

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

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In the matter of Application 10973 of Gilbert D. Williamson to Appropriate from Wadsworth Canal; Application 10974 of Gilbert D. Williamson to Appropriate from Drainage Ditch of Reclamation District 2054; Application 10975 of Yuill Joaquin to Appropriate from Wadsworth Canal; Application 10983 of W. P. Niesen Estate to Appropriate from Poodle Creek; Application 10987 of Bridge Investment Company to Appropriate from Gilsizer Slough; Application 11025 of Letha C. Middleton et al. to Appropriate from Main Collecting Canal of Sacramento-San Joaquin Drainage District System; and Application 11058 of E. H. and Floyd S. Christenson to Appropriate from State Reclamation Board South Collecting Canal; all for Irrigation Purposes.

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Decision A. 10973, 10974, 10975, 10983, 10987, 11025, 11058 D.- 530

Decided February 28, 1946

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APPEARANCES AT INFORMAL HEARING CONDUCTED AT THE COURT HOUSE, YUBA CITY,  
ON NOVEMBER 28, 1945.

For the Applicants

Gilbert D. Williamson	(Applications 10973 and 10974)	In propria persona
Yuill Joaquin	(Application 10975)	In propria persona
W. P. Niesen Estate	(Application 10983)	Alvin Weis
Bridge Investment Company	(Application 10987)	Edward Von Geldern Pearson Henderson Arnold Waybur Alvin Weis
Letha C. Middleton et al.	(Application 11025)	Alvin Weis
E. H. and Floyd S. Christenson	(Application 11058)	E. H. Christenson

For the Protestants

Collectively	(All Applications)	Neal Chalmers Kenneth Lagenour
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For Division of Water Resources

Biscoe Kibbey, Associate Hydraulic Engineer, for Gordon Zander,  
Supervising Hydraulic 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 the Proposed Developments

Application 10973 was filed by Gilbert D. Williamson on February 8, 1945. The amount applied for is three cubic feet per second from March 1 until November 1; the source, Wadsworth Canal; the point of diversion within the SE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 10, T 15 N, R 2 E, M. D. M.; the purpose, irrigation of 139 acres (80 acres of alfalfa and 59 acres of pasture) lying within Sections 10 and 15 of T 15 N, R 2 E; the means, a 3000 gallon-per-minute pumping plant, delivering through a 21 inch concrete pipe line 1825 feet long, rising 7.2 feet from intake to outlet. By letter dated March 23, 1945, the applicant states that he and Mr. Yuill Joaquin, the applicant under Application 10975, intend to divert at the same point and, for the present, to use the same diversion equipment.

Application 10974, also filed by G. D. Williamson on February 8, 1945, calls for three cubic feet per second to be diverted from Drainage Ditch of Reclamation District #2054 at a point described as being at the north east corner of the south half of the south east quarter of Section 35, T. 16 N., R. 2 E., M. D. M. The purpose is irrigation, the season from March 1 to November 1, the means a pumping plant of 3000 gallons per minute capacity delivering through an 18-inch diameter concrete pipe 2550 feet long laid on a rising slope of 0.00025. The land to be irrigated is located in Section 35 of T. 16 N., R. 2 E. and in Sections 1 and 2 of T. 15 N., R. 2 E., M. D. M. and aggregates 136 acres made up of 50 acres in rice and 136 acres in clover.

Under Application 10975 by Yuill Joaquin, dated February 8, 1945, it is sought to divert 3 cubic feet per second from Wadsworth Canal at a point within the SE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 10, T. 15 N., R. 2 E., M. D. M.; to pump

it by means of a plant of 3000 gallons per minute capacity; and to deliver it through a 21-inch concrete pipe line 1825 feet long, rising 7.2 feet from intake to outlet. The proposed use is the irrigation of 260 acres of rice located in Sections 10 and 15 of T. 15 N., R. 2 E.; the season, from March 1 to November 1.

