# 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 11602 by Clyde, Irene and Vern Probert, Application 11760 by Leland S. and Rose E. Drais, Application 12957 by Robert M. Gruvell, Application 12965 by Earl Mott, and Application 13170 by Milton B. and Coetia V. Hutcheson to Appropriate Water from Littlejohn Creek in San Joaquin County for Irrigation and Stockwatering Purposes.

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Decision A. 11642, 11760, 12957, 12965, 13170 D. 738

Decided April 16, 1952

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In Attendance at Investigation Conducted by the Division of Water

In Attendance at Investigation Conducted by the Division of Water Resources in Connection with Application 11642 and 11760 on July 23, 1948:

Clyde Probert

Representing the Applicants Probert

Leland S. Drais

Representing the Applicants Drais

L. B. Raab

Representing the J. F. Goodwin

Company, Protestent

A. S. Wheeler

Associate Hydraulic Engineer,
Division of Water Resources,
Department of Public Works,
Representing the State Engineer.

In Attendance at Investigation Conducted by the Division of Water Resources in Connection with Applications 12957, 12965 and 13170 on June 13, 1950:

Robert M. Gruwell

Applicant

Earl Mott

Applicant

Milton R. Hutcheson

Representing the Applicants Hutcheson

Elmer W. Forslund

Applicant Gravell's Attorney

C. D. Goodwin )

(Representing the J. F. Goodwin

Guy L. Goodwin)

(Company, Protestant

L. B. Reab

Protestant's Engineer

C. S. Hodges

Protestant's Banch Manager

Joe Schmid

Protestant's Lessee

L. C. Jopson

Supervising Hydraulic Engineer, Division of Water Resources, Department of Public Works, Representing the State Engineer.

Supplementing the above listed investigations, engineers of the Division visited the territory on July 20 and November 15, 1949, and on July 26, July 27, August 14, August 27, September 12 and September 28, 1951. During said visits additional information was secured and various individuals interviewed.

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#### OFINION

## General Description of the Projects

Application 11652 contemplates an appropriation of 2.0 cubic feet per second from Little John creek for the irrigation of 160 acres of alfalfa. Diversion is to be effected by means of a 6 inch pump, located within the New of Section 25, Tin RSE, MIRAM. The water is to be delivered by means of 5000 lineal feet of earth ditch and 3000 lineal feet of 16 inch concrete pipe. The place of use lies within Sections 23 and 26 of the township named. Use is to extend from about April 1 to about October 31. The applicants claim also a riparian right.

Application 11760 contemplates an appropriation of 1.0 cubic foot per second, year-round, from Little John Creek at a point within the Swing of Section 20, TIN R9E, MDB&M. It is proposed to divert by means of a 4.5 second-foot pumping plant and to deliver by means of a

12 inch pipe line, 1000 feet long. Eighty acres of clover are to be irrigated and 500 head of cattle vatered, the place of use being located within Sections 19 and 20 of the township mentioned. Irrigation is to extend from about April 1 to about November 1. The applicants claim also a riparian right.

Application 12957 is for an appropriation of 2.25 cubic feet per second from Littlejohns Creek from April 1 to September 30 of each season, for irrigation. The water is to be diverted at a point within the Manna of Section 25, TIN RSE, MDRAM, by means of a 2000 gallons-perminute pumping plant and delivered through an 18 inch concrete pipe line, 1900 feet long. The place of use, 180 acres in extent and planted to general crops, lies within the same Section 25. The applicant claims no other water right or source of water supply.

Application 12965 is for an appropriation of 0.25 cubic foot per second from April 1 to November 1, the water to be pumped from Littlejohns Creek at a point within the SWISEL of Section 23, TIN RSE, MDB&M, and delivered through 1350 lineal feet of open ditch to a 20 acre pasture within Sections 23 and 26 of the same township. The applicant claims no other water right or source of water supply.

Application 13170 contemplates an appropriation of 0.5 cubic foot per second from Littlejohn Creek, from March 1 to December 1, for irrigation, the point of diversion to be within the SELSWE of Section 23, TIN RSE and the place of use 40 acres of general crops lying partly within Section 23 and partly within Section 26 of the same township. The project includes a 600 gallons-per-minute pumping plant and 1750 lineal feet of open ditch. The applicants also claim a riparian right.

