

D 854

15287

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 15287 by Madera Irrigation District to Appropriate Water from Fresno River Tributary to San Joaquin River in Madera County for Irrigation Purposes.

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Decision A 15287 D 854

Decided April 26, 1956

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Appearances at Hearing Held at Madera on December 6, 1955:

For the Applicant

Madera Irrigation District David S. Peckinpah

For the Protestant

John Gallaberry Floyd H. Hyde

EXAMINER - WILLIAM R. GIANELLI, Supervising Hydraulic Engineer, Division of Water Resources, Department of Public Works, for HARVEY O. BANKS, Acting State Engineer.

Also present - Kenneth L. Woodward, Senior Hydraulic Engineer, Division of Water Resources, Department of Public Works.

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DECISION

Substance of the Application

The application initiates an appropriation of 200 cubic feet per second, year-round, from Fresno River, tributary to San Joaquin River, for irrigation purposes. Diversion is to be effected by means of a concrete dam, 8 feet high by 250 feet

long, located within the SW¹ SE¹ of Section 8, T11S R18E, MDB&M, in Madera County. The land to be irrigated, according to the application, is 45,500 acres in extent and lies within the boundaries of Madera Irrigation District, said boundaries including a gross area of 112,400 acres located within Townships 10, 11, 12 and 13 South, Ranges 16, 17, 18 and 19 East, MDB&M. As to other water rights or sources of supply for the land to be irrigated the applicant asserts an existing right to divert 200 cubic feet per second from Fresno River and mentions a proportion of "CVP" water to be purchased and a natural ground-water supply of 15,000 acre-feet per year. The applicant asserts ownership of the land at the proposed point of diversion, states that the land to be irrigated is owned by individuals within the District. The land to be irrigated is said to include 4,500 acres of alfalfa, 13,500 acres of vines, 25,000 acres of general crops including cotton, 2,500 acres of pasture. Irrigation is to extend throughout the year.

Protest

The application is protested by one John Sallaberry who states as the basis of his objection that the appropriation sought by the applicant "will interfere and jeopardize my practiced normal operation of my project". Mr. Sallaberry claims a right to the use of water from the source named by the applicant, under "established use over 10 years, prior

application and riparian use". As to his present and past use he states:

"December 1st, 1940 used the full flow of the river when available to irrigate approximately 4,500 acres of pasture. It is my established practice to irrigate my ranch twice a year; once in Dec. or Jan., and again in March and/or Apr., the river permitting. I use the full flow for 5 days and nights each time."

Mr. Sallaberry describes his point of diversion as being located within the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 16, T11S R16E, MDB&M, and states finally:

"This protest may be disregarded and dismissed if Tadera Irrigation District will stipulate they will not interfere with my normal operations."

Answer

In answer to the protest the applicant denies that the appropriation which it seeks will result in injury to the protestant or will interfere with or jeopardize the continuance of any use of water which the protestant has heretofore made. It denies that the protestant has at any time since December 1, 1940 had facilities for diversion of the entire flow of Fresno River during the periods mentioned in the protest. It alleges in effect that in most years the flow of Fresno River during those periods is enough both to enable the protestant to divert as he has in the past and to enable the applicant to divert as proposed in its application. It

suggests that its application might be approved without possibility of injury to the protestant if the approval is so conditioned as to prohibit diversions thereunder during two certain five-day periods each year, those periods to be agreed upon by negotiation between the parties.

Hearing Held in Accordance with the Water Code

Application 15287 was completed in accordance with the Water Code and the Rules and Regulations of the Division of Water Resources and being protested was set for public hearing under the provisions of the California Administrative Code, Title 23, Waters, on Tuesday, December 6, 1955, at 10:00 o'clock a.m. in the Court Room, Madera County Courthouse, Madera, California. Of the hearing the applicant and the protestant were duly notified.

