

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 11816 by the City of St. Helena to  
Appropriate Water from Bell Creek, Tributary to Napa River, in Napa  
County, for Municipal Purposes.

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Decision A. 11816 D. 760

Decided September 25, 1952

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Appearances at Hearing Held at Napa on April 17, 1952:

For the Applicant

City of St. Helena

Richard M. Starns, Jr.

For the Protestant

California Medical  
Missionary and Benevolent  
Association

(H. G. Crawford  
(Palmer and York, by  
(Lowell Palmer

Murel D. Elkins

Murel D. Elkins

EXAMINER - HARRISON SMITHERUM, Supervising Hydraulic Engineer, Division  
of Water Resources, Department of Public Works, for A. D. EDMONSTON,  
State Engineer.

Also Present - Kenneth L. Woodward, Associate Hydraulic Engineer, Division  
of Water Resources, Department of Public Works; and Carl Hilkner, Member,  
City Council, City of St. Helena.

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OPINION

General Description of the Proposed Development

The applicant seeks to appropriate 1 cubic foot per second,  
year-round, also 1800 acre-feet per annum, the latter to be collected  
between November 1 and May 31 of each season, from Bell Creek, a tributary

of Napa River, in Napa County. Diversion is proposed at a point within the SW $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 12, T8N R6W, MDB&M. Storage is to be effected by means of an earth dam 75 feet high by 350 feet long, which is to create a reservoir 68 acres in surface area and 1800 acre-feet in capacity. The project includes a 16 inch diameter cast iron conduit, 21,000 feet long. The water is wanted for municipal purposes, the place of use being described as the City of St. Helena and surrounding area.

#### Protest

The California Medical Missionary and Benevolent Association protests the application, representing that the diversion thereunder will deprive it of water now used or to be used for domestic purposes at St. Helena Sanitarium and for irrigation on Sanitarium property. The protestant claims both a riparian and an appropriative right. In connection with the latter right it states:

"Water from this stream has been used by the  
- - - Association and its predecessors in  
interest since about the year 1888. This  
appropriation has been in constant use since  
that date."

It asserts that its diversion heads within the SW $\frac{1}{4}$ SW $\frac{1}{4}$  of Section 13, T8N R6W, MDB&M and states that its protest may be disregarded and dismissed "if protestant can be assured of a sufficient water supply from said Bell Creek for present and future use with consideration being given to future expansion and development on the Sanitarium properties."

#### Answer

The answer to the protest contains statements to the effect that the St. Helena Sanitarium is included within the area that the City contemplates serving, that the Sanitarium does not make use of waters of Bell Canyon at any point downstream from the point of diversion contemplated under Application 11816, and that the Sanitarium therefore cannot be

injured but on the contrary will be benefited by the City's proposed development.

Hearing Held in Accordance with the Water Code

Application 11816 was completed in accordance with the Water Code and the Rules and Regulations of the Division of Water Resources and being protested was set for formal hearing under the provisions of Section 733(a) of the California Administrative Code, Title 23, Waters, on Thursday, April 17, 1952 at 10:00 o'clock A.M. in the City Council Chamber, City Hall, Napa, California. Of the hearing the applicant and the protestant were duly notified.

Discussion

The substance of the testimony adduced at the hearing of April 17, 1952 is as follows:

Richard M. Starns, Jr., the applicant's engineer, testified (pages 8 to 52 of transcript) to the effect that the City of St. Helena needs an estimated 929.4 acre-feet per annum now and will need an estimated 1258 acre-feet per annum by the year 1975, that the flow of Bell Creek during 1949, measured at a concrete weir 300 or 400 feet below the proposed point of diversion, was 2455 acre-feet, that the tributary drainage area is 3625 acres in extent, that rainfall for the calendar year 1949 totaled 20.46 inches, that the percentage of runoff was estimated to be 42.5 per cent, that rainfall for the last 8 years in the St. Helena area has averaged 32.06 inches, that runoff from the area tributary to the proposed dam is estimated to average 5510 acre-feet per annum, that sales of water not immediately needed, to agencies outside of St. Helena, would enable that city to amortize its project, that <sup>in</sup> investigating Bell Creek he could find but one diversion - a 2 inch pump - on that stream, that in 1949 no water was flowing at the projected dam-site during the months of August, September and October, that

