

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 15422 by Rawlie Vandegrift to
Appropriate water from Kings Slough, Tributary via Cross
Canal to Sacramento River, in Sutter County, for Irrigation
and Stockwatering Purposes.

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Decision A 15422 D 842

Decided December 6, 1955

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In Attendance at Investigation Conducted by the Division of
Water Resources on February 17, 1954:

Mrs. Rawlie Vandegrift	Applicant
Laurence J. Davis	Protestant
Fred James	Protestant
Roy E. Richmond	Protestant
C. C. Coppin	Protestant
Thomas A. Sills	Protestant
Howard Van Dyke	Interested party
K. L. Woodward Associate Hydraulic Engineer Division of Water Resources Department of Public Works	Representing the State Engineer

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DECISION

General Description of the Project

The application initiates an appropriation of 3 cubic feet per second, year-round, from Kings (shown on maps as King) Slough, tributary via Cross Canal to Sacramento River. Diversion is to be effected by pumping at either or both of two points, one being within the SE $\frac{1}{4}$ SE $\frac{1}{4}$, the other within the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 36, T12N R4E, MBB&M. The water is wanted for ^{stockwatering and for} the irrigation of 240 acres located within the S $\frac{1}{2}$ of the same Section 36. One-half of that acreage is to be in rice, the remainder in pasture and/or general crops. The applicant asserts that she owns both the land at the point of diversion and the land upon which the water is to be used. She also mentions the availability of 2 wells as an alternative source of supply.

Protest

The application is protested jointly by Laurence J. Davis and four other individuals, the protest containing among other passages the following:

"... the proposed appropriation will ... complicate Nevada Irrigation District flowage, retard operation of present irrigation works and reduce supply of water of our riparian rights."

"Nevada Irrigation District furnishes water to these properties for rice irrigation and we growers have pumping plants to lift water into the fields."

The protestants state that they have irrigated since 1949, from sometime in April to about October 1, that they divert from Kings Slough at points within a two-mile reach immediately below the applicant.

Answer

Extracts from the applicant's answer to the protest are as follows:

"It is not my intention to interfere with any rights which anyone has to the Nevada Irrigation District waters, or to any other flow to which any individual may have rights."

"My application is to appropriate 'unappropriated waters', therefore, I do not intend to appropriate water which the Nevada Irrigation District is entitled to sell to you, and which you or anyone else is, or will be, entitled to purchase from the Nevada Irrigation District."

"Your riparian rights do not attach to foreign flows, therefore, I am not proposing to interfere with your 'riparian claims'."

"I have filed to appropriate the 'unappropriated waters' which flow through Kings Slough, as it crosses my property, at the stipulated points of diversion."

Field Investigation

The applicant and the protestants, with the approval of the Division having stipulated to the submittal of the application and protest upon the official records of the Division, a field investigation was conducted on February 17, 1954. The applicant and the protestants were present or represented during the investigation.

Records Relied upon

Application 15422 and all data and information on file therewith.

Information Secured by Field Investigation

The report covering the field investigation of February 17, 1954, contains among other statements the following:

"A conference was held at the Pleasant Grove school. Inasmuch as opposition to the application was only during the irrigation season, normally beginning in April or May ... no purpose could be served in observing the source and the diversion works of the various parties at this time."

"Kings Slough heads four or five miles north-east of Pleasant Grove and flows in a general westerly direction approximately seven miles to the Cross Canal dividing Reclamation District 1000 and Reclamation District 1001. The watershed is relatively flat varying in elevation from about 100 feet to about 35 feet at the confluence with Cross Canal. Rainfall during the late spring, summer and early fall months is extremely rare and during the irrigation season natural flow in the slough is insignificant. Irrigation water for the area is principally obtained from Nevada Irrigation District although some acreage is said to be irrigated from wells."

"With the exception of Fred James, all of the protestants obtain their water directly from Kings Slough."

"Laurence J. Davis claimed that he owns 160 acres in Section 35, T12N R4E, NDS&M, and that in 1953 he raised 139 acres of rice with plans to fallow the land during the coming season. Use of water will apparently be every other year."

