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 15657 by J. W. Dieterich to Appropriate Water from Dutch Ravine, Tributary to Auburn Ravine, in Placer County, for Irrigation and Stockwatering Purposes.

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Decision A 15657 D 849

Decided February 15, 1956

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In Attendance at Investigation Conducted by the Division of Water Resources on May 24, 1955:

Joe Varni	Applicant's ranch manager
T. R. Chamberlain, Jr.	Applicant's attorney
Daphne J. Rich	Protestant
Robert Hopkins, Office Engineer M. H. Shinn, Placer Division Representative	Representing the protestant Nevada Irrigation District
K. L. Woodward Senior Hydraulic Engineer Division of Water Resources Department of Public Works	Representing the State Engineer

Also present - Edward C. Greiner, Assistant Hydraulic Engineer, Division of Water Resources

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DECISION

General Description of the Project

The application initiates an appropriation of 0.18 cubic foot per second, year-round, from Dutch Ravine, tributary to Auburn Ravine, in Placer County. The water is to be diverted at a point within the SW¼ NE¼ of Section 23, T12N R7E, MDB&M, and utilized for irrigation and for the watering of 84 head of cattle, on a 34-acre pasture located within the NE¼ of the same Section 23. Diversion is to be effected by pumping, conveyance by means of 600 lineal feet of 4-inch diameter steel pipe. The applicant claims to own both the diversion site and the place of use. He claims no other water right except a riparian right.

Protests

The Nevada Irrigation District protests that approval of Application 15657 would mean a reduction of and interference with the supply which it obtains from Dutch and Auburn Ravines. It states that water from said sources is used in irrigating land in the NW¼ of Section 15 and in the NE¼ of Section 16, T12N R7E, its diversion point being located within the SW¼ NE¼ of the same Section 15, that water is diverted from April 1 to November 1 of each year.

Robert P. Rich and Daphne J. Rich protest the application, stating that the flow in Dutch Ravine is very small at times, that

they (the protestants) claim a right under an old mining appropriation to divert 30 inches of water year-round, that they use said water from Dutch Ravine for pasture irrigation, "house water" and stockwatering. They state further that their diversion heads at a point within the NW¼ of Section 23, T12N R7E, MDB&M, and that their protest may be disregarded and dismissed if sufficient water is left in the ravine to satisfy their needs and to support fish and other wildlife.

Answers

The applicant answers the protests by denying that the appropriation he seeks will dry up Dutch Ravine and asserting that sufficient flow for the protestants' purposes will remain therein at all times. He asserts that according to his belief the major portion of the flow reaching his proposed point of diversion is return flow of water purchased by him from Caperton Ditch of Pacific Gas and Electric Company and utilized on his land.

Field Investigation

The applicant and the protestants, with the approval of the Division having stipulated to the submittal of the application and protests upon the official records of the Division, a field investigation was conducted on May 24, 1955, by an engineer of the Division. The applicant and the protestants were present or represented during the investigation.

Records Relied Upon

Applications 4597, 6529, 7457, 12944, 15657 and all information on file therewith; Auburn and Markham Ravine Quadrangles, United States Geological Survey; Reports of Sacramento-San Joaquin Water Supervision, Division of Water Resources.

Information Secured by Field Investigation

The report dated June 9, 1955, covering the field investigation of May 24, 1955, contains statements to the following effect:

