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 15629 by Elizabeth G. and Allan A. Whittle to Appropriate Water from Elder Creek Tributary via Conn Creek to Napa River in Napa County for Irrigation Purposes.

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Decision A 15629 D 836

Decided September 8, 1955

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In Attendance at Investigation Conducted by the Division of Water Resources on November 12, 1954:

Allan G. Whittle	Applicant
K. L. Woodward Associate Hydraulic Engineer Division of Water Resources Department of Public Works	Representing the State Engineer

n.b.-- The protestant did not participate in the investigation.

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DECISION

Substance of the Application

The applicants seek to appropriate 0.5 cubic foot per second, the water to be diverted between May 1 and October 31 of each year from Elder Creek, a tributary of Conn Creek, in Napa County. They propose to divert at

either or both of two points, approximately one-half mile apart, located respectively within the NE¼ NE¼ of projected Section 27 and the SW¼ NW¼ of projected Section 26, T8N R4W, MDB&M. The water is to be used for irrigating a total of 11 acres of alfalfa, 20 acres of general crops, and 11 acres of pasture. Of the area to be irrigated, 35 acres are to be served from the uppermost proposed point of diversion, seven acres from the lowermost. The applicants state that they own both the sites of their proposed diversion and the land that they propose to irrigate. They claim no other water right or source of water supply than the one sought in the application.

Protest and Answer

Beaulieu Vineyard protests the application, contending that the diversions therein proposed will reduce the ground water supply available to certain lands, including its own, below Conn Valley Dam. It states that it owns lands in projected Sections 10, 11, 14 and 15 of T7N R5W, MDB&M, that it presently irrigates five or six acres of young grapevines at a nursery, that its needs for water will increase, that it obtains water by pumping from underlying ground water, that it is entitled to so pump by virtue of riparian and appropriative rights, rights as overlying owner and rights recognized by the Division in the latter's action in

connection with Application 10990. It states that its protest may be disregarded and dismissed if applicants will limit storage to periods between November 1 and May 1 and will not divert at any time when inflow into Conn Valley Reservoir is less than 10 cubic feet per second.

In answer the applicants deny all of the protestant's allegations and state that they will not agree to any of the conditions that the protestant proposes.

Field Investigation

The applicants 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 12, 1954, by an engineer of the Division. At the investigation one of the applicants was in attendance; the protestant was unrepresented.

Records Relied upon

Applications 10990, 13943, 15451 and 15629 and all data and information on file therewith.

Information Secured by Field Investigation

Extracts from the report dated May 19, 1955, covering the field investigation of November 12, 1954, are as follows:

" ... a field investigation was made by the writer on November 12, 1954. The investigation included a visit to the applicants' proposed project and an inspection of the stream system between the applicants' place and Conn Valley Reservoir. Allan A. Whittle, one of the applicants, participated in the investigation. Although notice of the investigation was given to the protestant ... no appearance was made on its behalf. Observations of water conditions were also made by the writer on April 13 and April 27, 1955, and by J. V. Scammon, Associate Hydrographer of this office, on May 11, 1955."

"Elder Creek heads at an elevation of about 1500 feet above sea level on the south slope of Baldy Mountain of the Coast Range in Section 15, T8N, R4W, MDB&M, flows in a southeasterly direction about three miles through Elder Valley thence makes an abrupt turn to the west and flows about one mile farther to a junction with Sage Creek. Immediately below this junction Sage Creek enters Sage Canyon, a steep, narrow, heavily wooded ravine, and continues a total of about four miles south thence west where it emerges into Chiles Valley at the head of Conn Valley Reservoir, the municipal water supply for City of Napa. The watershed above the upper proposed point of diversion is about one and one-half square miles, is fairly well covered with live oak trees, a scattering of pine trees, and willow trees along the stream channel."

"Construction of the Matheson dam (Application 13943), downstream and adjacent to the applicants' property, was started about the first of September 1954 and completed in about 60 days. It is an earth-fill structure about 25 feet high with a 10 inch steel outlet pipe encased in reinforced concrete. Spillway is in the left abutment of an auxiliary dam opposite the right abutment of the main structure. According to the files of the Supervision of Dams a cutoff trench was excavated to a depth of about 12 feet. The reservoir as completed has a capacity of about 90 acre-feet."

"According to a memorandum (in Dam File 1413) by the Division engineer supervising the construction of the Matheson dam, on December 6, 1954, 'the rains to date have produced practically no runoff

from the watershed . . . The main stream is not flowing and only a small puddle has accumulated in the reservoir.'"

"On April 13, 1955, and again on April 27, 1955, the writer observed that the Matheson dam contained only approximately 5 acre-feet of water. No water had been released through the dam since its construction. J. V. Scammon, Associate Hydrographer of this office, on May 11, 1955, estimated 5 gpm was reaching the Matheson dam although no diversion was then being made by the applicants. Seepage through the dam was only about 2 or 3 gpm."