Roy E. Richmond stated that he leased a portion of his property to Protestant Sills but that he also raised some 100 acres of rice in 1953 and each year during the past three years. Richmond's property is in Section 3, T11N R4E, MDB&M.

"C. C. Coppin owns 255 acres in Section 34, T12N R4E, MDB&M, and during 1953 irrigated only 150 acres of rice. Only 95 acres of rice are planned for 1954.

"Thomas A. Sills owns property in Section 3, T11N R4E, MDB&M, and irrigated a total of 160 acres of rice in 1953 which he indicated will be his maximum use.

"Fred James's property is located in Section 4, T11N R4E, MDB&M. He indicated that in the past he obtained his water from wells only but that it is feasible to irrigate from Kings Slough should he elect to do so.

"According to information obtained at the conference the major supply of water available in Kings Slough during the irrigation season is furnished by Nevada Irrigation District through the Pleasant Grove Canal which diverts from Auburn Ravine in Section 26, T12N R5E, MDB&M. The canal, approximately four miles in length, discharges into Kings Slough near the east line of Section 33, T12N R5E, MDB&M, and the slough is then used as a conduit to conduct the water to the District's customers. The Pleasant Grove Canal was constructed in 1948 by several of the users However, the cost of construction has recently been fully repaid by the District As this area is outside the District's boundaries, service has been on a year to year basis with the understanding that the District would be under no obligation during those years of deficient supply. Apparently since construction of the canal sufficient water has always been available to meet the needs of those users wishing service. The protestants stated that water is limited to rice land They indicated that no actual measurement of

water is made by the District in the operation of the system either at the canal diversion or at the users' pumps. Allegedly at no time during the irrigation season is water intentionally allowed to flow over the above-mentioned dam for any appreciable period. The watermaster closely regulates the diversion from Auburn Ravine so as to keep sufficient water in the channel for the users' needs and at the same time allow none to spill over the dam.

"It was the applicant's contention that at least two ranchers near the upper end of the watershed irrigate some 400 to 500 acres of permanent pasture from wells and that a considerable amount of runoff results from this operation which flows down and intermingles with the District's water at a point above most of the users. She contended that as the District diverts from Auburn Ravine only enough water to keep a sufficient supply in the slough for its customers the District is receiving revenue for the waste water which it has no legal claim to, that it is runoff water from wells that she is seeking to appropriate under the application. On the other hand, the protestants claim that the ranches in question also have sump pumps in the channel to recapture their own waste water and therefore the amount contributing to the Kings Slough supply is very small.

"Mr. Howard Van Dyke stated that he was appearing at the request of Mr. Ed Wells, Manager of Nevada Irrigation District, to advise the Division that the District is opposed to the approval of the application as any water the applicant diverted would be water belonging to the District and already committed to downstream users.

"It appears from the information available that during the irrigation season there may be water in Kings Slough in addition to that diverted from Auburn Ravine by Nevada Irrigation District although the quantity or period of occurrence could not be determined. It is recommended that further action on the application be suspended temporarily and that during the coming irrigation season the slough be checked periodically by actual streamflow measurements at appropriate points to be established by

field investigation to determine if unappropriated water in sufficient quantity does actually exist in Kings Slough to justify the application."

A memorandum by the same investigator dated April 27, 1954 reads in part:

"In accordance with the recommendations contained in the Investigation Report dated February 24, 1954, ... engineers ... made the initial inspection of the area on April 22, 1954, with a view to locating several points for observing the origin, and measuring the flow in King Slough during the coming irrigation season, other than the water brought into the area by Nevada Irrigation District through the Pleasant Grove Canal.

"Other parties present were (the applicant, Protestants Richmond and Coppin and Irrigation District Watermaster Frank Newcomb).

"According to Mr. Newcomb the District plans to serve during the coming season from Pleasant Grove Canal only 140 acres of rice to a Mr. Howsley, south of King Slough Neither the applicant nor record protestants expect to be served by NID water this year.