the dam which the applicant proposes to construct is an earth-fill dam, 400 feet long, that its exact height is as yet undecided, that the estimated cost of the entire project is \$453,000, that it is feasible for the City of St. Helena to finance the project, that the dam itself will cost \$200,000, the land and rights of way \$46,000, the pipeline, in place, \$182,000, a chlorination installation \$5,000 and a booster pump \$10,000, that there are some additional cost items which include engineering, contingencies and legal, advertising and financing charges, that the financing of the project by means of revenue bonds was given consideration, that the general obligation bonding capacity of the City however is nearly sufficient for the purpose, and that another means of financing is by the formation of a Municipal Improvement District. With further reference to streamflow records the witness testified that the City has such records for 1950 and for part of 1951 as well as for the calendar year 1949, and will submit them. Counsel for the protestant sought to establish by questioning Witness Starns, as well as by stating the protestant's position in the matter (page 14 et seq. of transcript), that the applicant's cost estimates are incorrect, that the cost of the proposed development cannot be financed legally, and that the application should therefore be disapproved. The applicant's representative objected to financial questioning by counsel on grounds of irrelevancy. The examiner allowed the questioning to proceed subject to subsequent legal review.

Murel D. Elkins testified (pages 53 to 73 of transcript) that he owns property in Pratt Valley on which are located 3 wells, some 3/4 mile downstream from the applicant's proposed dam, and some 300 or 400 feet off-stream; and that he protests the application because he apprehends that a water-tight dam built across Bell Creek and extending down to bedrock will prevent or

greatly reduce the movement of percolating waters upon which he depends for the replenishment of his wells. He testified further that he has observed the behavior of Bell Creek for 32 years, that there is more water in that stream than is now being appropriated, that the Sanitarium pumps both from wells and from the creek, that he doesn't know the amounts pumped, that the Sanitarium is an institution and a community similar to a town, that it uses water for irrigation, domestic purposes and for purposes incidental to a community, that he doesn't know the acreage irrigated or the population served, that of his own wells one is 117 feet deep or more, one is 37 feet deep and one is a shallow well, that the water level in his wells fluctuates between 18 inches and 12 feet, both with reference to the top of the ground, that many ravines enter Bell Creek below the applicant's proposed point of diversion, that such ravines carry water in winter but at other seasons are usually dry.

The records of the flow of Bell Creek referred to in Witness Starn's testimony (summarized above) were transmitted to this office by letter dated April 23, 1952 and according to that letter a copy thereof was also furnished to Protestant's Attorney Lowell Palmer. The data contained in those records, after conversion from cubic feet, indicate flows in Bell Creek, in acre-feet, at the point of measurement (500 feet below the applicant's proposed point of diversion) to have been as follows:

<u>Month</u>	<u>1949</u>	<u>1950</u>	<u>1951</u>	<u>1952</u>
January	153.4	1547.5	5343.5	*
February	460.8	1669.8	4007.1	838.3
March	1373.4	147.7	955.7	2662.3
April	66.9	158.9	*	415.7****
May	25.5	164.1	*	*
June	24.6	79.4	*	*
July	1.9	0	*	*
August	0	0	*	*
September	0	0	*	*
October	0	0	*	*
November	73.0	1571.0	*	*
December	<u>275.6</u>	*	*	*
<b>Total</b>	<b>2455.1</b>	<b>5338.4**</b>	<b>10306.3**</b>	<b>3916.3**</b>
Flow stopped	July 12	June 15	*	*
Flow started	November 7	November 1	*	*

\* No record  
 \*\* Flow insofar as recorded  
 \*\*\* Flow during April 1 to 19 only

According to the data set forth in the preceding paragraph, flows occurring during January, February, March and December of the 4 years of record, insofar as recorded--flows during some of those months were not recorded - aggregated respectively 2263.2, 3365.0, 10306.3 and 3500.6 acre-feet. Those flows are more than enough to support a diversion to storage of 1800 acre-feet per annum as proposed in the application plus a direct diversion, as also proposed in the application, of 1 cubic foot per second, during those same 4 months. The data of the preceding paragraph also indicate that flow during July, August, September and October is either nil or extremely scanty and that during April, May, June and November it is sometimes plentiful but more often rather moderate.