> Dutch Ravine heads at a point in the Sierra Nevada foothills about one mile south of Auburn, at an elevation of about 1,400 feet, flows westerly and northwesterly some 6.5 miles to its junction with Auburn Ravine.
>
> Rainfall at Newcastle occurs mainly in late fall, winter and early spring and has ranged from 16.63 to 48.05 and averaged 32.14 inches.
>
> Much of the water passing the gaging station on Auburn Ravine at Highway 99 E has been introduced by Nevada Irrigation District from foreign sources, for supply to downstream customers.
>
> Flow at Auburn Ravine has been measured at Highway 99 E crossing, south of Lincoln, since 1947.
>
> Flow in Dutch Ravine derives mainly, during irrigation seasons, from return flow, erratic in occurrence, from irrigated lands served by Pacific Gas and Electric Company ditches.
>
> Applicant Dieterich allegedly purchases 20 miner's inches from Pacific Gas and Electric Company and was irrigating at time of investigation. Runoff from his operations alone at time of investigation equaled or exceeded the flow he seeks to appropriate. According to Mr. Varni return flow in two draws on applicant's property in July or August of 1954 measured 14 miner's inches.
>
> The investigator observed flows of 2.8 cubic feet per second on May 13 and 4.2 cubic feet per second on May 24, 1955, in Dutch Ravine, at the applicant's property.

Auburn Ravine heads about two miles north of Auburn. It is fed in part by effluent from a sewage disposal plant at Auburn, in part by return flow from irrigated lands. Flow in Auburn Ravine above Wise powerhouse (Pacific Gas and Electric Company) some two miles below Auburn, on May 24, 1955, was four cubic feet per second. Auburn Ravine also receives water from the Pacific Gas and Electric Company via the tailrace of Wise power plant and via one Ophir Ditch (carrying Rock Creek water); such water in general is intentionally introduced into Auburn Ravine for service to customers of Nevada Irrigation District - mainly rice growers west of Lincoln. On May 24, 1955, according to Mr. Shinn, Nevada Irrigation District was receiving 85 cubic feet per second at Wise powerhouse and three cubic feet per second from Ophir Ditch.

Diversions from Dutch Ravine as observed on May 24, 1955, were:

Above Highway 40: Three domestic diversions, based apparently upon riparian rights.

Below Highway 40: A diversion by the protestants Rich, a diversion by gravity of some 0.75 cubic foot per second, for the irrigation of approximately 75 acres of pasture and hay; the Riches apparently anticipate no shortage but wish assurance that shortage will not result from the applicant's proposed appropriation. Also below Highway 40:

The Newcomb Ditch, which heads within the SE¼ NW¼ of Section 15, T12N R7E, MDB&M, and diverts about 0.75 cubic foot per second - an old diversion, probably under an old appropriative right.

Diversions from Auburn Ravine between Auburn and Lincoln, by purchase from Nevada Irrigation District, according to Mr. Shinn, aggregate 14 miner's inches. In addition, within the same reach, there is the diversion under Application 4597, License 948 (Mulligan) of 0.15 cubic foot per second from May 15 to October 15 and two diversions by Nevada Irrigation District, one of the latter being at the Auburn Dam (in NE¼ of Section 14, T12N R7E, MDB&M) and the other at the Hemphill Dam (within NW¼ NE¼ of Section 13, T12N

R6E, MDB&M) under Application 6529 Permit 5805. The capacity of the Hemphill Ditch is about 6.0 cubic feet per second.

Information from Division Files

A tabulation showing, for the years 1950, 1951, 1952 and 1953, releases into Auburn Ravine at Wise powerhouse, diversions into Auburn Ravine Canal and diversions into Hemphill Ditch, was furnished by letter from Nevada Irrigation District dated June 6, 1955. The data contained in the tabulation are as follows:

RELEASES AND DIVERSIONS

Month	Releases to Auburn Ravine @ Wise P.H. in Ac. Ft.				Diversion to Auburn Ravine Canal @ Head in Ac. Ft.				Diversion to Hemphill @ Head in Ac. Ft.			
	1950	1951	1952	1953	1950	1951	1952	1953	1950	1951	1952	1953
Jan.	0	0	0	0	0	207	445	0	0	0	0	0
Feb.	0	0	0	0	0	0	0	0	0	0	0	0
March	0	0	0	0	0	462	0	1053	0	0	0	0
April	0	39	274	870	854	737	1019	1215	48	48	63	131
May	2015	3804	3626	3591	2039	1803	2265	1846	100	100	131	267
June	4961	4987	4434	3763	2543	2730	2776	*2683	97	97	126	263
July	5386	5159	5394	5224	2905	2871	2941	*2906	100	100	131	263
Aug.	5385	5105	5416	5211	2806	2904	3031	2572	100	100	131	267
Sept.	4159	3855	4354	4170	2398	2441	2682	2418	97	97	126	263
Oct.	1843	1943	1808	1565	1555	1683	1950	1910	50	50	66	133
Nov.	55	0	246	339	750	0	0	295	0	0	0	0
Dec.	0	0	0	0	426	376	0	* 401	0	0	0	0