Application 10983, dated February 15, 1945, by W. P. Niesen Estate, contemplates the diversion of four cubic feet per second from April 25 to September 25 for the irrigation of 160 acres of rice, this tract constituting the north west quarter of Section 20, T. 15 N., R. 2 E. According to the application, the point of diversion is on Foodle Creek within the NW $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 20, T. 15 N., R. 2 E., M. D. M.; water is to be pumped by a plant of 3150 gallons per minute capacity and delivered through an earth ditch 2750 feet long. This ditch is described as having a 15-foot water line width, an 8-foot bottom width, a depth of 1.5 feet and a slope of 0.0001.

Under Application 10987, dated February 21, 1945, Bridge Investment Company seeks to divert 40 cubic feet per second from Gilsizer Slough. The point of diversion is described as being within the NE $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 1, T. 13 N., R. 2 E., M. D. M.; the purpose, the irrigation, from April 1 to October 1, of 1390 acres (1297 acres of rice and 93 acres of clover) within Sections 35 and 36 of T. 14 N., R. 2 E., Section 31 of T. 14 N., R. 3 E., Sections 1 and 2 of T. 13 N., R. 2 E., and Section 6 of T. 13 N., R. 3 E. Diversion is to be effected by means of an 18000 gallons-per-minute pumping plant; delivery by open ditch of equal capacity. With reference to actual water requirements, the application states, "Entire rice area will not be planted each year due to rotation with unirrigated crops or summer fallow, probable rice area each year 650 acres."

Application 11025, filed April 6, 1945, by R. R. Musz (now standing in the name of Letha C. Middleton et al.) names as its source the Main Collecting Canal of Sacramento-San Joaquin Drainage District System. It proposes the diversion of two cubic feet per second, from March 1 until November 1, at a point within the NE $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 35, T. 14 N., R. 2 E., M. D. M. It is stated that diversion will be made by pumping, that the capacity of the plant and of the earth ditch leading therefrom is 5000 gallons per minute and that the contemplated use is the irrigation of 75 acres of leased rice land, lying within Section 35, T. 14 N., R. 2 E., M. D. M.

Application 11058, dated May 25, 1945, filed by E. H. and Floyd S. Christenson, shows as a source the State Reclamation Board South Collecting Canal, the amount 15 cubic feet per second, the season March 1 to November 1, the purpose irrigation, the points of diversion 4 in number, one within the NE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 20, another within the NE $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 20 and the remaining two within the NE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 28, all of T. 13 N., R. 3 E., M. D. M. The application states that diversion will be made by pumping, two plants being mentioned, of 4500 and 7000 gallons capacity, respectively. As to the conduit system, the application states, "Ditches of ample capacity constructed." The place of use is described as a tract of 2736.68 acres lying within Sections 8, 9, 16, 17, 20, 21, 22, 28 and 29, T. 13 N., R. 3 E., M. D. M. The segregation reported is rice 600 acres and general crops 2136.68 acres.

#### Protests

Five protestants (in one instance a group of protestants) have filed protests against each of the applications under consideration.

The names of the protestants and the salient allegations of the protests are as follows:

R.E. Hughes:

Points of diversion - within each of the following quarter-quarter sections: NW $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 10 and NW $\frac{1}{4}$  SE $\frac{1}{4}$  of Section 3, both of T. 12 N., R. 3 E.; also NW $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 33, NE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 29, SE $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 20 and NE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 19, all of T. 13 N., R. 3 E.

Extent of use - irrigation of 725 acres of rice, corn and other crops under Application 6348 and irrigation of 1897 acres of miscellaneous crops under Application 6582.

R. E. Hughes, Oliver Orrick, Elsie Atkins, R. J. Hughes, and Lucile Orrick:

Point of diversion - within the NE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 29, T. 13 N., R. 3 E.

Extent of use - Irrigation of 1089 acres of rice and general crops under Application 7989.