Hearing Testimony

Relevant testimony by witnesses at the hearing of December 6, 1955, was in substance as follows:

Franklin Secara, Water Superintendent, Madera Irrigation District, testified (pages 13 to 18 and 63 to 70 of transcript) to the effect that the appropriation sought under Application 15287 would enable the District to serve lands that are not presently served; that he (the witness) made a study of seepage losses, the study being based upon a comparison of flows passing

the United States Geological Survey gaging station near Daulton with flows passing another gaging station on Fresno River located eight miles west of Madera; and that he concluded from his study that Fresno River loses approximately 10 cubic feet per second between the Daulton station and Fresno River weir and 60 cubic feet per second between the Fresno River weir and the Sallaberry ranch. Witness Secara testified further to the effect that Madera Irrigation District diverts at no point on Fresno River except at its diversion dam above Madera, that during the December-April period the District does not purchase any water, that diversions by the District during that period are generally for percolation purposes although to some extent for irrigation also, that of the approximately 112,400 acres in the District it is expected to irrigate 105,000 acres, that the District generally buys water from the Bureau of Reclamation from early March, when the Fresno River supply begins to fail, until mid-September, that the District needs all of the winter flow of Fresno River that it can get in order to replenish the underground supply, that during the last 31 years ground water levels within the District have receded an average of about 1 foot per year and are still receding, that if excess winter flow of Fresno River is used for percolation purposes within Madera Irrigation District the same water cannot benefit lands farther down-river.

Harry Barnes, Civil Engineer, testified (pages 19 to 45 and 70 to 73 of transcript) to the effect that he worked for and with

Madera Irrigation District from 1930 to 1950 and, since 1950, has remained in Madera in private practice, that he has been called as an expert witness on water on numerous occasions, that his studies of the District's water supplies were continuous over a long period, that those studies had to do with both surface and underground supplies and included measurements of surface flows and ground-water levels. He testified also to the effect that the capacity of the District's canal is 200 cubic feet per second, that the District's expected requirements are 400 cubic feet per second, that Application 15287 was filed in order to obtain such additional flow as may be available from Fresno River instead of purchasing more water from the Bureau of Reclamation. He testified further to the effect that the flow of Fresno River is very erratic, that it occurs in winter and spring only, that sometimes it amounts to several hundred cubic feet per second for weeks at a time, that a study of flow records was made and that the study indicated the existence of unappropriated water. He testified that in his opinion the taking of that unappropriated water by Madera Irrigation District would not injure anyone downstream and would tend to relieve floods. As to the possibility of adverse effect upon Protestant Sallaberry he testified:

"There's a lot more water (at times in Fresno River) than he (Sallaberry) can use or need or require, there's a lot left over for the Madera Irrigation District."

Witness Barnes testified further to the effect that diversion facilities and quantities of water diverted by the District or its forerunner in 1914 were much the same as at present, that the expansion now contemplated of the District's facilities will entail, mainly, an enlargement of the District's intake and main canal, that there are no substantial accretions to Fresno River between the Daulton gage and the Sallaberry property, that the Bureau of Reclamation's Madera Canal crosses Fresno River about 12 miles above Madera, that Madera Irrigation District purchases water from the Bureau of Reclamation for discharge down the Fresno River, that the District does not provide for its customers from wells, that pumping plants within the District are all privately owned, that the amount of water obtainable from the Bureau of Reclamation is less than the District requires and must be supplemented by increased use from Fresno River, that winter flow of Fresno River should be spread upon District lands for percolation into underground storage, that the necessity for increased use of local supply is what prompted the filing of Application 15287.

John Sallaberry, protestant, testified (pages 46 to 50 of transcript) to the effect that his ranch is 5,546 acres in extent, that he usually irrigates about 4,500 acres, that he diverts by means of three weirs on Fresno River, that he has diverted since 1940, that he diverts in winter and up to about

May 1, depending upon when storms occur, that in order to irrigate he needs a big flood, that a flow so small as 45 cubic feet per second would not do him much good, that his practice in irrigating is to just open the gates and let the water flood the land, that so long as he is allowed to operate in that manner he has no objection to the appropriation sought by the applicant, that when he irrigates he needs 700 cubic feet per second or more, that one complete irrigation, when flow is ample, takes about five days and nights, that his land ought to have two such irrigations each year.