"In order to acquaint the entire group present with the physical conditions Mrs. Vandegrift conducted a tour around the area and pointed out the various locations where she believes unappropriated water enters King Slough. Six points were selected for observation during the season. Their positions ... are ... as follows:

(1) Brewer Road crossing over an unnamed drain tributary to King Slough approximately 1200 feet due north of the SW corner of Section 32, T12N R5E, MDB&M.

(2) Catlett Road crossing over an unnamed drain tributary to King Slough approximately 2000 feet due west from the E $\frac{1}{2}$ corner of Section 33, T12N R5E, MDB&M.

(3) Overflow from a small regulatory reservoir 500 feet due north of the SE corner of Section 33, T12N R5E, MDB&M, at the junction of King Slough and Pleasant Grove Canal.

(4) An unnamed drain immediately above its confluence with King Slough at a point about 500 feet north and 1000 feet west of the SE corner of Section 33, T12N R5E, MDB&M.

(5) and (6) Two unnamed drains on the south side of King Slough along the east and west borrow pits, respectively, of Brewer Road near the NW corner of Section 5, T11N R5E, MDB&M. Both drains flow due north and drain an area south of King Slough.

"There was no flow at any of the 6 points at the time of the investigation. It was agreed however that measurements would be made at two-week intervals throughout the summer."

A memorandum by an engineer of the Division, dated October 19, 1954 reads in part:

"Pursuant to the recommendations contained in the Investigation Report ... and memorandum ... the writer observed the flows (in cfs), tabulated below, at the six points described in said memorandum ... throughout the summer of 1954.

Date	Point #1	Point #2	Point #3	Point #4	Point #5	Point #6
April 22	0	0	0	0	0	0
May 5	0	0	0	0	0	0
May 20	0	0*	0*	0	0	0
June 2	0	0	2	0	0	0
June 16	0	0	1.1	0.1	0	0.25
June 30	0	0	0	0	0	0
July 14	0	0	0	0.005	0	0
July 28	0	0	0.6	0	0	0
August 11	0	0	1	0.005	0	0
August 25	0	0	2	0.1	0	0
September 8	0	0	1	0.1	0	0.8

* On May 28, 1954, K. L. Woodward stated that he observed 0.5 cubic foot per second at Point #3 and no flow at Point #2.

"Water was observed in pools along the unnamed drain west of Brewer Road to and including the August 11 inspection, said water being drainage from rice fields ... and clover fields Due to the general conditions of the drain's channel and the heavy growth of tules and other vegetation therein, it is doubtful if any of the water in said drain at Point #1 reaches Kings Slough during the summer months.

"In the early summer months the fields north of Point #2 were being cultivated for crops other than rice and were not irrigated during the irrigation season. For this reason no flow was observed at Point #2.

"The regulatory reservoir at Point #3 was observed spilling into Kings Slough on several occasions. This water, pumped from wells, is used to irrigate clover fields east of the reservoir. Drainage from the irrigated fields is recaptured, regulated in the reservoir, and is pumped therefrom and reused for irrigation of said clover fields.

"On June 16, Mr. J. Monaco, owner of said property, was interviewed (about 9:00 a.m.) and informed the writer that water began to spill into Kings Slough about 6:00 a.m. due to the system not being operated while stock were being transferred from one field to another. Mr. Monaco also stated that water occasionally spills for several hours at a time while the pump at the reservoir is not in operation, but that said spillage is not regular and could not be depended upon for irrigation purposes. The regulatory reservoir and pumping plant were estimated to be 1 acre-foot and 800 gallons per minute respectively in capacity.

"Point #4 - Small flows from rice fields within NE $\frac{1}{4}$ of Section 4, T11N R5E, MDB&M, were observed during the latter part of the summer. From the appearances of the drain a large portion of any drainage water from said rice fields would not reach Kings Slough due to the large swampy area created by the drainage water of which a large portion would be consumed by evaporation and seepage into the ground.

"Point #5 - No flow was observed in the east drain along Brewer Road, as there was no irrigation in the vicinity.

