

Before the Division of Water Resources
Department of Public Works
State of California

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In the Matter of Application 10342 of San Bernardino County
Waterworks District No. 2 to appropriate from Mojave
River in San Bernardino County for Domestic and
Incidental Allied Uses and for Industrial Purposes

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Decision A. 10342 D. 501

Decided April 2, 1943

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APPEARANCES AT INVESTIGATION CONDUCTED AT THE SITE OF THE PROPOSED
APPROPRIATION ON JULY 15, 1942.

For Applicant

San Bernardino County Waterworks District No. 2

Donald Gillespie, Deputy District
Attorney
Royal Ward, Flood Control Engineer
C. D. Wheeler

For Protestant

Adelanto Mutual Water Company

John B. Surr, Attorney
Earl Paul, President
T. A. Lee, Secretary

Interested Party

W. P. Rowe

In propria persona

For Division of Water Resources

Biscoe Kibbey, Associate Hydraulic Engineer, for Harold Conkling,
Deputy State Engineer in Charge of Water Rights, Division of Water
Resources, Department of Public Works, State of California.

APPEARANCES AT HEARING HELD AT SACRAMENTO ON MARCH 23, 1943 IN CONNECTION
WITH APPLICATION 10342 AND PETITION TO CHANGE THE POINT OF DIVERSION

For Applicant

San Bernardino County Waterworks District No. 2

No appearance

For Protestant

Adelanto Mutual Water Company

No appearance

Examiner

Harold Conkling, Deputy State Engineer in Charge of Water Rights,
Division of Water Resources, Department of Public Works, State of
California

O P I N I O N

General Description of Project

As originally filed, Application 10342 proposed an appropriation of 4 cubic feet per second from either the surface or subsurface flow of the Mojave River to be diverted throughout the year at several points, the locus of which is an old well belonging to the Adelanto Mutual Water Company within the NW $\frac{1}{4}$ of SE $\frac{1}{4}$ of Section 30, T 6 N, R 4 W, S.B.B.& M. Subsequently, after the field investigation it was found that applicant District did not have the necessary right of access and a petition was filed on October 2, 1942 to change the point of diversion to a point within the SW $\frac{1}{4}$ of SE $\frac{1}{4}$ of Section 30, T 6 N, R 4 W, S.B.B.& M.

At the proposed point of diversion it is intended to sink a well and to install a booster pump by means of which the water will be delivered to the San Bernardino County Waterworks District No. 2 and to the Victorville Military Airport within Sections 20, 21, 22, 23, 26, 27, 28 and 29, T 6 N, R 5 W, S.B.B.& M. where it will be used for household purposes and for use in manufacturing airplane engines and for general use at the Airport shops. The applicant District is under contract to serve the Airport.

Protest

Application 10342 in its original form and also the petition to change the point of diversion were protested by the Adelanto Mutual Water Company, a Corporation.

Protestant Company claims a right to the use of the waters which applicant District is seeking to appropriate, which right is based upon "prescription, judicial decree and prior appropriation". It alleges in effect that water was first used in approximately the year 1925 from its present well which is the locus of applicant District's proposed wells and that the water has been pumped as required throughout the year for irrigation and domestic purposes to the extent of about 100 miners inches (measured under a 4" pressure); that the proposed diversion would lower the water level of protestant's well below the existing intakes and would deprive the Company of water to which it is entitled; furthermore that applicant District's wells would not draw upon the surface or subsurface flow of the Mojave River but would take percolating waters which may support or sustain the flow of the stream and over which waters the Division of Water Resources has no jurisdiction.

Subsequent to the filing of the petition to change the point of diversion, a protest was filed by the Adelanto Mutual Water Company against the proposed change alleging in effect that if an underground stream did exist at or near the applicant's original proposed point of diversion or the proposed new point of diversion (which existence would be necessary to the jurisdiction of the Division of Water Resources, but which existence protestant does not concede), the proposed new point of diversion would be upstream from the existing well of the protestant, whereas the original proposed point of diversion would have been downstream from said well, and the flow of water to the well will be diminished and rendered inadequate should the proposed change be granted and the application approved.