Clifford P. Childers:

Points of diversion - one within the NW $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 27 and one within the NW $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 34, both of T. 13 N., R. 3 E.

Extent of use - irrigation of 521 acres of rice and general crops under Application 8830.

C. Fred Holmes, Jr.:

Points of diversion - one within the SE $\frac{1}{4}$  SE $\frac{1}{4}$  of Section 10, one within the SW $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 15 and one within the SE $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 28, all of T. 12 N., R. 3 E.

Extent of holdings - 2362.42 acres of which 600 acres are susceptible of irrigation from the East Borrow Pit.

Extent of use - irrigation of 500 acres of rice and general crops under Application 9230.

This protestant also claims a riparian right to waters of Sacramento Slough.

Walter Raymond:

Point of Diversion - within  $SE\frac{1}{4}$   $SE\frac{1}{4}$  of Section 21, T. 11 N., R. 3 E.

Extent of use - Irrigation of approximately 400 acres (rice and general crops) from the East Bypass under Application 3206 and riparian rights on Sacramento Slough.

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Except for minor differences, chiefly on points of detail, the pattern and basis of the several protests are the same. Each sets forth that the protestant derives his irrigation supply from the East Borrow Pit of Sutter Bypass (or from Sacramento Slough into which the East Borrow Pit indirectly drains); each asserts a right to so divert upon land, which he owns or leases; and each argues that since the diversions proposed by the applicants tap channels which feed into and contribute to the quantity of water flowing in East Borrow Pit, then such proposed diversions, quoting from a typical protest, "will diminish and jeopardize the water supply of this protestant."

Answers to Protests

Applications 10973 and 10974: The applicant argues that water at his points of diversion is in its entirety runoff water from Reclamation Districts 2054, 2056 and 777 and, accordingly, that no part thereof can be subject to riparian claim. He concedes that his applications are subject to existing rights and states that if his applications are granted he is willing to abide by any regulation the Division of Water Resources may make concerning the allocation of waters.

Application 10987: The applicant denies that the proposed diversion will injure the protestant. He asserts that he has a riparian right and also an appropriative right, the latter in the amount of 22 second feet, based on

Application 10739 and applicable to 743 acres. He alleges high seepage losses, in that connection stating, "Due to heavy transportation losses in the main canal and the porous condition of the soil only 55% of the 22 second feet diverted can be applied to the land for beneficial use, the 45% loss seeping and flowing directly back to Gilsizer Slough, which makes it necessary to divert 40 second feet to obtain the 22 second feet to which the applicant is entitled. Of the water actually applied to the land for beneficial use, approximately 45% is overflow into the drainage system and 95 percent of this drainage flows directly back into Gilsizer Slough on the lands of the applicant. Since 27.9 second feet of the 40 second feet applied for will flow back into Gilsizer Slough the net loss to the supply of the protestant will be 12.1 second feet which is less than the applicant is entitled to under Application No. 10739."

Applications 10975, 10983, 11025, and 11058: Answers were not filed.

#### Field Investigation

It appearing that no agreement could be reached between the applicants and the protestants whereby the protests would be withdrawn, stipulations under Regulation 12 B of The Rules and Regulations of the Division of Water Resources were signed by the interested parties and approved by this office, consenting to an informal hearing. An investigation which included a study of available records and a familiarization trip to the territory was made during September, 1946, by a representative of the Division (Mr. Biscoe Kibbey, Associate Hydraulic Engineer) and an informal hearing was held at the Yuba City Court House on November 28, 1946. The results of this study and the proceedings at the informal hearing are set forth in Mr. Kibbey's report submitted under date of December 13, 1945.

Records Relied upon in the Determination of Action  
in Connection with Applications and Protests

Application	Entire File
10973	" "
10974	" "
10975	" "
10983	" "
10987	" "
11025	" "
11058	" "

Flood Control Project Maintenance Map, Division of  
Water Resources, Scale 2 inches = 1 mile, dated  
October, 1932.

