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

In the Matter of Application 14396 by the United States - Lassen National Forest to Appropriate Water for Domestic Purposes from Three Unnamed Springs Tributary to Mill Creek in Tehama County.

Decision A. 14396 D. 793
Decided June 3, 1954

In Attendance at Investigation Conducted by the Division of Water Resources at the Site of the Proposed Appropriation on September 29, 1953:

W. J. Brokenshire
District Ranger
Lassen National Forest Represents the Applicant

Verle M. Counts
Secretary
Coneland Water Company Represents the Protestant

K. L. Woodward
Associate Hydraulic Engineer
Division of Water Resources
Department of Public Works Represents the State Engineer
OPINION

General Description of the Project

The applicant seeks to appropriate 0.02305 cubic foot per second (approximately 10.3 gallons per minute) from three unnamed springs, located within Section 34, T29N R4E, MBR&M. The springs are tributary to Mill Creek, in Tehama County. The water is wanted for domestic purposes within what is known as Mill Creek Tract of Lassen National Forest. According to the application there were 80 summer homes within the tract when the application was filed, with 60 more in prospect. The project was said at that time to be 75 per cent complete, with full utilization contemplated by December, 1956, "or as new home sites are developed." Some of the water is to be piped to a nearby camp ground having accommodations for 100 persons. The development includes spring boxes at two of the springs and an earth and stone diverting dam 5 feet high by 25 feet long at the third, two redwood regulating tanks, one 10,000 and the other 5,000 gallons in capacity, and a miscellany of cast iron and galvanized iron pipe lines ranging from 4" to 1" in diameter and aggregating some 13,200 feet in length.

Protest

The Coneland Water Company protests the application, stating as a basis of its objection that during the height of the irrigation season that extends from June 1 to September 15 decreed rights allow it (the protestant) "the use of all water flowing in Mill Creek at the
Company's lower diversion dam". It claims a water right based upon "rights, court decrees and uses dating back and prior to 1914". As to the extent of present and past use of water from Mill Creek by itself or its predecessors it states:

"Farm land irrigation during the season of March through October on some 10,000 acres owned by some 450 individuals".

The protestant states that it diverts at two points, one of them being within the NE\(^2\) of Section 1, T25N R2W, MDB&M, and the other some two miles farther downstream. Other statements by the protestant are:

"We do not object to this small quantity of water being diverted during the less critical irrigation season (other than the months of June, July, August and September)."

"This protest may be disregarded and dismissed if the total flow of Mill Creek remains above 150 second-feet of water during irrigation season or if winter runoff water is impounded and stored for the applied for use."

"During the months of June, July, August and September the amount of water flowing in Mill Creek is critically low (under 130 sec.ft.). Whenever the Mill Creek flow drops below 130 sec. ft. (in the Los Molinos area) irrigation of farm lands by the users of this water must be curtailed in direct proportion to the drop in flow of Mill Creek. Should the quantities of water applied for be withheld from the natural flow of Mill Creek during irrigation season, the Los Molinos irrigation district will in many years find itself short that additional quantity of water and the crops of the area further curtailed in direct ratio to the quantity of water removed."

**Answer**

The applicant's answer, by letter dated August 22, 1952, reads in part:

"Our letter of June 9, 1952, amended the original application .... The entire use is for domestic purposes. This type of use has
been taking place on this area for many years, probably before the advent of the Conelands Water Company. Since public demand has indicated this type of use and the water has and probably will continue to be used, our filing was done to enable us to install a system which would provide the same amount of water as is now being used, but in an uncontaminated and safe condition. Most of this use will probably be considered as non-consumptive."

Field Investigation

The applicant and the protestant, with the approval of the Department, having stipulated to the submittal of the application and protest upon the official records of the Department, a field investigation was conducted on September 29, 1953, by an engineer of the Division. The applicant and the protestant were represented during the investigation.

Records Relied Upon

Application 14396 and all data and information on file therewith; also "Mineral" and "Tehama" quadrangles and Water Supply Papers relating to Pacific Slope Basins in California, United States Geological Survey.