## Protests

The J. F. Goodwin Company protests Applications 11642, 11760, 12957, 12965 and 13170. It claims a right under Applications 10864 and 11364 to the use of water from the source filed upon by the applicants. With reference to Applications 11642 and 11760 it asserts that the diversions proposed thereunder are upstream from its own points of diversion, that the summer flow of Little John Creek is practically all return flow from permanent pasture irrigation, that several large irrigators are installing or have installed pumps to recover their waste water, resulting in the reduction of supply, that there is no indication that there is sufficient water to supply all of the applications made in the past, that for 3 consecutive years the supply has been insufficient to permit continuous pumping under Application 10864 and that in one summer it was necessary to waste from a well 2 miles upstream in order to reinforce Little John Creek. It agrees that its protests against Applications 11642 and 11760 may be disregarded and dismissed if it can be proved that the flow of the source during dry years will supply all prior applicants with the amounts to which they are entitled. With reference to Applications 12957, 12965 and 13170 the protestant argues that the approval of those applications would only cause additional confusion and create false hopes. It asserts that during cortain summer months the supply is insufficient to meet in full the requirements under Application 10864, under which about 130 acres (in 1949) are being irrigated (by the protestant) from 3

sources, namely, from 2 wells supplied by Littlejohn Creek, and from wells several miles upstream, the water from which is intentionally spilled into Littlejohn Creek and later recovered. It asserts further that (as of 1949) no use of water has been made under Application 11364 as, much of the time, no flow reaches the point of diversion designated in that application. It is silent as to terms under which its protests against Application 12957, 12965 and 13170 may be disregarded and dismissed.

#### ADSVETS

The Applicants Drais moswer the protest sgainst application 11760 by stating that there is sufficient flow of water in the source in question when used carefully and without weste, by the protestant and prior applicants, to supply water to parties so entitled. They argue that if the present supply appears insufficient during certain menths under present conditions, it may be that the supply will increase in future; they ask therefore that their application be not dismissed in order that they may maintain priority over applications filed later. They request further that if the supply is deemed insufficient during certain menths they be allowed to appropriate during menths in which the supply is considered ample.

Applicant Gravell answers the protest against Application 12957 by stating that the supply passing his proposed point of diversion is ample to supply the requirements of all present users from the source.

Applicant Hott and the Applicants Hutcheson answer the protests against Applications 12965 and 13170 respectively by denying that the appropriations which they propose will injure the protestant, denying that there is no more than enough water in the source to satisfy the protestant's

permits end denying that approval of the applications would only cause additional confusion and create felse hopes. On the other hand these applicants allege that no use of water has been made under application 11364 and that the right to appropriate thereunder has therefore been lowed. They allege that they (the applicants) have pumped out of the source filed upon to the extent of their needs and to the extent specified in their applications, for the 5 years last past without complaint or objection having been raised to such use. These applicants furthermore assert riparian rights to pump from Littlejohn Creek.

## Field Investigations

The parties having stipulated to an informal hearing as provided for in Section 733(b) of the California Administrative Code, a field investigation was conducted at the site of the developments proposed under Applications 11642 and 11760 on July 23, 1948, by an engineer of the Division, and a like investigation was conducted in connection with Applications 12957, 12965 and 13170 on June 13, 1950. At these investigations the applicants therein concerned as well as the protestant were present or represented.

Supplementary field investigations in connection with Applications 11642 and 11760 were made on July 20 and on Hovember 15, 1949 and a supplementary field investigation bearing upon all applications to divert from Littlejohn Creek was made on July 26 and 27, 1951. The flow of Littlejohn Creek was watched during the late summer of 1951, field visits for that purpose being made on August 14, August 27, September 12, and September 28.

### Discussion

"Little John Creek", "Little Johns Creek", "Little John Creek", and "Little Johns Creek", as the source filed upon is variously called in the applications and related papers, are one and the same stream that is designated on the USGS quadrangles as "Little Johns Creek". It is located between the Calaveras and Stanislaus Rivers, flows westerly and is tributary to San Joaquin River, via French Camp Slough.

general services

Among references bearing upon the stream in question is a report by the Sacramento District, Corps of Engineers, U. S. Army, entitled "Office Report on Review of Plans for Control of Floods in the Littlejohn Creek Group Area", dated November 29, 1946. According to that report Littlejohn (or Little Johns) Creek drains 222 square miles of Sierra Nevada foothill watershed. According to the report damaging floods sometimes occur as a result of heavy rainfall within that watershed. As to irrigation practice and needs however the report states:

"Under present conditions there is no reliable stream flow during the irrigation season and consequently the major source of irrigation supply is ground water. However in recent years the level of the ground water (below the tight surface soils) has lowered to an extent which precludes further large scale irrigation development unless a new water supply is developed."