Arnold D. Sallaberry, the protestant's son, testified (pages 57 to 63 of transcript) to the effect that he is familiar with his father's ranching operations, that he "engineered a good lot of his (father's) project and also constructed it", that he (the son) served four years as a director of Madera Irrigation District, that in his opinion, based on long study and observation, his father needs a flow of at least 200 cubic feet per second to irrigate the maximum amount of land he can spread his water over, that one irrigation of the 4,000 to 4,500 acres of irrigable land takes from 8 to 10 days with a flow of 200 cubic feet per second, that with a flow in that amount from 2,000 to 2,500 acres may be covered in 5 days and 5 nights, that if water is available there should be two irrigations each year -- one in December and the other in March or April, that 2 irrigations

even one month apart are better than a single irrigation, that his father when irrigating uses the entire flow of Fresno River up to 700 or 800 cubic feet per second but that when the flow is greater than that the excess passes downstream.

Hearing Exhibits

Exhibits were introduced during the hearing as follows:

By Division of Water Resources (by reference)

No. 1 - Report of Division of Water Resources on Application 15287.

No. 2 - Division of Water Resources records of the applications mentioned in its Exhibit No. 1.

No. 3 - California State Water Resources Board Bulletin No. 1 - "Water Resources of California", 1951.

No. 4 - California State Department of Public Works, Bulletin No. 5 - "Flow in California Streams", 1923.

No. 5 - California State Department of Public Works, Division of Water Resources, Bulletin No. 29 - "San Joaquin River Basin", 1931.

No. 6 - Relevant Water Supply Papers, United States Geological Survey.

No. 7 - Relevant Topographic Quadrangles, United States Geological Survey.

By Madera Irrigation District

No. 1 - Letter dated February 2, 1955 from Mr. Harry Barnes to Madera Irrigation District.

Division Exhibits No. 1 and No. 2 establish that diversions from Fresno River have been authorized by the

Division of Water Resources as follows:

Under Application 11003 Permit 7582 William F. Cook et al. may divert 35 cubic feet per second from February 1 to December 1 at points within Section 15, T11S R14E and Section 36, T10S R13E, for irrigation and stockwatering.

Under Application 11048 Permit 7584 Red Top Ranch, Inc. may divert 35 cubic feet per second from February 1 to December 1 at a point within Section 18, T11S R15E, for irrigation.

Under Application 13541 Permit 9076 John Sallaberry may divert 45 cubic feet per second from October 1 to July 1 at a point within Section 16, T11S R16E, for irrigation and stockwatering. Permits 7582, 7584 and 9076 each contain among other provisions the following:

"The equivalent of such continuous flow allowance for any thirty-day period may be diverted in a shorter time if there be no interference with vested rights."

The rights under which the holders of Permits 7582 and 7584 may each divert up to 1050 second foot days in any thirty day period between February 1 and December 1 and the right under which the holder of Permit 9076 may divert up to 1350 second foot days in any thirty day period between October 1 and July 1 are therefore prior to any right that may be perfected under Application 15287.

Division Hearing Exhibit No. 1 contains passages relative to water supply and water utilization, as follows:

"Fresno River ... drains a secondary watershed of the lower western slope of the Sierra Nevada ... between the Merced watershed ... and the San Joaquin watershed (It) rises at an elevation of about 7,000 feet, 40 miles westerly from the crest of the Sierra Nevada and flows ... south-westerly ... to the valley floor, thence westerly to its junction with San Joaquin River. The upper portion of the watershed consists of several branches which converge into a single channel at Windy Gap. From this point the stream remains in a well defined channel for several miles with no tributaries of importance until its junction with Coarse Gold Creek. On the lower reaches the stream bed ... broadens into a wide sandy channel. The stream rises at ... an elevation too low (for it) to be snow-fed in the summer months, and the natural runoff varies from little or no flow in late summer to flashy floods during the rainy season."

"Madera Irrigation District claims an old appropriative right to 200 cfs and has diverted at its head dam in Section 8, T11S R18E, M&M, northeast of the City of Madera, for many years."

"... Protestant Callaberry's project was the subject of an inspection by this office on May 12, 1954 According to the report of inspection, diversion by Mr. Callaberry is into an earth canal with effective width of about 70 feet, a depth of over 6 feet There is no permanent turnout structure at the intake and during periods of low flow an earth dam is dozed across the river to turn water into the canal. About 31 miles of channel levees and 14 miles of cross dykes for ponding on the irrigated area have also been constructed. The water is controlled by 10 reinforced concrete weirs and 22 flood gates. All the weirs and flood gates are equipped with flashboards."

