STATE OF CALIFORNIA DEPARTMENT OF PUBLIC WORKS BEFORE THE STATE ENGINEER AND CHIEF OF THE DIVISION OF WATER RESOURCES

000

In the Matter of Application 15567 of Crane Valley Land Company to Appropriate Water from Balsam Greek Tributary via Kimshew Greek to West Branch North Fork Feather River in Butte County for Irrigation and Stockwatering Purposes.

00	00
Decision A 15567 844	
Decided January 16, 1956	
00	00
In Attendance at Investigation Co of Water Resources on November 19	onducted by the Division 9, 1954:
W. M. Wilson	Representing the applicant
Clifford Carpenter	An associate of Mr. Wilson
Donald H. McCrea Engineering Department Pacific Gas and Electric Company	
Richard M. Conery Division Land Supervisor Pacific Gas and Electric Company	Representing the protestant
K. L. Woodward Associate Hydraulic Engineer Division of Water Resources Department of Public Works	Representing the State Enginee:

DECISION

Substance of the Application

The applicant seeks to appropriate 2 cubic feet per second, the water to be diverted from May 1 to December 1 of each year from Balsam Creek at a point within the NE‡ SE‡ of Section 6, T24N R5E, MDB&M, in Butte County. Balsam Creek is tributary via Kimshew Creek to West Branch North Fork Feather River. Diversion is to be effected by means of a timber dam 2 feet high by 10 feet long, conveyance by means of a 6-inch diameter pipe line, 1,100 feet long. The water is wanted for the irrigation of 100 acres of pasture and the watering of 200 head of cattle.

Protest

The Pacific Gas and Electric Company protests that diversions under the proposed appropriation would interfere with its own diversions under rights which it alleges to be as follows:

- "(a) The right to divert in the SW¹/₄ of Section 30, T23N R4E, MDB&M, at the Miocene headdam, 65 cubic feet per second from the natural flow of the Feather River and its tributaries above said headdam into the Miocene Canal for power use at Lime Saddle and Coal Canyon power plants and for public service use along the Powers Canal, with priority of 1865.
- "(b) The right to divert in the NEt of Section 25, T19N R3E, MDB&M, at the Western

Canal headdam, 60,000 inches from the natural flow of the Feather River and its tributaries above said headdam into the Western Canal for irrigation use, with priority of February 3, 1908."

Answer

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

- "... the appropriation of the water in question will not interfere with such downstream rights as now exist."
- "... proper irrigation in Crane Valley ... will insure a longer and more even flow during the dry periods of the year."
- "... the water level in Crane Valley has been receding gradually over a long period of years. Proper use of water resources will serve to raise the water level"
- "... the granite glacial formation which forms the drainage basin above the valley permits a very rapid runoff of snow water. The creeks are full in the spring, but there is little soil to provide seepage and steady flow in summer months."

"Crane Valley is the largest single area in this locality which can supply storage in its soil for surplus water. Proper irrigation will conserve water which is now being wasted."

"The water which is to be used can only flow as a return to the course of the stream from which it is taken and may be re-used downstream..."

"The protest of a downstream user that the granting of appropriations to upstream users 'might' interfere with existing downstream rights should not be considered proper grounds for protest."

"Application Number 15567 asks for the use of water resources which are entirely within the bounds of the property owned by the Crane Valley Land Company and in an area which was granted as an Agricultural Patent in the year 1879. Riparian rights guarantee the reasonable use of water resources which flow through the property."

Field Investigation

The applicant and the protestant with the approval of the Division having stipulated to the submittal of the application and protest upon the official records, a field investigation was conducted on November 19, 1954, by an engineer of the Division. The applicant and the protestant were represented during the investigation.

Records Relied upon

Application 15567 and all data and information on file therewith; Chico, Oroville, Paradise and Bidwell Bar quadrangles, United States Geological Survey; Water Supply Papers, Part 11, Pacific Slope Basins in California, United States Geological Survey; report of Sacramento-San Joaquin Water Supervision, Division of Water Resources.

Information Secured by Field Investigation

Extracts from the report dated December 1, 1954, covering the field investigation of November 19, 1954, are as follows:

"Balsam Creek originates in Butte County in Section 31, T25N, R5E, MDB&M, at an altitude of about 6,000 feet, flows in a southerly direction to a confluence with Big Kimshew Creek on the applicant's property near the southeast corner of Section 6 of the next lower township, thence about 8 miles in a southwestern direction to West Branch Feather River. The watershed area contributing to the flow at the proposed point of diversion is an estimated two square miles."