* No record - averaged same months of previous years.

Flows in Auburn Ravine at the gaging station designated "Auburn Ravine at Highway 99 E," in acre-feet, according to Reports of Sacramento-San Joaquin Water Supervision, Division of Water Resources, for the calendar years 1950 through 1953, have been as follows:

Month	1950	1951	1952	1953
January	4841	11500	16580	8277
February	5365	6228	7500	2118
March	3031	5584	9933	4114
April	1766	694	1611	3273
May	3455	4255	2558	3293
June	3118	3604	3205	2567
July	4483	3955	2696	4316
August	3911	4020	2940	3707
September	2111	1595	1875	1654
October	1197	1695	451	558
November	11110	2586	792	1426
December	13810	7020	3245	1620

This gaging station is located directly south of the town of Lincoln. It is approximately 2.5 ravine-miles below the head of Hemphill Ditch, approximately 7.0 ravine-miles below the junction of Dutch and Auburn Ravines.

Filings to appropriate from flow occurring in Auburn Ravine or branches include the following:

Application 4597, Permit 2232, License 948, Mulligan, for 0.15 cubic foot per second, May 15 to October 15, diverted from Auburn Ravine at a point within the SE¼ SW¼ of Section 9, T12N R7E, MDB&M, for irrigation.

Application 6529, Permit 5805, Nevada Irrigation District. 10 cubic feet per second, April 1 to December 1, diverted from Auburn Ravine at a point within the NW¼ NE¼ of Section 13, T12N R6E, MDB&M, for irrigation. According to memorandum covering field visit on July 22, 1955, by an engineer of the Division, some 400 acres are irrigated under Application 6529 of which about 107 acres are in rice, the remainder being permanent pasture.

Application 7457, Permit 4192, License 2046, Hardin, 2.5 cubic feet per second, April 1 to April 30, diverted from Auburn Ravine at a point within the SE¼ NW¼ of Section 28, T12N R5E, MDB&M, for irrigation and stockwatering. An extract from a letter dated March 31, 1939, signed Chas. T. Law, Engineer, Nevada Irrigation District, is as follows:

> "Auburn Ravine, in its natural state, dries up at a point somewhere between Lincoln and Dr. Hardin's property and all points below on or before May 1 and there is no water there for diversion unless Pacific Gas and Electric Company or Nevada Irrigation District discharge water into the stream. Several years prior to the time District took over the Gold Hill system in 1933 Pacific Gas and Electric Company wasted considerable quantities of water down Auburn Ravine from its South Canal. After the South Canal was rebuilt Pacific Gas and Electric Company discontinued discharging water into Auburn Ravine and it reverted to its natural state as above described until District began serving customers in 1934, since which time we have served water each year, both through Dr. Hardin's property and other customers further down, using the channel of Auburn Ravine to conduct our water to these customers. The water is released just below Wise powerhouse and regulated to the demand."

Application 12944, Permit 7923, Zasso, 0.31 cubic foot per second, year-round, diverted from Dutch Ravine at a point within the SE¼ NW¼ of Section 23, T12N R7E, MDB&M, for irrigation and stockwatering.

