

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

oOo

In the Matter of Application 15791 by Wayne E. Mayhew to  
Appropriate Water from Dry Creek Tributary to Napa River  
in Napa County for Irrigation Purposes.

oOo

Decision A 15791 D 846

Decided February 1, 1956

oOo

In Attendance at Investigation Conducted by the Division  
of Water Resources on February 23, 1955:

Gregory F. Chamberlain	Protestant
Theodore F. McFall	Protestant
Fred Wall	Property owner on Dry Creek
Ludwig Behnke	Property owner on Dry Creek
K. L. Woodward	Senior Hydraulic Engineer Division of Water Resources Representing the State Engineer

n.b. - The applicant was neither present nor represented at the investigation.

oOo

DECISION

Substance of the Application

The applicant seeks to appropriate 100 acre-feet per annum from Dry Creek, tributary to Napa River, in Napa

County, for irrigation purposes. The water is to be impounded behind a dam located within the SE $\frac{1}{4}$  SE $\frac{1}{4}$  of Section 25, T7N R6W, MDB&M; it is to be collected between October 1 of each year and July 1 of the next and utilized in irrigating 30 acres of pasture located within the SE $\frac{1}{4}$  SE $\frac{1}{4}$  of Section 25 and the NE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 36 of the same township. The dam is to create an on-stream reservoir 7.2 acres in surface area and 100 acre-feet in capacity. Irrigation is to extend from about May 1 to about October 30. The applicant asserts a riparian right; he claims to own both the land at the proposed point of diversion and the land upon which the water is to be used.

#### Protests

Theodore F. McFall protests that the appropriation sought by the applicant will stop the flow of water required for irrigation on his (the protestant's) property. He states that he diverts from Dry Creek at a point within the SE $\frac{1}{4}$  of Section 32, T7N R5W, by means of a centrifugal pump 150 gallons per minute in capacity, and that he irrigates permanent pasture from May to November of each year. He states in effect that his protest may be disregarded and dismissed if the applicant will refrain from interference with natural flow between May 1 and November 1.

Francis LeConte Chamberlain, Marie Louise Chamberlain, Gregory F. Chamberlain and Blanche Clark Chamberlain protest collectively that with the applicant's project in operation their irrigated pasture, truck garden and young trees would not survive. They claim to divert at 2 points within Section 4 of T6N R5W, MDB&M, under a riparian right. They state that they irrigate a total of about 7 acres and use a total of about 25 acre-feet each year, that irrigation extends from April to October, both inclusive, that their protest may be disregarded and dismissed if the applicant will divert only from November 1 to May 1. They state that present supply between July 1 and late October barely meets their irrigation needs.

#### Answers

In answer to the protests the applicant states in effect that not more than 20% of the total runoff from the watershed tributary to the protestants' properties enters Dry Creek above his dam site; that the 100 acre-feet which he seeks to appropriate represents not more than 10% of the annual flow of Dry Creek reaching his dam site; that during June, July, August and September there is no flow in Dry Creek above his dam site; that his proposed accumulation of winter flow cannot affect protestants' supply during summer months. The applicant's answers also contain the following statement:

"The undersigned applicant admits that during most of the dry season there is a small amount of water in Dry Creek on his own property, below the proposed reservoir site. At the present time this water is being used by the applicant, all or in part, by pumping from pools in the creek bed. As to this water, the applicant contends that he has riparian rights ...."

#### 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, a field investigation was conducted on February 23, 1955, by an engineer of the Division. The protestants were present or represented during the investigation; the applicant was neither present nor represented.

#### Records Relied Upon

Applications 631 and 15791 and all information on file therewith; Water Supply Papers and Rutherford, Yountville and Napa quadrangles, United States Geological Survey; Bulletin No. 5 - "Flow in California Streams" - Department of Public Works, Division of Engineering and Irrigation, 1923.

#### Information Secured by Field Investigation

According to the report of the field investigation of February 23, 1955, the watershed above applicant's dam site

is about 3 square miles in extent, ranges in elevation from 2,240 to 725 feet and is moderately wooded; the watershed above the diversions of the protestants Chamberlain is about 10.4 square miles in extent and is also predominantly hilly and wooded; the watershed tributary to the reach between applicant and protestants is steeper and more heavily wooded than that above the applicant; estimated flows at points along Dry Creek on February 23, 1955, were as follows:

Point	: Flow in cubic : feet per second
Proposed dam site	0.5
McFall ranch	4.0
Chamberlain ranch	5.0

The field investigation of February 23, 1955, also developed that the applicant pumps from Dry Creek under an alleged riparian right, below the point of diversion described in the application, for domestic use and for the irrigation of about 2 acres; that Protestant McFall diverts from Dry Creek for the irrigation of 2 acres of permanent pasture, waters some 20 head of sheep and owns 25 acres altogether, of which the minor portion, only, appears irrigable; that the Chamberlains divert from the creek at two points, employ pumps, buried pipe lines and sprinklers and irrigate a total of about 7 acres; that according to Mr. Chamberlain there is a flow of water

past his property throughout the year; that Mr. McFall is at present the only user between the applicant's dam site and the Chamberlain property but that farther down stream some 10 or 12 property owners, probably, depend on Dry Creek for a supply for domestic purposes and garden watering; that during the latter part of irrigation seasons surface flow ceases a short distance below the applicant's property but resumes above the McFall intake, that any flow reaching the Napa-St. Helena Highway is either lost in the channel farther downstream or flows into Napa River, that protestants are not averse to impounding of natural flow, as proposed by the applicant, up to the end of April but contend that during May and June the natural flow of Dry Creek is not in excess of the requirements of users farther downstream.