The army engineers also have measured and recorded the flow of Littlejohn Creek at a location approximately 1.5 miles east of Farmington. Their record, which dates from June 11, 1948, indicates recent monthly mean discharges in cubic feet per second to have been as follows:

	1948	1949	1950	1951
Jamuary	*	5	455	300
February	*	19	zió	142
%arch	<b>發</b>	198	44	166
April	*		18	18
May	*	9	5	70
June	0	ģ	Ŕ	ล์
July	10	Ź	ŭ	า์จ
Auguet	10	Ŕ	Ĺ	્રે વ
September	11	5	ġ	ره زيد
October	6	í	4.1	3
Movember	1.2	4	249	3
December	*	1	593	998

\*No record

Beyond the measurements mentioned in the preceding paragraph no satisfactory continuous record of the flow of Littlejohn Creek appears to exist. Scattering measurements and estimates have however been made, chiefly in connection with the applications now at issue.

According to the report of the investigation of July 23, 1948, the flow of Littlejohn Creek at Eugene was estimated to be 10.0 cubic feet per second. Eugene is some 8 miles above Farmington but below the point at which drainage from the Caldale Irrigation District enters Littlejohn Creek. On the same date the flow of Littlejohn Creek at Van Allen Bridge (on west boundary of the Applicants Drais' proposed place of use) was estimated to be 8 cubic feet per second. The same report states that the flow in the stream during most of the irrigation season is largely composed of runoff from irrigated areas and waste from the Caldale Irrigation District and is therefore erratic. A continuation of the same investigation disclosed a flow of 5.6 cubic feet per second on June 20, 1969, at Van Allen Bridge and on the same date a flow of approximately 5 cubic feet per second at the proposed Farmington Reservoir

dam (some 3 miles above Farmington). On Hovember 15, 1949 it developed that a veir had been installed on Littlejohn Creek at Mariposa Road (upstream from the protestant's diversions, and downstream from ell of the applicants' proposed diversions), that through a misunderstanding only dates of zero flow had been recorded during 1949 (these dates being July 25, 27, 28 and 31, September 15, 28 and 30 and October 4 and 25). but that actual flow records would be kept during 1950 and furnished. On July 20 and 21. 1950 an engineer of the Division visited the weir just referred to and noted that about 0.5 cubic foot per second was leaking past the weir. By letter dated October 30, 1950 Mr. L. B. Baab, engineer for the protestant, transmitted a record of weir measurements during 1950. The record is discentinuous, discharges being shown for but 3 days in April, 6 days in May, 4 days in June, 7 days in July, 13 days in August, 10 days in September and 6 days in October. The record suggests that on average the flow of Littlejoba Creek may have been of the order of 3 cubic feet per second up until June 15, but seldow in excess of 1 cubic foot per second thereafter. Because of the discontinuity of the record and the fact that the weir was observed to leak, these figures must be regarded as very rough.

The J. F. Goodwin Company as alleged in its protests holds

Applications 10864 and 11364. Application 10864 was approved and was

subsequently licensed in the amount of 3 cubic feet per second to be

diverted year-round. The diversion covered by Application 10864 heads

some 3 miles downstream from the weir mentioned in the preceding paragraph.

In the report of inspection for license on July 21, 1948 the inspecting

engineer estimated the flow of the source to be 5.0 cubic feet per second.

According to the record the protestant's experience with Application 11364, Permit 6550, also for 3 cubic feet per second, to be diverted year-round, has been less satisfactory. In its progress report for 1950 it states in answer to the question as to construction work done, "Mone - not enough water available". In harmony with its apparent belief that the flow reaching the projected intake under Application 11364 is insufficient the J. F. Goodwin Company under date of November 13, 1950 has petitioned to change the point of diversion unfor that application to a point within the Notice of Section 20, The ROE, MERAM. - a point some 8 miles upstream from its present location - stating as a reason for the proposed change, "Too meny unauthorized diversions between the old and the new points of diversion".