Reports of Sacramento-San Joaquin Water Supervision  
for years 1929 to 1944, inclusive.

The data available for consideration in connection with the seven applications at issue point to the conclusion that diversions by the applicants in the quantities proposed, to the extent available, will not in ordinary years diminish the flow of the East Borrow Pit to the point of preventing the diversion by any of the protestants of amounts reasonably needed by them. The data also indicate that the amount applied for under Application 10987 is excessive.

The stream system upon which the applicants and protestants depend for their water supply is chiefly artificial and the water flowing therein during the irrigation months is almost entirely seepage and return water from diversions on higher land.

The main channel of this system is the East Borrow Pit of Sutter Bypass and the tributaries most important to this discussion are Butte Slough, Foodle Creek Drain, Wadsworth Canal, Snake River and Gilsizer (Gelshauser) Slough; also the concentrated accretions entering the East Borrow Pit at Pumping Plants 2 and 3, derived from various drainage ditches tributary thereto.

The waters flowing in the East Borrow Pit are diverted, in the near vicinity of Chandler, westerly, through Willow Slough into West Borrow



Pit. Here the waters derived from East Borrow Pit mingle with such drainage as may be flowing in West Borrow Pit and are carried southerly to the junction of West Borrow Pit with Sacramento Slough. Along this reach (from Willow Slough) the West Borrow Pit receives accretions of drainage from lands of Reclamation District 1500. These accretions include some seepage through the District's East Levee, but most important is the discharge of very considerable quantities through the District's Drainage pumps, located opposite the entrance to Sacramento Slough. At the junction of West Borrow Pit with Sacramento Slough the entire flow of the former is turned into the latter channel, runs easterly and enters the Sacramento River a half mile above the mouth of the Feather.

Discharges within this stream system have been measured at various points and are recorded in the Reports of Sacramento-San Joaquin Water Supervision. Pertinent extracts from these reports have been incorporated and discussed in the report by Mr. Biscoe Kibbey dated December 13, 1945.

The Kibbey report compares the recorded discharges of Sacramento Slough with the aggregate of the amounts necessary to satisfy the current applications and concludes from such comparison that unappropriated surpluses ordinarily exist, and that there is little basis in fact for the protests.

The aggregate amount considered necessary to satisfy the current applications is taken as 48 cubic feet per second or 2950 acre feet per 31-day-month. This is 22 cubic feet per second less than the sum of the actual amounts applied for because in the case of Application 10987 it is considered for reasons later explained that 18 cubic feet per second should suffice, rather than the 40 cubic feet per second named in the application.

According to the figures, during July, 1944, 10280 acre feet entered Sutter Bypass from Wadsworth Canal and 6080 acre feet entered from Butte Slough; diversions from East and West Borrow Pits aggregated 11550 acre feet; 11390 acre feet passed through Willow Slough and 7810 acre feet were derived from West Borrow Pit. The sum of the two last named figures or 19200 acre feet entered Sacramento Slough. In addition, 28190 acre feet of drainage from Reclamation District 1500, discharging into the West Bypass opposite the western extremity of Sacramento Slough, also entered the latter channel.

During the year discussed Sacramento Slough, carrying 19200 + 28190 or 47390 acre feet plainly could have withstood upstream withdrawals in the amount of an additional 2950 acre feet. The 11390 acre feet, after upstream diversions, entering Willow Slough is also far in excess of the 2950 acre feet sought by the applicants.

As to Julys of other years, the records considered by Mr. Kibbey (1937 to 1944, inclusive, less 1942) indicate that the flow of Willow Slough has averaged 8238 acre feet and only once was less than 2950 acre feet. On that one occasion it was 2630 acre feet. As to other months of other years, the record contains no indication of any lesser flow than 2950 acre feet. A seven-year average for June is 9301 acre feet. Six-year averages for August and September are 6967 and 9272 acre feet, respectively. Three scattering April records and three scattering May records average 3920 and 10547 acre feet respectively. The lowest monthly discharge of any month of record since 1936 was the 2630 acre feet above referred to in July, 1939; the next lowest, 3360 acre feet, in October, 1941.