Investigation

Stipulations under Regulation 12B of the "Rules and Regulations of the Division of Water Resources with Respect to Protests and Hearings" having been signed by both applicant and protestant and having been approved by the Division, an investigation was conducted at the site of the proposed appropriation on July 15, 1942 by an engineer of this office. Notices of the proposed investigation were sent to the parties at interest and representatives of both applicant and protestant were present.

Hearing Held in Accordance With Section 1A and Section 16 of the Water Commission Act

Application 10342 was completed in accordance with the Water Commission Act and the requirements of the Rules and Regulations of the Division of Water Resources. Also a petition was presented in regular form to change the point of diversion originally described in said application and duly advertised. Both the application and petition having been protested the matter was set for public hearing on Tuesday March 23, 1943 at 10:00 o'clock A.M. in Room 401 Public Works Building, Sacramento, California. Of this hearing applicant and protestant were duly notified and advised that unless they had further data and evidence to submit beyond that which was already in the records of this office, no appearances at the hearing would be necessary. Apparently neither the applicant nor the protestant had anything further to submit as no appearances were entered at the hearing.

Records Relied Upon in Arriving at a Decision

(1) Report on the Utilization of the Mojave River for Irrigation in Victor Valley, California, by the Mojave River Commission, published in 1918 as Bulletin 5 of the Department of Engineering of the State of California and reprinted in the Sixth Biennial Report of the Department of Engineering published the same year.

(2) United States Geological Survey Water Supply Paper 578 entitled "The Mojave Desert Region, California", by David G. Thompson, Washington, D.C. 1929.

(3) Bulletin 47 of the Division of Water Resources, Department of Public Works, State of California, entitled "Mojave River Investigations 1934".

(4) "Utilization of the Waters of Mojave River" by Henry F. Blaney and Paul E. Ewing, a contribution from Bureau of Agricultural Engineering, Division of Irrigation, Department of Agriculture, 1935.

(5) Application 10342 - complete file.

History

It appears from the record that about the year 1925 the Adelanto Mutual Water Company began service of water to the community in and around Adelanto, the water being obtained from a well located about 8 feet westerly from the left bank of the Mojave River and some 275 feet westerly from the thread of the main channel. This well is approximately 4 miles below the Upper Narrows at Victorville and about $1\frac{1}{2}$ miles below the Lower Narrows.

Apparently no steps were taken by the Water Company to initiate an appropriative right and a suit was brought by a certain property owner below for the purpose of determining the Water Company's rights. The suit was ultimately settled by stipulation and the right of the Company to divert 100 miners inches (measured under a 4" pressure) was recognized by the parties at interest although the basis of the right is not known.

Subsequently the agricultural activities in the vicinity of Adelanto decreased and service was taken over by applicant San Bernardino County Waterworks District No. 2 which entered into a contract with the protestant Water Company to utilize its pumping plant and to divert 50 miners inches of the 100 miners inches claimed by the protestant company.

Recently the Victorville Military Airport was established easterly of Adelanto with an estimated personnel of 6500 with a possible increase to 10,000 and the government authorities entered into a contract with the protestant company for the use of water, sunk a well some 75 feet upstream from the original Adelanto well, installed a pumping plant and is now pumping water some three miles to the Airport. Up on the mesa the new installation is connected to the old Adelanto pipe line. Although the engineer who conducted the investigation was not permitted to enter the Airport and therefore could not determine with any degree of accuracy the use of water, according to the best information available the Army pumps about 50 A.F. per month (an average rate of 0.84 c.f.s. for a 30 day month) and the applicant District, under its contract with the protestant Company is pumping at the rate of 0.50 c.f.s., the bulk of which water is also used at the Airport. The Army has also entered into a contract with the applicant District to supply to the Airport such water as it may require over and above that purchased from protestant Company and that supplied by the applicant District under its contract with protestant Company.

Apparently Application 10342 was filed as a result of friction between the applicant District and protestant Company over the contract entered into between these parties and their service of water to the Airport, a question on the part of the applicant District as to the validity of the water rights of protestant Company and its rights under its present corporate structure to sell water to the U.S. Government; and also to be able to supply water to the Airport should its demands exceed the 50 miners inches which it is now supplying to the Airport.