According to the report of the investigation of June 13, 1950 it was estimated that on that date the flow of Littlejohn Creek above the applicants' proposed points of diversion was 5 cubic feet per second and that approximately 4.5 cubic feet per second was reaching and being diverted by the protestant under Application 10864. According to the same report the applicants were of the opinion that the flow of Littlejohn Creek on June 13 represented about the seasonal minimum and that increasing development upstream will make more water available. It developed from the investigation that Applicants Mott, Hutcheson, Probert and Drais have been using some water from Littlejohn Creek for several years even though no permits have been issued to any of them and that in some cases parties may be diverting without having filed an application.

The flow of Littlejohn Creek necessary to satisfy the protestant and the 5 applicants (Probert, Drais, Gruvell, Mott and Hutcheson) is 12 cubic feet per second as may be noted from the following table in which for convenience of reference certain data relating to the applications have been re-stated.

			Approximate River	
Application	Owner	cis)	Distances (miles)*	Remarks
10864	Goodwin Co.	3.0	0.0	Protestant
11364	Goodwin Co.	3.0	3.0	Protestant
11642	Probert	2.0	7.0	Applicant
11760	Drais	1.0	9.5	Applicant
12957	Gruwell	2 <b>.25</b>	7.5	Applicant
12965	Mott	0.25	6 <b>.6</b>	Applicant
13170	Hutcheson	0.5	6.5	Applicant

<sup>\*</sup>Scaled upstream from intake of lowermost party

The 1949 and 1950 weir measurements (previously mentioned) give weight to the protestant's contention that the flow of the stream is insufficient at times if not prevalently, in summer time, to supply appropriations under approved Applications 10864 and 11364 and that the pending applications under consideration should therefore be disapproved. The record of discharges 1.5 miles east of Farmington (set forth in an earlier paragraph) indicates that supply is ordinarily plentiful from January through April of most years but not thereafter. However other circumstances warrant consideration before a decision may be arrived at. These circumstances are that, allegedly, some of the

applicants are already siverting the amounts that they only now apply for; that, allegedly, unauthorized diversions are being made by parties other than the applicants; and that allegedly, the trend is toward more extensive irrigation upstream, which, it is argued, will increase the amount of return flow carried in Littlejohn Creek and enable diversions therefrom to be increased. To accure more definite information in regard to the circumstances just stated, as well as to accumulate more date as to the flow of Littlejohn Creek, the supplemental investigations of 1951 were undertaken.

Limited information as to the circumstances just mentioned, apart from the supplementary investigations, is as follows:

a. The investigation report of July 23, 1948 in connection with Applications 11642 and 11760 contains the following statement:

"Applicants — contend that a further increase in flow in future years will result from increasing irrigation activities within the area through the drilling of new wells and the northward expansion of Oakdale Irrigation District water deliveries. It is also expected by them that, if and when the U.S. Army Engineers construct a dam at the Farmington Reservoir site, additional water will be available."

The same report also states:

by the fact that some land owners along the creek have installed numps and have been taking water from the creek without, apparently, any color of right.

This was the cause of considerable discussion at the investigation and there was some thought given to commencing court action against such diverters.

b. The inventigation report of June 13, 1950 in connection with Applications 12957, 12965 and 13170 contains statements as follows:

Wit appears that Applicants Mott and Hutcheson have been using some water from Littlejohns Creek for several years and that applicants under Applications 11642 and 11760 probably have been doing likewise There may be other parties diverting who have not filed an application."

"The applicants and probably others along the stream have been using a portion of this water for several years prior to the filing of the applications now under protest."

x x x x x X

Wit is possible that at times there is unappropriated water in Littlejohns Creek after June 1, and increasing irrigation activities within the watershed will tend to provide more unappropriated water - - - "

- c. According to office memorandum dated warch 20, 1951,
  Applicant Clyde Probert stated on March 3, 1951 that an additional 310
  acres was being placed under irrigation from wells just above Farmington and that the Oakdale Irrigation District was now serving additional lands within the Littlejohn Creek watershed. This he anticipated would further increase the flow during 1951 and, he felt, supplied sufficient justification for approval of his application and also Application 11760.
- d. By letter dated May 7, 1949 Applicant Clyde Probert stated, in part, in regard to so called "bootleggers":

"\_ - - there are four between me and them"

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By letter dated September 12, 1948 the same applicant stated:

"There are three ranches bootlegging water from Littlejohn Creek above me and an equal number below. It seems to me the protestant should stop them if he contends there isn't sufficient water. My attorney says I haven't any right to go to Superior Court and ask for an injunction when I haven't been granted a permit. There has been a good flow going by all summer and the J. F. Goodwin Company hasn't made any attempt to use it - - -. I am wondering how long they have to either use it or let some one else have a charce to exist."