"A flow of an estimated 0.1 cfs was observed at each of the proposed points of diversion on November 12, 1954, with several hundred feet of dry channel in between. This was entirely rising water on the applicants' place coming from springs or seepage from the sides of the channel and was disappearing underground at a point some distance above the Matheson dam."

"In view of the conditions of stream flow observed at various times by engineers of this office, it is believed that little or no water would reach beyond the Matheson dam site except during and immediately after periods of heavy precipitation, and even in the absence of any intervening obstruction in the stream, little interference could possibly occur to downstream users in the watershed should the applicants divert during the May 1 - October 31 period requested."

" A concrete dam about eight feet high by about twenty feet long has been constructed at the upper point of diversion and a sump excavated off of the main channel with a connecting ditch to create a regulatory reservoir. Water is to be backed into the sump by the dam and rediverted by means of a portable sprinkler system. The lower point of diversion will be immediately above a concrete abutment bridge on the property with the abutments supporting timber flashboards. Diversion from the stream by the applicants prior to the investigation had been made for the irrigation of

about 0.25 acre of garden. No other source of supply for irrigation of the extent contemplated is available."

"The land to be irrigated is adjacent to the stream and undoubtedly riparian thereto. The applicants have sufficient irrigable land to utilize the amount of water requested. However, in view of the alleged limited supply in the stream during the latter part of the irrigation season, Mr. Whittle indicated that the entire 45 acres listed in the application will in all probability not be developed."

"Domestic use at the Whittle home and water for a large flock of turkeys is supplied from a spring on the property. Other animals on the ranch drink directly from Elder Creek."

"Water supply for the Matheson ranch will apparently be obtained from stored waters in the reservoir and according to Mr. Whittle, Mr. Matheson had stated that he has no objection to the proposed project. During the May 11, 1955, visit water conditions were discussed with Mr. Matheson and no objections were voiced at that time in regard to the application. There is only one ranch below Matheson and above the head of Sage Canyon. The ranch is unirrigated and only use of water is possibly for stock water directly from the creek. ... Sage Canyon to Conn Valley Reservoir is very precipitous and heavily wooded and appears to be completely absent of any development which would be interested in the Sage Creek for a water supply."

Other Information from Division Files

Application 10990 Permit 6960 authorizes the City of Napa to divert 35 cubic feet per second from November 1 of each year to May 1 of the following year, plus 30,500 acre-feet per annum, collected during the same period, from Conn Creek at Conn Dam (Lake Hennessey), for irrigation, municipal and domestic purposes. The permit was issued subject to the terms of a stipulation providing, among other things, that the City, from November 1 to May 1, will pass through its reservoir up to 10 cubic feet per second of inflow from Conn Creek and tributaries and from May 1 to November 1 will pass that inflow in its entirety, for the purpose of maintaining ground-water conditions below Conn Dam.

Application 13943 Permit 9204 authorizes Alexander Matheson to appropriate 180 acre-feet per annum from an unnamed stream tributary via Sage Creek to Conn Creek at a point within the NW¼ SW¼ of projected Section 26, T8N R4W, MDB&M, the water to be collected between November 1 and May 1 and utilized for irrigation purposes. A report dated April 25, 1952, covering a field investigation made on October 4, 1951 in connection with Application 13943 contains statements as follows:

> "The source under the application is an unnamed stream in Elder Valley which flows southerly to Sage Creek and thence northerly to Chiles Creek."

"The watershed above the proposed dam site is moderately wooded, has an area of about 2.5 square miles and an average rainfall of about 33 inches."

"The source was dry at the time of this investigation and normally there is little or no flow except during storms and a while thereafter."

"Beaulieu Vineyard (a corporation) ... has installed a two-inch centrifugal pump which is directly powered by a 7.5 h.p. electric motor and pumps from an excavated sump on the edge of the Conn Creek channel."

"The pump, which has a rated capacity of 0.23 cfs, is used to irrigate 2.5 acres of nursery stock from May 1 to September 1."

"The pump is operated 24 hpd. for 2 days per irrigation and normally there are 7 irrigations per season."

"Domestic supply is obtained from a well 75 feet deep by means of a pump of 1,000 gph capacity."

Application 15451 Permit 9934 authorizes Inspiration Heights Mutual Water Company to appropriate 0.22 cubic foot per second from a source described as two unnamed springs or cienegas located within the SE¼ SE¼ of Section 7, T8N R5W, MDB&M, from October 1 of each year to July 15 of the next, for domestic purposes. The source is further described in the report covering a field investigation by an engineer of the Division on March 18, 1954, as "a cienega some 200 or 300 feet in diameter on a steep, heavily wooded slope of the canyon forming Conn Creek". The same report states:

"At the lower end of the cienega, water gathers into a channel and flows approximately 200 yards to Conn Creek."