From the foregoing it appears that during the period considered there has been, in every record month but one, an amount of flow exceeding the needs of the protestants by a margin more than enough to satisfy the applications now under consideration.

As to earlier seasons, the record shows conditions less favorable to the applicants. At the Yuba City meeting of November 28, 1945, an engineer (Mr. Lagenour), representing the protestants, presented a graph (appended to Mr. Kibbey's report) showing that during the period from 1929 to 1934, inclusive, the surplus at Chandler fell below 1000 acre feet in one month of each season. This condition nearly obtained, also, in July, 1936. During such months junior appropriators would have to curtail their diversions. The fact remains, however, that during these years surpluses existed even though discontinuous, and that for the 8 years last past the surplus has stood up well during practically every irrigating month.

Further reference is made to Application 10987 by Bridge Investment Company to appropriate 40 cubic feet per second for the irrigation of 1297 acres of rice (of which about 650 will be irrigated each year) and 93 acres of Ladino Clover. This application was filed for the purpose of incorporating in a single application the amount of water, including seepage losses, for the irrigation of the Company's lands described in its prior Application 10739, which was approved for an amount of water not to exceed 22 cubic feet per second and which amount was found to be insufficient for the irrigation of its lands.

The Company's engineer found that in order to deliver the 22 cubic feet per second to the rice checks it was necessary to divert about 40 cubic feet per second at the headgate, consequently Application 10987 was filed for the larger amount with the idea of withdrawing Application 10739 if and when Application 10987 was approved.

We can see no necessity, however, for the Company to surrender the application of earlier priority. The same purpose could have been served by filing Application 10987 for 18 cubic feet per second and relying upon the prior appropriation of 22 cubic feet per second and it is believed that

Application 10987 should be considered for that amount only.

Although the seepage losses appear to be excessive, applicants' engineer claims that of the 40 cubic feet per second diverted, 27.9 cubic feet per second return to the slough and the actual consumptive use is only 12.1 cubic feet per second. All of the drainage returns to the slough within the Company's property above the intake of the drainage canal leading to Pumping Plant No. 2 and apparently the diversion of 18 cubic feet per second under Application 10987 will not materially affect the supply available to the protestants.

There is apparently some uncertainty as to the acreage of rice which will be irrigated each year under Applications 10739 and 10987. According to the applications, probably not more than 650 acres will be irrigated each year; applicants' engineer, however, believes that possibly 700 acres will be under irrigation.

In view of the uncertainty both as to actual seepage losses and to the acreage which will ultimately be irrigated in any one year, it is the opinion of this office that Application 10987 should be approved for an amount of water not to exceed 18 cubic feet per second with the understanding that such amount may be revised should later information so warrant, or should future demands by upper diverters necessitate reduction of transmission losses to reasonable amounts.

ORDER

Applications 10973, 10974, 10975, 10983, 10987, 11025 and 11058 having been filed with the Division of Water Resources as above stated and protests against the approval of said applications having been received, and

Stipulated hearings having been held and the Division of Water Resources now being fully informed in the premises:

IT IS HEREBY ORDERED that Applications 10973, 10974, 10975, 10983, 11025 and 11058 be approved subject to such of the usual terms and conditions as may be appropriate.

IT IS FURTHER ORDERED that Application 10987 be approved for an amount of water not to exceed 18 cubic feet per second and that a permit be issued thereon subject to such of the usual terms and conditions as may be appropriate.

WITNESS my hand and the seal of the Department of Public Works of the State of California, this 28th day of February 1946.



  
EDWARD HYATT, STATE ENGINEER