- e. In their answers to protests against their applications
  Applicants Note and Hutcheson allege that they have pumped from Little
  John Creek to the extent of their needs and to the extent specified
  in their applications for a period of five years last past.
- f. By letter received March 21, 1951 (filed with Application 11364) Applicant Clyde Probert states:

Part of the second second

"I would say there is from 12 to 30 feet going by my place in summer - - - which the bootleggers get and my land goes dry. There is going to be more water in Little John this year than ever before on account of more land in alfalfa and clover."

g. By petition dated November 13, 1950 the J. F. Goodwin Company, protestant against Application 11642 and related applications, seeks persission (as mentioned in an earlier paragraph) to change the point of diversion described in Application 11364 to a point within Section 20, The R9E, MERAM., alleging as a reason for the proposed change that there are "too many unsuthorized diversions between the old and the new points of diversion".

During the supplemental investigation of July 26 and 27, 1951 consideration was given to Application 11366 Fermit 6551 and to Application 13401, as well as to the applications considered in the earlier investigations. Application 11366 Permit 6551, in the name of J. George Sanguinetti, authorizes the diversion of 0.5 cubic foot per second from Little John Creek at a point some 2.5 miles above Farmington (that point being above the USED gage), from March 1 to November 1, for the irrigation of 47 acres of general crops. Application 13401, by J. Sinei, seeks to divert 3 cubic feet per second from April 1 to September 30, from Little John Creek, at a point about 3/4 mile upstream from the protestant J. F. Goodwin Company's upper intake (Application

11364 Termit 6550) for the irrigation of 260 acres of alfalfa and clover. Meither Application 11366 nor Application 13401 was protested. During the investigation Applicant Clyde Probert was interviewed. Several non-applicant land owners along the creek were also interviewed.

According to the report of the investigation just mentioned observations of stream flow during that investigation were:

Location .	Flow (cfs)
Five miles above Farmington At USED gage	4.0 2.50
At County road south of Farmington At Van Allan road (3 miles west of	1.6
Farmington) At Smith pump (4.5 miles west of	1.0
Farmington) At Mariposa road (6.5 miles west of	1.10
Farsington) At Goodwin ranch (9 miles west of	0.5
Farmington)	0.7

In regard to the measurements the report states:

"The decrease in flow from the uppermost point down to the Van Allan road can only be accounted for as channel loss on the detritus cone of the creek as no use was observed in this section -- "

In regard to use the report states further:

"Little john Creek flows through cultivated lands throughout the section covered - - -. Portions of these lands are planted to non-irrigated crops but such of the area is irrigated either from the creek or from deep wells. During - - - 1951 - - - 6 users were irrigating from the creek on lands as follows:

Maer	Application So.	Acreage Irrigated
J. G. Sanguinetti Earl Mott H. and M. Mott M. B. and C. M. Hutcheson G. A. and B. H. Smith J. F. Greeves	11366 12965 None 13170 Hone None	10 10 10 ?•5 40 20

"In years prior to the 1951 season several other parties have irrigated some land from the creek but those installations have all been dismantled except the J. F. Goodvin pump - - - -

"The size and estimated capacities of the various creek numer now in place are as follows:

Pizo	Size and Type	Approximate Capacity (cfs)
J. G. Sanguinetti Marl Mott M. B. and Y. M.	2' in Centrifugal	1.75 0.33
Hutcheson G. A. and B. A.	3 in Centrifugal	•50
Smith J. F. Greeves J. F. Goodwin Co.	6 in Centrifugal 5 in Centrifugal Litch (cump	2.00 1.60 4.50

"Water is used by the various diverters for the irrigation of orchard, alfalfa, clover, rice and garden crops with the daily diversion, exclusive of the J. F. Goodwin Co. pump, probably averaging about 1.50 cubic feet per second. Water from the Goodwin pump is used for rice irrigation and operation is practically continuous whenever it is in use. (Not used in 1951)."

The same report also contains the following significant passages:

"It has been claimed by the applicants --- that use --- by persons having no valid right thereto has been the cause of a deficiency in supply for the J. F. Goodwin Co. ---. The instant investigation indicates that such is not the case ---."