The protestant apparently operates a considerable establishment, including St. Helena Sanitarium and facilities relating thereto. In its protest it asserts riparian rights and it states that use, which includes both domestic use and irrigation, has been continuous since about 1888. The protest also contains a description of its alleged point of diversion, but

omits mention of the extent of its use or of the amount of water to which it considers itself entitled. The protestant's presentation at the hearing also fails to cover the points last mentioned.

The data are insufficient for a rigorous analysis of the situation presented. The meager information that is available does indicate, however, that the protestant's uses are diversified, that they extend year-round, that they do not involve storage of flood waters except as a fraction of such waters percolates into ground storage and that the protestant's diversions from the surface flow of Bell Creek below the applicant's proposed point of diversion are not of an order greater than the capacity of a 2 inch pipe. Also, in the light of the circumstances just mentioned, the streamflow data indicate that unappropriated water exists in winter, and, to a limited extent, in spring and in late fall, but that it is practically non-existent in summer, the season in which the protestant's needs for water are greatest. Beyond doubt streamflow ordinarily exceeds the protestant's present needs during January, February, March and December by an amount in excess of the 1800 acre-feet which the applicant proposes to collect in storage annually, and in excess, during those four months, of the direct diversion of 1 cubic foot per second which the applicant also proposes. Beyond doubt streamflow during July, August, September and October is too scanty to support a new appropriation and, apparently, little if any unappropriated water exists in May or June, either. In April and November, according to the data, unappropriated water exists in some years and the protestant's requirements, for irrigation at least, are relatively small. Probably, on average, unappropriated water exists during the first half of April and the latter half of November.

Summary and Conclusions

Unappropriated water usually exists in Bell Creek during December, January, February and March. It also exists occasionally in April and November. Such water may be conserved and applied to beneficial use in the manner proposed in the application without injury to downstream users. In such permit as may be issued diversion to storage and direct diversion should both be restricted, for the protection of lower users, to periods commencing November 15 and ending April 15. Subject to such restriction and subject also to the usual terms and conditions it is the opinion of this office that Application 11816 should be approved.

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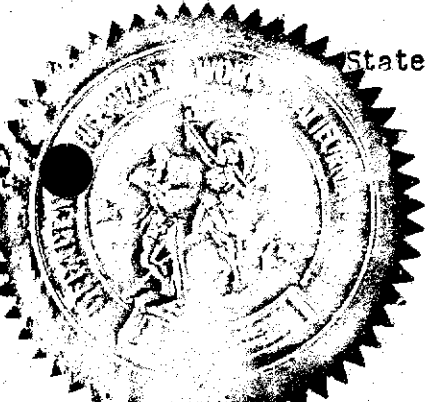
ORDER

Application 11816 for a permit to appropriate water having been filed with the Division of Water Resources as above stated, a protest having been filed, a public hearing having been held and the State Engineer now being fully informed in the premises:

IT IS HEREBY ORDERED that Application 11815 insofar as it relates to diversion from about November 15 to about April 15 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 authorization to divert under Application 11816 from about April 15 to about November 15 be denied.

WITNESS my hand and the seal of the Department of Public Works of State of California this 25th day of September 1952.

A circular seal with a serrated edge. The outer ring contains the text 'STATE ENGINEER' at the top and 'DEPARTMENT OF PUBLIC WORKS' at the bottom. The center features a figure holding a scale and a sword, with the word 'EUREKA' below it.  
A. D. Edmonston  
A. D. Edmonston  
State Engineer