Physical Aspects

As stated above, the old well of the protestant Company from which applicant District is now obtaining its supply is located about 8 feet from

the westerly bank of the Mojave River and some 275 feet westerly from the thread of the channel. The intervening space is a sandy wash which is flooded periodically and at times the waters of the Mojave River have risen a foot or more over the well curbing. At the time of the investigation the flow in the river was approximately 20 c.f.s. and under normal conditions there is surface flow in the stream channel throughout the year.

At this old well a 3 stage Layne Boulder Turbine Pump has been installed which is direct connected to a 15 H.P. General Electric Motor which operates at a speed of 1750 revolutions per minute. The pumping lift is about 34 feet and the rated capacity of the plant is 2 cubic feet per second. The pumped water is discharged into a concrete stand, flows about 1/2 mile westerly through a 14" concrete pipe to another stand and from there it is boosted up onto the mesa to Adelanto, a distance of some 4 miles.

The bed of the Mojave River lies about 15 feet below the level of the pump and the suction pipe extends some 20 feet below the river bed. At this point the bank of the river consists of a pervious, silty loam covered with deposits of silt and admits of percolation from the surface flow to the area from which applicant Company now pumps and from which it is seeking to pump under Application 10342.

It is protestant Company's contention that its well is not supplied from the surface or subsurface flow of the Mojave River but from seepage along the hillside to the southwest where there are numerous small outcroppings of water or springs which are used to supply domestic requirements along the highway. Also, immediately opposite the pump and some 800 feet distant there is a considerable flow (said to be about 60 miners inches) which is caught in a reservoir and used for the irrigation of 60 acres of alfalfa.

Quoting from the Report on the Utilization of Mojave River for

Irrigation in Victor Valley, California, by Mojave River Commission.

"Numerous springs occur along the west bank of the river from a point 2 miles above, to a point 4.5 miles below, the Upper Narrows. None are found on the east bank. The water seeps from the sandy strata confined between alternating clay strata. The strongest flowing are situated at the Turner Ranch below the narrows and about midway between Victorville and Oro Grande. Some of the springs have been developed by tunneling into the sandy layers from which water outcrops and the flow is used for domestic purposes and for the irrigation of gardens. Those at the Turner Ranch fill a small reservoir from which the water is taken to irrigate a field of considerable size. The several groups of springs vary in elevation but 40 feet throughout the 6.5 miles along the river bank and their positions coincide with the water plane of the mesa as shown by the wells. Those upstream and most of those downstream from the Upper Narrows are above the level of the river at that point and those at the Turner Ranch, 3.5 miles below Victorville, are but little lower than those near the town while the river falls 67 feet in the same distance. The water in the test well just northwest of the narrows stands 8 feet above the water in the river at the narrows. This seems to show that the seepage water is not from the river immediately above the narrows, but, if from the river, rather from some point further upstream, or from the West Fork, by an indirect route through the mesa. Other observations indicate that the river underflow does not detour around the west side of the rock at the Upper Narrows".

Subsequent to the investigation, action upon Application 10342 was deferred in order to afford protestant Company an opportunity to submit water analyses in support of its contention that the water which applicant District is seeking to appropriate is not Mojave River water but had its source elsewhere. Although action was deferred at the request of the protestant Company no analyses were submitted. On the other hand analyses of the water were submitted by applicant District which indicate that the water which supplies protestant Company's wells and which will supply the applicant District's well is derived from the waters of the Deep Creek Branch of the Mojave River.

The report of our engineer indicates that the pumping of water from the new well which is only 120 feet distant from the old well had little if any effect upon the water level in the old well. It was also found that

regardless of the operation of the pump at the old well, there was no material increase in the pumping lift.

General Discussion

The applicant District's proposed well is to be sunk at a point approximately 470 feet southeasterly of protestant Company's original well and approximately 350 feet southeasterly of the new well from which the Army is now pumping. Both the existing wells and the site of the proposed new well are situated at approximately the same distance from the left bank of the Mojave River and from the thread of its main channel and there is no doubt in our mind that they will receive water from the same source or sources, whatever these sources may be.