"Another claim of the applicants is that increased use along the creek both above and below Farmington will add to the water supply in the creek because of the drainage collecting therein. Intermittent estimates of flow over the past three years together with the estimates contained herein indicate that the increase has not occurred to date and in fact all evidence points to a decrease in flow probably due to the irrigators above installing pumps to recenture their own drainage."

"During the investigation, flow conditions at the USED station were observed and it was found that the control was overgrown with tules and other aquatic growth which changes from week to week. These records, therefore, cannot be depended upon as a measure of the low season water supply."

The supplemental investigations of August 14, August 27.

September 12 and September 28, 1951 yielded measurements of flow in

Littlejohn Creek, in cubic feet per second, as follows:

Place	u just 14	August 27	Sertamer 12	September 28
At Sonora Road, 5 siles above Farzington Above junction of Rock and				0.0
Littlejohn Creeks, 2 miles above Farmington				0.8
USED station, 1.5 miles east of Fermington	3.15	5 <b>.7</b>	3 <b>.0</b>	0.1
At County Road south of Farmington	0.5	0.5	0.0	0.0
At Mobley (Stenley) Road, 1.5 miles west of Farmingto At Ven Allen Road, 3 miles	on 3.2	2.45	2.0	0.11
vest of Farmington At Smith Pump, 4.5 miles	0.3	1.67	0.16	0.0
vest of Farmington At Mariposa Road, 6.5 miles	0.3	0.0		
west of Farmington	0.0	0.1	0.1	0.0

The following statements appear in the report covering the last mentioned investigations:

"During the course of the investigations made on August 14, August 27 and September 12 the only apparent diversion from Littlejohn Creek throughout the area investigated was by the Barl Mott pump which on the first and second visit was pumping an estimated 0.33 cubic foot per second for the irrigation of approximately 20 acres of pasture. Many sections of the channel were checked in an attempt to ascertain to what extent drainage water from lands adjacent to the creek was contributing to the flow. It was found that accretion to the flow in the Farmington area from this source was very slight and had no approachable effect on the flow of the stream."

"On the last visit the writer had the opportunity to interview J. George Sanguinetti - - - who was found to be pumping an estimated 3 cubic feet per second from the creek at a point located approximately one quarter mile upstream from the USED gaging station - - . Mr. Sanguinetti was irrigating a 58 acre tract of newly developed land which he had just placed under irrigation for the first time. It was apparent that this diversion caused the low flow conditions found further downstream on this date. The Sanguinetti development also includes another newly developed 15 acre tract just above the junction of Rock and Little john creeks and an older development of pasture on the opposite side of the creek from his 58 acre tract. His irrigation is effected by means of three pumping installations located on the creek and having rated capacites of 1500, 790 and 1000 gallons per minute. The 1500 gallon per minute pump was in operation at the time of the visit."

applications 10864 and 11364 (by the protestant Goodwin Company), for 3 cubic feet per second each, are both senior to all of the 5 applications currently awaiting decision. Obviously the first 6 cubic feet per second flowing in Littlejohn Creek are required for the satisfaction of those two applications and only such flow as may occur in excess of 6 cubic feet per second may be considered to be now subject to appropriation.

The applications currently awaiting decision are as follows:

Application	Applicant	Amount (cfs)	Seasons
11642	Probert	2	4/1 - 10/31
11760	Drais	1	4/1 - 11/1
12957	Gruvell	2.25	4/1 - 9/30
12965	Mott	0.25	4/1 - 11/1
13170	Hutcheson	0.5	3/1 - 12/1

If channel losses between the USED gage and the protestant Goodwin Company's lower intake be ignored the USED record indicates that excesses, in cubic feet per second, beyond the 6 cubic feet per second covered by the protestant's prior rights, would have been as follows:

Month	1949	<u>1949</u>	<u>1950</u>	<u> 1951</u>
March	#	192	38	160
April		0	ĺ2	12
Yay		3	0	3
June	3	j j	Ó	ō
July	Ĩ4	ī	0	0
August	l.	2	0	0
September	. 5	0	C	0
October	i	0	0	0
November	0	0	243	0

\*No record

If channel losses in Little john Creek are negligible the apparent excesses just tabulated would have satisfied the 5 applicants to the following extent:

Product and Drais: in 2 Aprils out of 3, 2 Mays out of 3, 2 Junes out of 4, 1 July out of 4, 1 August out of 4, 1 September out of 4, no October out of 4; a total of 9 months out of 26.