"In view of the location and altitude, the watershed receives considerable snowfall"

"Flow of Balsam Creek at the time of investigation was an estimated 1.0 cfs. Within the week prior to the investigation a storm had visited the area and some snow was still on the ground. According to Mr. Wilson the flow is considerable during the spring of the year, gradually decreases as the season progresses. He stated that at times surface flow of the creek is not continuous but will disappear underground and reappear at a lower point. Balsam Creek traverses the entire length of the place of use. The channel is relatively shallow and shows evidence of having changed its course several times over the years. Near the upper end of the place of use a tree had fallen over the stream and a considerable portion of the flow was being diverted easterly into a marsh or swamp and possibly the consumptive use therefrom during the warmer part of the year is considerable. Big Kimshew Creek also crosses the place of use further to the east and carries more water than Balsam Creek due to a larger runoff area but the supply from Balsam Creek is preferred due to the possibility of diverting by gravity whereas pumping may be required to divert from the other supply."

"To date no direct use of water has apparently been made for irrigation purposes from Balsam Creek or Big Kimshew Creek. Over the years a portion of the place of use has been overgrown by brush and timber and the applicant is presently in the process of clearing and restoring the land to its previous state. About 60 acres are clear and the growth is to be removed from possibly 40 acres more. The applicant's plans are apparently indefinite at this time

as to the exact manner in which the water will be diverted but in view of the irregularity of the ground a sprinkler system may be required to irrigate the full acreage. About 5 acres on the northwest side of the place of use appears to be subject to seepage from the side hill and it is doubtful whether any artificial irrigation thereon will be needed. Mr. Wilson contended that if the development is allowed the water now flowing into the swampy area can be salvaged. Furthermore, that as the valley is in effect a shallow underground reservoir considerable outflow seepage will develop later in the year."

"It is believed that there is presently no substantial use of water in the watershed above the protestant's Miocene Dam on West Branch This dam was reconstructed in Feather River. the winter of 1952-53 and is now a concrete arch structure about 15 feet high by about 200 feet long. Excess flow spills over the top of the dam. It is equipped with an outlet gate in its base and during the periods of low flow the only water apparently passing the dam is 1.0 miner's inch released for maintenance of fish life. Water is diverted into the Upper Miocene Ditch with an alleged capacity of about 65 cfs, conveyed several miles to the Kunkle Reservoir in Section 31, T22N, R4E, MDB&M, forebay for the Lime Saddle Powerhouse, used through that plant, picked up at the tailrace into the lower Miocene Ditch for reuse through Coal Canyon Powerhouse near the east quarter corner of Section 11, T20N, R3E, MDB&M. The water is then diverted into the Powers Canal (shown on Oroville Quadrangle, edition 1949, as Lower Miocene Canal) by the California Water Service Company and distributed by that utility to the City of Oroville and surrounding areas. The protestant's Wilenor ditch diversion from Concow Creek empties into the Upper Miocene Canal about one-half mile above Kunkle Reservoir."

"Mr. George L. Campbell, ditch tender for Pacific Gas and Electric Company, was interviewed during the course of the investigation. Mr. Campbell stated that he had been in charge of the Miocene Dam and Canals for the past nine years, that the canal normally carries between 64 and 65 cfs and that after about July 1 of each year the entire flow of West Branch Feather River is diverted into Upper

Miocene Canal with the exception of the above mentioned released for fish life. According to Mr. Campbell's records the lowest flow of the canal during 1954 was on October 31 when it decreased to 28.26 cfs. He stated that there was considerable leakage through the old Miocene Dam and that the new dam was constructed to take advantage of that loss. Mr. McCrea was of the opinion that the flow recorded at "West Branch Feather River near Yankee Hill" during the dry period of the year with the exception of the contribution from Concow Creek was principally leakage through the dam."

"Under present conditions there is apparently no shortage of water at the Western Canal Dam on the Feather River. Mr. McCrea inferred that any limitation of diversion at that point is, if anything, due to the capacity of the canal. Relative to the arrangements of Pacific Gas and Electric Company with Sutter Butte Canal Company, et al., and the shortage of water at Sutter Butte Dam as alleged by Attorney P. J. Minasian in his letter of October 28, 1954, in connection with Application 15625, Mr. McCrea stated that the rights of Pacific Gas and Electric Company with Sutter Butte Canal Company were determined in 1924 in a certain court action in Butte County and it was provided at that time that when the natural flow of Feather River was insufficient to meet the Sutter Butte Canal Company rights it was assumed that the additional water diverted by the Canal Company was Pacific Gas and Electric Company water released from Lake Almanor and that the Canal Company would purchase such water at a specified rate. Although the U.S.G.S. gage at Gridley Bridge may indicate to some degree the extent of unused water in Feather River, this flow is apparently stored water as well as natural flow and therefore the gage may show unappropriated water insofar as other users are concerned while at the same time Sutter Butte Canal Company may be purchasing water from Pacific Gas and Electric Company"

"... it was the conclusion of the protestant's representatives that the proposed place of use is undoubtedly riparian and the protestant would interpose no objection to use of water by the applicant under that claim of right. In keeping with the

established policy of the protestant they believed that the protest should be maintained as it was their belief that during several months of the year no unappropriated water exists in the source."