"It is understood that the method of operation is to install the flashboards in the weir in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 18, T11S R16E, M&M, and back the water through an overflow in SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 18 and through a flood gate As the basins are filled, the flood gates at the lower ends of the basins are opened progressively downstream keeping the basins filled to an average depth of 1 $\frac{1}{2}$ to 1 $\frac{3}{4}$ feet Water is normally diverted

for five-day periods in November or December and again in February or March when flood water is available to cover the 3,558 acres to a depth of 1½ feet."

"... a conference was held on January 7, 1955 It suggested ... an adjustment may be reached To this end the District prepared a tabulation ... showing the benefits that each party would have received had such an agreement been in effect."

"Mr. Harry Barnes ... addressed a letter dated February 2, 1955 to the District Board of Directors wherein an analysis of the problems was made."

"... daily streamflow records of Fresno River near Daulton are available For the tabulation prepared under the direction of Mr. Barnes it was assumed that a channel loss of 10 cubic feet per second occurred between the gage and the District's dam and a loss of 60 cubic feet per second occurred between the dam and Sallaberry. It is understood that these estimates of channel losses are the results of several years of observations by the District."

Division Hearing Exhibit No. 1 also contains a tabulation setting forth the number of days in each year of record when flows passing "Fresno River near Daulton" exceeded the aggregate of probable existing rights plus probable channel losses; setting forth also the number of days in each year of record when said flows exceeded said aggregates by 100, 200 and 500 cubic feet per second. The tabulation is based on assumptions that channel losses amount to 10 cubic feet per second between "Fresno River near Daulton" and the Madera Irrigation District dam, 60 cubic feet per second between that dam and the Sallaberry intake and 10 cubic feet per second between Sallaberry and Cook.

Division Hearing exhibit No. 6 contains among other things a record of flows passing the gaging station "Fresno River near Daulton", that station being located within the NW $\frac{1}{4}$ of Section 3, T10S R19E, MDB&M, and scaling approximately 11.3 miles upstream from the applicant's intake. According to that record, flows passing the station mentioned have averaged, by months, as follows:

Mean Discharges of Fresno River Near Hamilton in Cubic Feet per Second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Average
1941-42	12.9	17.0	203.	258.	316.	321.	301.	243.	169.	75.9	8.5	4.8	160.
42-43	8.1	45.2	53.5	294.	252.	658.	312.	198.	75.5	23.9	7.4	3.3	161.0
43-44	10.2	6.6	15.2	36.5	192.	230.	147.	142.	89.7	11.7	3.5	1.3	73.4
44-45	2.41	91.7	43.5	43.7	565.	522.	281.	180.	130.	31.6	5.36	0.83	155.
45-46	2.38	19.4	119.	61.1	53.9	137.	177.	163.	65.2	17.7	0.98	2.01	68.9
46-47	8.72	47.7	99.9	43.2	78.6	75.9	79.3	55.5	21.9	3.78	0.13	0.0	42.7
47-48	4.75	6.70	8.38	7.69	12.6	54.0	214.	133.	99.4	22.9	1.90	0.0	47.1
48-49	0.65	3.85	11.3	16.1	34.9	171.	94.0	149.	81.8	13.2	1.65	0.57	48.3
49-50	1.34	8.40	10.2	50.1	150.	57.9	111.	115.	53.9	8.94	0.63	0.0	47.3
50-51	1.22	241.	374.	208.	200.	169.	126.	126.	44.0	13.9	0.94	0.0	125.
51-52	2.11	13.7	120.	503.	224.	802.	396.	192.	135.	80.3	13.8	7.78	208.
52-53	9.55	17.5	84.9	205.	80.1	93.0	119.	112.	93.3	23.1	1.95	1.49	70.1
53-54	4.95	13.0	17.5	45.6	87.9	170.	148.	132.	57.2	15.6	0.61	0.0	57.5
Average	5.79	41.2	89.3	136.2	173.0	267.0	193.0	149.2	85.9	26.3	3.65	1.70	97.3

Extracts from Madera Irrigation District's Hearing
Exhibit No. 1 are as follows:

"Relative to a suggested compromise in the matter of the protest of Mr. John Sallaberry

"... Mr. Sallaberry filed an application with the State ... to divert 45 second feet of water from Fresno River for the irrigation of a tract of 4000 acres of pasture land Under the system of flood irrigation which he follows the annual requirements have been estimated at practically 9000 ac. ft. To be most effective this type of irrigation requires the use of a large head of water for a short time"

"It is stated that his diversion works, which are extensive, can handle and have diverted in excess of 700 cubic feet per second."