Gruwell: in 2 Aprils out of 3 and 1 September out of 4; a total of 3 months out of 22.

Mott: in 2 Aprils out of 3; a total of 2 months out of 26.

Hutcheson: in 3 Marches out of 3, 2 Aprils out of 3 and 1

November out of 3; a total of 6 months out of 28.

Channel losses in Littlejohn Creek however are not negligible.

Channel losses between the USED gage and the county road leading south

from Farmington, according to the reports of investigation, were measured

(during 1951) as follows:

<u>Date</u>	Flow at USED Gage (cfs)	Flow at point South of Farmington (cfs)	Channel Loss (cfs)	Percentage Loss
July 26 and 27 August 14 August 27	2.50 3.15 3.7	1.0 0.5 0.5	1.50 2.65 3.2	60% 84% 86%
September 12 September	3.0	0.0	3.0	100%
28	0.1	0.0	0.1	100%

On August 14, August 27 and September 12, 1951 "channel loss" includes one diversion (by Nott) of 0.33 cubic foot per second. Evidently channel losses in Littlejohn Creek are too large, relatively, at low stages, to be ignored. It is to be remembered that the channel losses herein considered have occurred in a reach of approximately 1.5 miles. Channel loss data for the reach extending from the USED gage to Mariposa Road (the approximate location of the protestant's upper diversion), a distance by creek of roughly 8 miles, are as follows:

<u>Date</u>	Flow at USED Gage (cfs)	Flow at Mariposa Road (cfs)	Channel Loss (cfs)	Percentage Loss
July 26				
and 27	2 <b>.50</b>	0.5	2.0	80%
August 14	3 <b>.1</b> 5	0.0	3.15	100%
August 27	3.7	0.1	3.6	97%
September 12		0.1	ź. 9	97%
September 20		ŏ.ō	õ. <b>1</b>	100%

As before, no surface diversion was being made except the Nott diversion of 0.33 cubic foot per second. Evidently, during low stages all or nearly all of the flow passing the USED gage up to about 3.7 cubic feet per second, at least, is dissipated by natural causes, before reaching Mariposa Road. It appears also that most of the flow passing the USED gage up to about 3.7 cubic feet per second, is lost between that gage and a point south of Farmington.

Channel losses occurring at stages (at the USED gage) of over 3.7 cubic feet per second cannot be calculated from the data at hand. It may be presumed however that such losses will be at least 3.6 cubic feet per second in the USED gage - Mariposa Road reach, since that is what they are reported to have been on August 27, 1951, when flow at the USED gage according to the same report was 3.7 cubic feet per second.

It follows then that for 6 cubic feet per second to reach even the protestant's upper intake the flow at the USED gage must be of the order of 6 plus 3.6 or 9.6 cubic feet per second. Average flows of 9.6 cubic feet per second or more at the USED gage occurred in July and in August of 1948 but, from May to October, both inclusive, in no other month of any year of record, Except during those 2 isolated months, unappropriated water in Littlejohn Creek above Mariposa Road appears to have been non-existent from about May 1 to about October 31 of the period of record, the latter extending from early June, 1948, through 1951.

### Summary and Conclusion

Available stream flow data include a record of daily discharges maintained by the Army Engineers since June, 1948, supplemented and extended by measurements by engineers of the Division of Water Resources, principally during 1951. The trend of the summer flow of Littlejohn Creek is downward and no likelihood of a reversal of that trend is apparent. The data indicate that unappropriated water in Littlejohn Creek occurs usually during January, February, March, April and December but that during the months of May to November, both inclusive, when water is most needed for irrigation, the occurrence of unappropriated water is too infrequent to warrant the approval of any of the pending applications to appropriate from that stream. In view of the infrequency of occurrence of unappropriated water in Littlejohn Creek it is the opinion of this office that Applications 11642, 11760, 12957, 12965 and 13170 should be denied.

#### ORDER

Applications 11642, 11760, 12957, 12965 and 13170 for permits to appropriate water having been filed with the Mivision of Water Resources as above stated, protests having been filed, hearings having been held and the State Engineer now being fully informed in the presises:

IT IS HERESY ONDERED that Applications 11642, 11760, 12957, 12965 and 13170 be rejected and cancelled upon the recerds of the Division of Water Resources.

VITNESS my hand and the seal of the Department of Public Works of the State of California this 14th day of April 1952.

/s/ A. D. Edmonston
A. D. Edmonston
State Engineer

SCV:do