Extracts from a memorandum dated September 20, 1955, covering a field visit to secure additional information in the same matter, are as follows:

"As instructed ... I made a field trip to Crane Valley, September 15, to determine the flow characteristics"

"Kimshew Creek is flowing slightly at the upper end of Crane Valley. At a point about 1/2 mile above ... Balsam Creek the flow disappears ... and the creek is dry except for small pools to a point about 100 yards above Balsam Creek where it reappears. The flow of Kimshew Creek immediately above and below Balsam Creek was measured at 0.04 cfs with no measurable inflow from Balsam Creek. Flow then appears to remain about constant to the lower end of Crane Valley where an unnamed tributary contributes about 1/4th cfs. The flow at Snows Mine road was estimated at 3/4 cfs."

"Balsam Creek is flowing slightly above a point approx. 1000 feet above ... Kimshew Creek. The flow then disappears into the streambed, except for small pools, and is completely dry in about a 200 foot section near its confluence with Kimshew Cr. There is a large pool immediately above Kimshew and a slight amount of water from this is seeping into Kimshew Creek."

"About 1/2 inch of rain had occurred on 9/14 ... but Mr. Thomison (Wilson ranch caretaker) said he could detect no increase in the Kimshew Creek flow. He said that before the rain and since about July 15 Balsam Creek had been completely dry to a point 1000 ft. above Kimshew Cr. The Division of Forestry stated that Kaiser, Kimshew and Little Kimshew Creeks have never been observed dry at road crossings."

"It is my conclusion that there is continuous flow from Kimshew Creek in Crane Valley to the West Branch of the Feather River all year. The flow is considerable in the spring and gradually decreases to its present amount, plus or minus, about the last of July. It appears that Balsam Creek flow into Kimshew Creek ceases about the middle of July or possibly later in a normal water year, except for possible underground seepage."

Other Information from Division Files

River distances downstream from the applicant's proposed point of diversion, in miles, as scaled from maps of the locality, are as follows:

To Kimshew Creek	0.7
To West Branch Feather River	8
To head of Upper Miocene Canal	16
To North Fork Feather River	31.3
To Western Canal Company intake	51.1

The source designated West Branch of North Fork
Feather River in Application 15567 is called West Branch
Feather River in Quadrangles and Water Supply Papers of the
United States Geological Survey.

According to Reports of Sacramento-San Joaquin Water Supervision, Division of Water Resources, all diverters from Feather River below the junction of West Branch Feather River therewith have had full opportunity in recent years to divert their apparent requirements.

The records of the Division disclose no diversions from Balsam Creek, Kimshew Creek or West Branch Feather River

except the diversion from the last named stream, by Pacific Gas and Electric Company, at Miocene Dam.

Discussion

In view of the protestant's apparent right to divert enough water at Miocene Dam to fill Upper Miocene Canal to capacity it is apparent that when the flow of West Branch Feather River recedes below the amount necessary to satisfy that right, unappropriated water ceases to exist. Until that time, which the report of field investigation indicates to be about July 1, the taking of water as proposed in Application 15567 evidently cannot injure the protestant.

is tributary via Kimshew Creek to West Branch Feather River, the waters of Balsam Creek are not subject to appropriation insofar as those waters reach Miocene Dam. Flow below the junction of Balsam and Kimshew Creeks is continuous, hence the question narrows to a consideration of the approximately 0.7 mile reach of Balsam Creek between the proposed point of diversion thereon and its junction with Kimshew Creek. In the reports of field investigation there is mention of discontinuity of flow in Balsam Creek, of cessation of discharge from Balsam Creek into Kimshew Creek after about July 15, of occasional slight flow at certain points on Balsam Creek, of the

existence of small ponds along the Balsam Creek stream bed and of a large pool in the same stream bed just above its junction with Kimshew Creek, and of some seepage from the large pool into Kimshew Creek. These circumstances indicate that the flow passing the proposed point of diversion after about July 1, when supply becomes deficient at Miocene Dam, is insignificant in amount, too small usually to reach Kimshew Creek, too small to serve the applicant usefully.

Conclusion

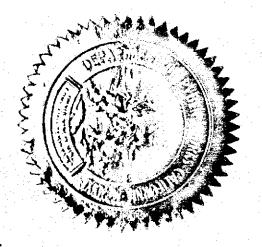
Unappropriated water usually exists at the proposed point of diversion until about July 1 of a normal year but not in significant amounts thereafter. Such water, when it does exist, may be taken and used beneficially by the applicant, in the manner proposed in the application, without injury to any downstream user. In view of these circumstances it is the opinion of this office that Application 15567 should be approved and permit issued, subject to the usual terms and conditions, but with diversions thereunder limited to periods extending from about May 1 to about July 1.

ORDER

Application 15567 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 15567 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 May 1 to about July 1 of each year.

WITNESS my hand and the seal of the Department of Public Works of the State of California this 16th day of January, 1956.



HARVEY O. BANKS

STATE ENGINEER

L/ C. Jopson

Principal Hydraulic Engineer