"Mr. Sallaberry's ... most real need is for winter water to start the spring grasses for feed. Later water is less valuable for this purpose."

"... to the Madera Irrigation District the winter water is of the least value because there is little active demand for irrigation in these months, while in the spring months, beginning with March 1, the demand can exceed the supply. Consequently it has been suggested that Madera Irrigation District might exchange certain of the winter flow ... falling within district rights ... for water in the months of March and April when the demand for irrigation water from the district was high, but when it would be of only minor benefit to Mr. Sallaberry."

"Discussion centers around the feasibility of the district agreeing to permit the passing downstream to Mr. Sallaberry a share of district water within its 200 second foot right for not to exceed two 5-day periods in December, January or February, if the natural flow of the stream has not been sufficient to irrigate his land otherwise, and that in return Mr. Sallaberry will agree not to enforce any of his claims to water, as against Madera Irrigation District, after March 1 of each season."

"In order to determine the effect of such an arrangement upon the availability of water to Madera Irrigation District, a study was made of the flow of Fresno River during the winter and spring months. Daily record of stream flow as obtained at the Daulton station of the U. S. Geologic Survey was used as a basis Deduction was made for seepage loss in the stream channel from the Daulton Station to M. I. D. dam, based on comparative measurements of stream discharge made by Mr. Secara in past seasons. Seepage loss from the dam to the Sallaberry diversion is estimated at 60 second feet by Mr. Secara, also based on comparative measurements This means therefore that to meet the Sallaberry diversion of 45 second feet, 105 second feet must pass the M. I. D. dam, to allow the 60 second feet seepage in route. The attached table shows for the months of December to April inclusive the amount of water falling within the 200 second foot right of the M. I. D. annually, and the residual water at the M. I. D. dam for the period 1938-39 to 1953-54 It also shows the water available to Mr. Sallaberry within those months annually with a maximum diversion of 700 second feet."

"While the foregoing figures indicate that insofar as diversion to Mr. Sallaberry alone, is concerned, there may be some advantage in an exchange . . . the feasibility of any such arrangement could be definitely offset by claims of other claimants for water with whom no such arrangement could be had."

"Suppose therefore that agreement was had with Mr. Sallaberry Actually all this would do would be to relieve the district of the obligation of sending Mr. Sallaberry's water down the river to him. It would not enable the district to salvage the 60 sec. ft. seepage loss in addition because the 70 second feet included in Applications 11003 and 11048 would still have to be released . . . along with the necessary seepage to carry that amount of water. This would nullify most of the advantage to the District of the arrangement with Mr. Sallaberry."

"I think that any agreement for the cooperative use of Fresno River water must be with all these claimants rather than Mr. Sallaberry alone in order to be effective."

Division Exhibit No. 7 includes "Raymond", "Madera" and "Firebaugh" quadrangles, United States Geological Survey. By plotting certain points mentioned in the proceedings and scaling river distances between them it may be determined that the gaging station "Fresno River near Daulton" is approximately 11.3 miles upstream from the Madera Irrigation District intake and that the points of diversion on Fresno River under Applications 13541 (Sallaberry), 11048 (Red Top Ranch) and 11003 (Cook) are respectively about 12.7, 20.7 and 23.9 miles downstream.

Discussion

Since District already claims a right to 200 cubic feet per second at its dam on Fresno River and no reason for doubting the validity of that right is apparent, flows reaching District's dam up to 200 cubic feet per second cannot be considered subject to appropriation. Neither may flows reaching District's dam in excess of 200 cubic feet per second be considered subject to appropriation insofar as such flows are required to satisfy known downstream rights or to offset channel losses occurring above intake of lowermost known diverter. Known downstream rights aggregate 115 cubic feet per second (35 cubic feet per second each to Cook et al. and to Red Top Ranch, after February 1, and 45 cubic feet per second to Sallaberry, after October 1); and channel losses, according to the evidence, amount to some 10 cubic feet per second between

"Fresno River near Daulton" and District's dam, 60 cubic feet per second between District's dam and Sallaberry and 10 cubic feet per second between Sallaberry and Cook, or 80 cubic feet per second in all. The evidence indicates therefore that unappropriated water can only exist at District's dam during certain periods within which flow at "Fresno River near Daulton" averages more than 200 plus 115 plus 80 or 395 cubic feet per second.