"Point #6 - Slight seepages were observed in the west drain along Brewer Road which appeared to be from a rice field within the NE $\frac{1}{4}$ of Section 6

"On May 20, the writer contacted Mr. R. L. Sharpless and was advised that he reclaims all waste water from his irrigated lands Mr. Sharpless also informed the writer that he has entered into an agreement with the Nevada Irrigation District under which he maintains a dam across Kings Slough, below the confluence of Kings Slough and the unnamed drain on which Point #1 is located, and reclaims by pumping therefrom the amount which he believes drains into Kings Slough and the unnamed drain from his irrigated lands.

"The flow observed on September 8 appeared to be drainage from a rice field within SW $\frac{1}{4}$ of Section 5,

T11N, R5E, MDB&M, which seeps under Brewer Road near the W $\frac{1}{2}$ corner of said Section 5, and was diverted into the west drain by an earth dam across the west drain near the W $\frac{1}{2}$ corner of said Section 5."

A memorandum dated April 14, 1955, by Engineer Woodward, supplementing his report covering the field investigation of February 17, 1954, contains among others the following statements:

"Pursuant to ... instructions ... a further investigation was made of the project and general area involved in Application 15422 on April 12 and the matter was discussed with Mrs. Vandegrift on April 14.

"The source of foreign water which is introduced into Kings Slough via Pleasant Grove Canal by Nevada Irrigation District is water purchased by the District from Pacific Gas and Electric Company at the tailrace of Wise power house on Auburn Ravine and from various other canals of the PG&E ditch system in the vicinity of Newcastle. Only that quantity needed for downstream customers is purchased by the District.

"Contracts between the District and the several protestants on Kings Slough below the applicant call for sufficient water to irrigate a given number of acres with no actual quantities of water such as cfs or acre-feet specified. According to the District's watermaster, Mr. Newcomb, the District attempts to maintain only a sufficient amount of water in Kings Slough for such uses. A permanent flashboard dam is located a few feet downstream from the junction of Kings Slough and an unnamed stream which joins Kings Slough about 1500 feet west of the SE corner of Section 34, T12N, R4E, MDB&M, on the south line of Section 34. The dam is located immediately below the point of diversion of the lowermost user of District water. At the beginning of the irrigation season the flashboards are placed

in the dam and no water passes beyond that point except for limited unavoidable spill. On April 12 there was no flow in Kings Slough but the protestants were expecting delivery from the District momentarily.

"One well referred to in the application as additional sources of supply is operated by a 12-inch Western turbine pump rated at 1300 gallons per minute and is located near the south boundary of Section 36, T12N, R4E, MDB&M, in the SW $\frac{1}{4}$ of SE $\frac{1}{4}$ of Section 36. Water is drawn from the second well by a 6-inch Worthington turbine pump; the well is located about a thousand feet north of the south line of said Section 36 within the SE $\frac{1}{4}$ of SW $\frac{1}{4}$ of that section. The place of use south of the slough is served by the wells. It was not apparent what supply, if any, has been used on the land north of the slough. There was no evidence of water having been used from Kings Slough by the applicant; furthermore, the pumps showed no evidence of having been operated for several months.

"The 1954 crops grown by the applicant on the place of use were corn, rice, and permanent pasture. It is common knowledge that such annual crops as corn and rice are irrigated normally only from about May 1 to about October 1, and no winter irrigation would be necessary. Although it is true that winter irrigation of pasture is carried on in some areas to some extent, such irrigation is normally only made during years of subnormal rainfall, and in view of the local nature of the watershed of Kings Slough it would follow that no natural flow would ordinarily be available for appropriation during the winter months when pasture irrigation was necessary.

"It is possible that some stockwatering from the slough could be made year-around as water was observed standing in several of the holes in the stream bed. The only cattle observed on April 12 was a flock of approximately 50 sheep which apparently were being watered from a well.