#### Other Available Information

Preceding the investigation of February 23, 1955 and subsequent thereto, flows in Dry Creek were observed by engineers of the Division as follows:

Date	Location	Flow*
February 7, 1955	Applicant's dam site	5.0
May 11, 1955	Applicant's dam site	0.3
do.	McFall ranch	2.9
do.	Chamberlain ranch	2.9
do.	Highway bridge	5.6
June 16, 1955	Applicant's dam site	0.0
do.	McFall ranch	0.4
do.	Mouth of canyon	0.79
do.	Highway bridge	0.015

\* In cubic feet per second.

Distances, according to maps of the locality, downstream from applicant's dam site to locations mentioned above, scale approximately as follows:

Location	Miles
Applicant's dam site	0.0
McFall ranch	2.2
Chamberlain ranch	3.3
Mouth of canyon	7.3
Highway bridge	9.8

The distribution of seasonal runoff of Napa River tributaries, which include Dry Creek (above elevation 180), is estimated in Bulletin No. 5 - "Flow in California Streams" - Department of Public Works, Division of Engineering and Irrigation, 1923, to average as follows:

January	36.2%
February	26.4
March	19.4
April	5.4
May	2.1
June	0.8
July	0.3
August	0.2
September	0.1
October	0.1
November	1.3
December	7.7

Seasonal runoff from tributaries of Napa River is estimated in the same reference to range from 1856 to 42 and to average 510 acre-feet per square mile.

Dry Creek is shown on United States Geological Survey quadrangles to be perennial from a point about 1.3 miles above, to a point about 6.9 miles below, the applicant's dam site and, except for that reach, to be intermittent. Some 12



miles below the applicant's dam site, Dry Creek enters Napa River. The quadrangles show Napa River to be perennial, yet its flow in summer diminishes to low values. The flow of Napa River is of record in Water Supply Papers, United States Geological Survey, at a point some 0.4 mile below Dry Creek, from November 1929 inclusive, through August, 1932. The record indicates mean flows in cubic feet per second during certain months of 1930, 1931 and 1932 to have been as follows:

Year	May	June	July	August	September
1930	23.5	6.10	1.14	0.1	0.1
1931	4.53	0.22	0.0	0.0	0.0
1932	14.9	5.99	0.47	0.1	--

Non-existence of unappropriated water in Napa River below Dry Creek is evidenced by complaints by holders of License 161 (Application 631) under which diversion of 0.44 cubic foot per second is authorized from Napa River, at a point roughly 1.5 miles below Dry Creek, from about May 15 to about October 15 of each season, for irrigation. A former holder of License 161 complained on June 13, 1939:

"Though my license ... permits normal irrigation of 35 acres, I have not at any time since ... 1933 irrigated more than a small amount of the allotted acreage."

The present holder of the license, in protesting an up-river

application (No. 13845), in 1950, asserted that supply was not enough for proper irrigation, that further reduction of supply would ruin his pasture.

Discussion

In view of the size, shape, topography and vegetal cover of the applicant's tributary watershed and in view of the estimated unit yield of watersheds tributary to Napa River and the time of occurrence of flow, amounts probably reaching the proposed dam site, during the proposed collection period, may be supposed to average somewhat as follows:

<u>Month</u>	<u>: Acre-feet*</u>
October	1.5
November	19.9
December	117.8
January	553.9
February	403.9
March	296.8
April	82.6
May	32.1
June	12.2

\*Area x average unit runoff x distribution factor.

It is evident that the collection of 100 acre-feet at the applicant's reservoir site presents no difficulty; that amount apparently could be collected in any single, normal month of December, January, February or March, and substantial though lesser amounts could be collected, apparently, in normal months of November and April. The protestants do not object to collection by the applicant after November 1 or before May 1 and it is not apparent that collection between those dates would injure any diverter below them. The protestants' objections together with the possibility that collection before November 1 and after April 30 might adversely affect other diverters appear to outweigh any advantage that the applicant would gain by an authorization to collect the flow occurring during October, May or June.

#### Conclusion

Unappropriated water exists in Dry Creek, at the point at which and in the amount which the applicant seeks to appropriate, during periods extending from November to April, both inclusive. Such water may be taken and used in the manner proposed in the application without apparent injury to the protestants or to other downstream users. The accumulation of flows occurring in May, June and October is not essential to the success of the applicant's project, is objectionable to the protestants and might at times affect them or other downstream users adversely. In view of the circumstances it is the opinion of

this office that Application 15791 should be approved subject to the usual terms and conditions and subject to the limitation of collection to periods extending from November 1 of each year to April 30 of the next.

oOo

ORDER

Application 15791 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 15791 be approved and that a permit be issued to the applicant, subject to such of the usual terms as may be appropriate and with collection in storage limited to periods extending from November 1 of each year to April 30 of the next.

WITNESS my hand and the seal of the Department of Public Works of the State of California this 1st day of February, 1956

HARVEY O. BANKS, STATE ENGINEER

By

  
L. C. Jopson  
Assistant State Engineer