While monthly mean flows passing "Fresno River near Daulton" have seldom exceeded 395 cubic feet per second, daily mean flows at the same station have exceeded that amount somewhat oftener. Calculations based upon the record of daily flows passing "Fresno River near Daulton" indicate that had rights such as are now held by the several users existed throughout the period of streamflow record and had such rights been fully exercised as promptly as conditions permitted, the following amounts, substantially, in second foot days, might have been diverted under a junior appropriation such as is now sought under Application 15287.

Season	November	December	January	February	March	April	Total
1941-42	0	600	1083	0	0	227	1910
42-43	0	0	1165	0	4023	131	5319
43-44	0	0	0	0	103	0	103
44-45	0	0	0	1346	1800	0	3146
45-46	0	0	0	0	0	0	0
46-47	0	0	0	0	0	0	0
47-48	0	0	0	0	0	0	0
48-49	0	0	0	0	0	0	0
49-50	0	0	0	0	0	0	0
50-51	200	1435	0	0	0	0	1635
51-52	0	100	1787	0	3385	2186	7458
52-53	0	0	0	0	0	0	0
1953-54	0	0	0	0	0	0	0

So irregular a supply as appears from the data to be obtainable from unappropriated flows of Fresno River is plainly unsatisfactory as a sole supply for irrigation. Such a supply may however be used with considerable resultant benefit in conjunction with the relatively firm supply otherwise available to the applicant District; and the mere spreading of waters not immediately needed for irrigation should prove definitely beneficial in arresting or retarding the subsidence of ground-water levels.

Inasmuch as unappropriated water appears at times to exist and the approval of an application to appropriate cannot authorize the invasion of prior rights, the protest against the approval of Application 15287 is insufficient to bar the approval of that application.

Conclusion

The data indicate that unappropriated water exists at times in varying amounts in the source from which the applicant seeks to appropriate, in one or another of the months of November, December, January, February, March and April but seldom if at all in other months. The data indicate further that such unappropriated water as does exist may be taken and used beneficially in the manner proposed in the application, as a supplement to the supply otherwise available to the applicant, without injury to downstream users. In view of these circumstances it is the opinion of this office that Application 15287 should be approved and permit issued, subject to the usual terms and conditions but with diversions thereunder limited to periods extending from about November 1 to about April 30.

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ORDER

Application 15287 having been filed with the Division of Water Resources as above stated, a protest 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 Application 15287 be approved and that a permit be issued to the applicant, subject to such of the usual terms and conditions as may be appropriate and subject to the limitation of diversions under the permit to periods extending from about November 1 of each year to about April 30 of the next.

WITNESS my hand and the seal of the Department of Public Works of the State of California this 26th day of April, 1956

HARVEY O. BANKS, STATE ENGINEER

By _____
L. C. Jopson
Assistant State Engineer

CC: ad

WATER RIGHT DECISION FOR SIGNATURE

Application 15287

Applicant: Madera Irrigation District

Source: Fresno River

Date Application Filed: 4/10/53

Date of Hearing or Investigation: 12/ 6/55

Amount: 200 cfs

Season of Diversion: 1/ 1 - 12/31

Purpose of Use: Irrigation

Protested by: John Sallaberry

Disposition of Protests: Hearing

Date 3/16/56

Prepared by: S. C. Whipple
S. C. Whipple
Senior Hydraulic Engineer

Date 4/5/56

Approval recommended: W. R. Gianelli
W. R. Gianelli
Supervising Hydraulic Engineer

Date 4/17/56

Approved: Henry Holsinger
Henry Holsinger ^{OK}
Principal Attorney ^{GMC}

Date 4/23/56

Approved: L. C. Jopson
L. C. Jopson
Assistant State Engineer