"As mentioned above, the problem was discussed with Mrs. Vandegrift on April 14, and

she conceded that she had no workable plan whereby it would be possible to divert the return flows such as observed during the last irrigation season and at the same time not interfere with the Nevada Irrigation District supply. She indicated however that in view of the results of the investigation and the tenor of our letter of October 26, 1954, she would not press the application further, and she agreed to submit a request for cancellation in the next few days."

Releases to Auburn Ravine at Wise power house in acre-feet, during 4 recent years, according to a letter from Nevada Irrigation District dated June 6, 1955 (filed with Application 15657), have been as follows:

Month	1950	1951	1952	1953
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	39	274	870
May	2015	3804	3626	3594
June	4961	4987	4434	3763
July	5386	5159	5394	5224
August	5385	5145	5416	5211
September	4159	3855	4354	4170
October	1843	1943	1808	1565
November	55	0	246	338
December	0	0	0	0

According to the information obtained by field investigation during 1954, return flow from lands irrigated from wells is inconsiderable, intermittent and unpredictable. True, flows of up to about 2 cubic feet per second were occasionally observed but such flows may be presumed to have been of short duration. The timing of the applicant's proposed diversions to accord exactly with occasional upsurges of return flow would appear prohibitively difficult. In that connection it is significant that the applicant conceded on April 14, 1955 that she has no workable plan for diverting return flows without interference with the Nevada Irrigation District supply. In the absence of such workable plan diversion as proposed by the applicant would injure the downstream protestants by denying them, in part, their purchased supply.

At times other than during irrigation seasons, which extend from about mid-April to about mid-November (according to record of releases at Wise power house) it is not apparent that the applicant can use water beneficially for irrigation and the utilization, for stockwatering, of such flow as may then occur in Kings Slough is unnecessary.

Conclusion

Although the available information indicates that unappropriated water sometimes exists in small amounts in Kings Slough it also indicates that the flow of such

With reference to the possible utilization of the flow of Kings Slough at times other than during irrigation seasons a statement by an engineer of the Division (filed with the records of the application) reads in part as follows:

"The writer has been familiar with the area wherein the appropriation is sought for many years and has observed runoff and water use conditions.

* * *

"Long observation of the availability of flow during the nonirrigation season has convinced the writer that water is rarely available in Kings Slough except when the bordering lands are too saturated for pasturing of livestock and water is then available on the lands themselves sufficient for normal use, making diversion for stock use unnecessary during times when it is present."

Discussion

Information available to the Division fails to establish that the foreign water introduced into Kings Slough by Nevada Irrigation District for delivery to its customers is subject to appropriation. The natural flow of Kings Slough, during irrigation seasons, appears to be negligibly small. The only water in Kings Slough during irrigation seasons that warrants consideration as possibly subject to appropriation is return flow from certain lands that are irrigated from wells. It is water of that category that the applicant seeks primarily to appropriate.

unappropriated water as does exist is so intermittent and unpredictable that its diversion as proposed by the applicant probably cannot be effected during irrigation seasons without substantial interference with the supply upon which downstream water users depend. It indicates further that at times other than during irrigation seasons a permit to appropriate would not facilitate either irrigation or stockwatering because of the saturation of bordering lands when flow occurs in that stream. In view of the circumstances mentioned it is the opinion of this office that the approval of Application 15422 is unwarranted and that the application should therefore be denied.

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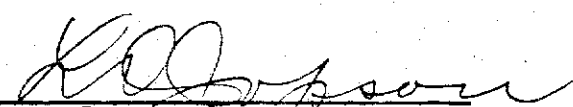
ORDER

Application 15422 for a permit to appropriate water having been filed with the Division of Water Resources as above stated, a protest having been filed, stipulations having been submitted, a field investigation having been conducted and the State Engineer now being fully informed in the premises:

IT IS HEREBY ORDERED that Application 15422 be rejected and canceled upon the records of the Division of Water Resources.

WITNESS my hand and the seal of the Department of Public Works of the State of California this 6th day of December 1955.

HARVEY O. BANKS
ACTING STATE ENGINEER

By 
L. C. Jopson
Principal Hydraulic Engineer