements shall be made and additional samples taken and analyzed at such times, as in the opinion of the Division of Water Rights, are necessary to determine the effect of diversion by applicant upon the elevation of said subterranean water plane and upon the chemical content of said subterranean water.

(4) Records of said measurements and analysis shall be permanently kept by permittee and copies of same furnished the Division of Water Rights upon request.

(5) Monthly measurements of the total water pumped shall be made by permittee and records kept on file which will be open to inspection at any time by the Division of Water Rights.

Dated at Sacramento, California, this 12th day of
December , 1925.

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

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