At the time of the investigation it appeared that the bulk of the seepage from the south and west was entirely consumed before reaching protestant Company's wells and that the water in the wells was largely water which percolated through the gravels from the channel of the Mojave River, but it is entirely conceivable that there may be times when the seepage from the south and west contributes to the supply. It is reasonable to assume however that when the table of the pumping area is materially lowered the limited seepage from the springs would be replaced at a greater rate by the seepage from the river.

We are particularly impressed by the fact that pumping from protestant Company's new well which is in close proximity to its old well has little if any effect upon the pumping at the old well, although the rate of pumping at the new well exceeds that at the old well, and believe that a reasonable amount of water may be pumped by the applicant District without materially diminishing the supply of the protestant Company. While it is

possible that the protestant Company's pumping lift may be somewhat increased by the operations of the applicant District, it has been the well established policy of the Division that protestants had no right to insist upon maintenance of water level for the sole purpose of facilitating pumping but must yield to the public policy and welfare declared in Section 1 of the Water Commission Act.

Although a portion of the water which applicant District is seeking to appropriate may be percolating water from the south and west, it is probable that this percolating water reaches a definite underground channel which is to be tapped by applicant District. The fact that the well is to be sunk through pervious material so close to the overflow channel of the Mojave River and to a depth below the bottom of the main channel which carries a perennial flow leads us to believe that such is the case and in the absence of a conclusive showing that the water which applicant District is seeking to appropriate is merely percolating water and not water flowing in a known and definite channel, we are of the opinion that jurisdiction should be assumed by this office.

Information has been requested from the applicant Company relative to the personnel to be served at Victorville Airport and also a detailed statement of other uses proposed upon which to estimate the amount of water necessary for appropriation under Application 10342 but no reply has been received.

As stated above the Airport has been reputed to house some 6,500 persons with an anticipated growth to 10,000 and it is highly improbable that the 4 cubic feet per second could be consumed beneficially for the purposes set forth in the application.

One cubic foot per second is the equivalent of 646,317 U.S. gallons

per day and on the basis of 100 gallons per day per capita would be sufficient to take care of approximately 6500 people. The present use is apparently 1.34 cubic feet per second which is the combined diversion from protestant Company's wells and even should the pumping from the existing wells be abandoned and the entire supply obtained from applicant District's proposed well it is our opinion that 2.5 cubic feet per second is ample. In the absence of more definite information, therefore, it may be assumed that the use of water by the applicant District from the proposed point of diversion will not exceed 2.5 cubic feet per second.

Summary and Conclusions

After a careful consideration of the data on file with this office we are convinced that there is unappropriated water available for appropriation and use by applicant District at the point designated in its petition ^{that} to change and/~~the~~ diversion of an amount of water not to exceed 2.5 cubic feet per second which amount should be ample to supply the applicant District's needs, will not materially affect the pumping operations at the protestant Company's wells.

We are also of the opinion that the water which applicant District is seeking to appropriate from underground source is moving in a definite channel and that jurisdiction in the matter should be assumed by this office.

It is therefore in order to amend Application 10342 to conform to the petition to change the point of diversion and to approve the application, subject to vested rights, for an amount of water not to exceed 2.5 cubic feet per second.

ORDER

Application 10342 for a permit to appropriate water having been filed with the Division of Water Resources as above stated, and a petition

to change the point of diversion under said Application 10342 also having been filed, protests against both the approval of Application 10342 and the petition to change having been filed, a field investigation by the Division having been made, a stipulated hearing having been held in connection with Application 10342 in accordance with Regulation 12B of the Rules and Regulations of the Division of Water Resources with Respect to Protests and Hearings and a public hearing having been held in connection with the said application and petition to change and the Division of Water Resources now being fully informed in the premises:

IT IS HEREBY ORDERED that Application 10342 be amended to conform to the petition to change the point of diversion, and

IT IS FURTHER ORDERED that Application 10342 be approved for an amount of water not to exceed 2.50 cubic feet per second and that a permit be granted to the applicant subject to such of the usual terms and conditions as may be appropriate, and

IT IS FURTHER ORDERED that the balance of the proposed appropriation applied for be denied.

WITNESS my hand and the seal of the Department of Public Works of the State of California this 2nd day of April 1943.

EDWARD HYATT, State Engineer

By Harold Oenshling
Deputy State Engineer

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