The flow of Sage Creek has been measured at a point immediately above Conn Valley Reservoir (called also Lake Hennessey). Monthly flows past that point of measurement, according to data supplied by the City of Napa (filed with Application 10990), in cubic feet per second during the months of May, June, July, August, September and October, are reported to have been as follows:

Year	May	June	July	Aug.	Sept.	Oct.
1947	0.87	0.43	0.06	*	*	0.45
48	3.64	0.86	0.18	0.05	0.00	0.08
49	1.69	0.52	0.14	0.03	0.00	0.00
50	1.44	0.55	0.05	0.00	0.00	0.20
51	2.37	0.67	0.02	0.00	0.00	0.15
52	2.12	0.88	0.32	0.01	0.00	0.00
53	2.87	1.37	0.28	0.11	0.12	0.01
Average	2.14	0.75	0.15	0.03	0.02	0.13

* no record

The watershed above the City of Napa gage on Sage Creek contains roughly 14.75 square miles. Since about 2 square miles of that watershed lie above the points where the applicants Whittle seek to appropriate, the flow physically available to the applicants may be of the order of 2/14.75 or about 13.5% of the averages above

tabulated or about 0.29 cubic foot per second in May, 0.10 cubic foot per second in June, 0.02 cubic foot per second in July and in October, and less than 0.01 cubic foot per second in either August or September. Such flows over an average 6-month season would aggregate about 26.7 acre-feet.

The stipulation entered into by the City of Napa in connection with protests against Application 10990 also provided that in order to facilitate the maintenance of groundwater levels below Conn Valley Dam, the City should drill and maintain certain wells and read and record water levels therein. One such well, designated as Test Well No. 2, is located on the Beaulieu Vineyard property about 500 feet westerly of Conn Creek and about 3½ miles below Conn Valley Dam. According to records supplied by the City of Napa the elevations at which ground water stood at that well have ranged in recent years as follows:

Year	Maximum	Minimum
1946	137.0	129.6
1947	137.1	130.8
1948	136.8	132.0
1949	137.1	132.8
1950	*	*
1951	141.6	133.5
1952	143.4	133.2
1953	141.0	132.8

* no record

The flow of Conn Creek at "Conn Creek near St. Helena" -- a United States Geological Survey gaging station described as located in outlet pool at toe of Conn Dam -- evidently includes all spillage and/or releases from Lake Hennessey into the Conn Creek channel. According to the published records, flows in acre-feet past "Conn Creek near St. Helena" have been as follows:

Year	May	June	July	Aug.	Sept.	Oct.	Total
1946	264	84	0	0	0	0	348
1947	69	212	0	0	37	481	799
1948	402	406	460	139	0	262	1669
1949	226	460	398	329	357	249	2019
1950	55	352	343	28	34	0	812
1951	321	126	403	185	56	0	1091
1952	273	259	252	297	86	0	1167
1953	179	163	289	240	191	-	1062

Discussion

While the flow of Elder Creek at the applicants' proposed points of diversion evidently averages less than the 0.5 cubic foot per second applied for, some flow unquestionably exists. Flows passing the Sage Creek gage suggest that Elder Creek flows may have ranged from about 0.3 cubic foot per second in May to

practically nothing in August. The report of field investigation suggests that some slight flow such as the 0.1 cubic foot per second observed on November 12, 1954 may persist at certain points, through the season. While the flow of Elder Creek is undoubtedly less, most of the time, than the amount the applicants seek to appropriate, it may be supposed that the applicants will utilize, beneficially, such water as may be available to them.

In view of the investigator's statements to the effect that Permittee Matheson (just downstream from the Whittles) does not object to the project under discussion and to the effect that there are no diversions between the Matheson place and Lake Hennessey, it is apparent that no one along that reach of Elder and Sage Creeks can be injured by the appropriation sought.

Irrespective of what the flow of Elder Creek may be neither the protestant nor any other water user below Lake Hennessey can be injured by the proposed appropriation unless as a result thereof ground-water levels below that reservoir recede. It is not apparent that the appropriation that the applicants seek will cause recession of ground-water levels. The diversion of 0.5 cubic foot per second from Elder Creek -- if such diversion is possible -- might reduce average outflow from Sage Creek into Lake Hennessey by 0.5 cubic foot per second in May and June and it might eliminate such outflow during July,

August, September and October -- outflows in the 4 last-named months averaging less than 0.5 cubic foot per second. Even if the proposed appropriation should produce such extreme results the total reduction of flow reaching Lake Hennessey could not exceed about 2x30 (0.5+0.5+0.15+0.03+0.02+0.13) or about 80 acre-feet per average 6-month diversion period. Flows passing the United States Geological Survey gage on Conn Creek have varied by amounts much exceeding 80 acre-feet per like period yet the water level in the test well on the protestant's property has not receded seriously in any year of record and actually stood higher in 1953 than in 1946.

Conclusion

The data point to the conclusion that such flows as occur in Elder Creek at the applicants' described points of diversion may be taken and used beneficially in the manner proposed without appreciable effect upon the water supply reaching either the protestant or any other downstream user. In view of that conclusion it is the opinion of this office that the protest against Application 15629 is an insufficient basis for denial and that Application 15629 should be approved and permit issued, subject to the usual terms and conditions.

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ORDER

Application 15629 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 15629 be approved and that a permit be issued to the applicants, 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 8th day of September 1955

A. D. Edmonston
State Engineer