Auburn Ravine Canal heads on Auburn Ravine at scaled distances of about 9.0 ravine-miles above "Auburn Ravine at Highway 99E", 6.5 ravine-miles above Hemphill Dam, 1.5 ravine-miles above the mouth of Dutch Ravine, 3.5 ravine-miles below Wise power plant. Flows diverted by Nevada Irrigation District into Auburn Ravine Canal appear to be made up of a part of the water released at the powerhouse tailrace plus such other flow

as may occur in Auburn Ravine. According to a purported (but unauthenticated) copy of an agreement in Division File No. 212.4, Nevada Irrigation District acquired from Pacific Gas and Electric Company, on or about May 5, 1933, among other things, a right to divert through Auburn Ravine Canal "all of the natural flow of water in Auburn Ravine up to 400 statutory miner's inches".

Discussion

The flow in Dutch Ravine, the tributary of Auburn Ravine from which the applicant seeks to appropriate, apparently exceeds somewhat the demands of water users who are served directly from that source and the objection by the protestants Rich is therefore not a bar to approval of the application.

The flow of Auburn Ravine at the protestant Nevada Irrigation District's intake under Application 6529, the basis of that protestant's objection to Application 15657, has been much more than enough to satisfy rights under Application 6529 but that flow during irrigation seasons consists largely of water purchased by Nevada Irrigation District to supply customers west of Lincoln and therefore to that extent and for the purposes of this Decision may be presumed not to be subject to appropriation. The protestant district contends that the diversion proposed by the applicant will force it (the district) to supply the place of use under Application 6529 with purchased water and the data submitted by district letter dated June 6, 1955, appears to support that contention.

In Auburn Ravine or in any reach thereof, as in other similar situations, total outflow equals total inflow. The hydrologic equation applicable to Auburn Ravine above the gaging station at Lincoln may be written:

$$G + A + H + L = I + W + T$$

where G = flow passing the gage
A = diversion to Auburn Ravine Canal
H = diversion to Hemphill Ditch
L = other channel losses above the gage
I = inflow from above Wise powerhouse
W = inflow from Wise tailrace
T = inflow from tributaries between gage and powerhouse

Transposing terms,

$$G - W = I + T - A - H - L$$

When the left hand member of the equation as last written is positive the right hand member must be positive also, surface inflow is more than enough to satisfy demand and offset channel losses and unappropriated water exists. Conversely when W exceeds G both members of the equation are negative, surface inflow (I and T) is less than enough to satisfy demand (A, H and L) and unappropriated water may be presumed not to exist. Comparison of records of flows passing the gage at Lincoln (G) with records of flows entering Auburn Ravine from the powerhouse tailrace (W) indicates that, during the four years of available record, G has exceeded W and unappropriated water has therefore existed in all of the months of November through April and in two of the months of May, only.

The apparent nonexistence of unappropriated water in Auburn Ravine from about mid-May until about the end of October necessitates denial of Application 15657 insofar as said application contemplates appropriation during that approximate period. Such denial does not affect whatever legal right applicant may have to recapture water purchased by him from Pacific Gas and Electric Company before it escapes from his land. While on applicant's land and presumably subject to further use by him the purchased water is not unappropriated and therefore it is the view of this office that a permit could not properly be issued to applicant for further use of such water.

Conclusion

The data indicate that unappropriated water ordinarily exists from about November 1 of each year until about May 15 of the next, at the point at which the applicant seeks to appropriate, that it does not ordinarily exist at other times and that when it does exist it may be taken and used beneficially and without injury to any other diverter supplied from the same source.

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ORDER

Application 15657 for a permit to appropriate water having been filed with the Division of Water Resources as above stated, protests 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 15657 insofar as it relates to diversions from about November 1 of one year to about May 15 of the next be approved and that a permit be issued, subject to such of the usual terms and conditions as may be appropriate.

IT IS FURTHER ORDERED that Application 15657 insofar as it relates to diversions from about May 15 to about November 1 be denied.

WITNESS my hand and the seal of the Department of Public Works of the State of California this 15th day of February 1956.

HARVEY O. BANKS, STATE ENGINEER

By _____
L. C. Jopson
Assistant State Engineer