Information Secured by Field Investigation

The report of the field investigation of September 29, 1953, contains, among other statements, the following:

"The (sources) under this application (are) three unnamed springs designated by the applicant as Springs A, B, and C. These springs are located a short distance above and north of State Highway 29 near the north boundary of Mill Creek Tract. Drainage is toward Mill Creek which is located one-quarter to one-half mile from the springs."

"Water at Spring A is collected into a short section of corrugated pipe (approximately 24" in diameter) set in a vertical position and conveyed approximately 350 feet through a 2" galvanized pipe to a 10,000 gallon wooden storage tank. Spring B, located a short
distance to the west of Spring A, is diverted into a 2" galvanized pipe by means of a low rock and earth dam and conveyed about 50 feet to the same storage tank previously mentioned. Overflow from the tank which represented the entire combined flow of Springs A and B was measured to be 12 gallons per minute. The soil at the springs and tank appeared to be fine decomposed lava and the overflow was disappearing into the ground at a point about 100 feet below the tank. According to Mr. Brokenshire the production of the springs was fairly constant from season to season."

"Spring C which is in effect a cienaga with water rising over a considerable area was estimated to be producing about 0.25 cubic foot per second at the time of the investigation. The water is collected in a small pool at the base of the seepage area by means of a low concrete dam. A 3" galvanized pipe leads a small portion of the flow to a 5,000 gallon wooden storage tank located about 60 feet from the dam and the remainder of the water flows downstream into Mill Creek. Overflow from the storage tank also discharges into the stream. The District Ranger indicated that Spring C also produced a constant flow through the year and that water therefrom reached Mill Creek on the surface even during the driest part of the year."

"The installation at Springs A and B furnishes the major portion of the requirements of the tract. The system was installed in 1950 and presently serves 60 fully plumbed homes. The system at Spring C was constructed in 1925 and presently serves 8 homes and a camp ground of 18 units. No lawns or gardens are existing within the tract and besides strictly household use no need of water is seen except for possible allying dust. All homes are required to install a septic tank and sewage disposal. It is proposed that use of water at the tract will increase in the future as additional homes are constructed but the rate of such increase cannot be estimated ...."

"Conelands Water Company which is a subsidiary of Los Molinos Mutual Water Company serves approximately 10,000 acres of land in the Los Molinos area. Contracts with the users call for 0.4 miner's inch for each acre served. The Company's water supply is obtained from Mill Creek and also from Antelope Creek, a stream originating in the mountains due east of Red Bluff and joining Sacramento River approximately one mile north of Mill Creek. According to Mr. Counts, the protestant serves 8,000 acres from Mill Creek and 2,000 acres from Antelope Creek with the period of maximum use normally extending from July 1 to August 15. After the latter date the needs of the Company decrease rapidly."
"Mr. Counts stated that he has been associated with Coneland Water Company since 1948 and to his knowledge the Company has never suffered from a shortage of water during that period. He indicated that the only purpose of filing a protest was to be on record of having prior downstream rights, that normally water is usually passing the Company's dams even during the period of maximum use and although he was not aware of the existence of the two cooperative gages being maintained on Mill Creek below the Company's dams the streamflow at these gages ... was a reasonable estimate of the water by-passing the dams. Mr. Counts further stated that the protestant is under no obligation to by-pass water for lower users and that the U. S. Fish Hatchery located about one mile northeast of Tehama ... obtains its water through the protestant's facilities."

**Information Secured from Other Sources**

Mill Creek, according to "Mineral" and "Tehama" quadrangles, United States Geological Survey, rises within Lassen Volcanic National Park, flows southwesterly and discharges into Sacramento River near Tehama. On the same quadrangles the river distance, from the applicant's project as described in the application to the uppermost of the protestant's 2 dams as described in the protest, scales about 38 miles. The protestant's two diversions from Mill Creek appear to be about 2 miles apart. About 0.7 mile below the lowermost said point of diversion Mill Creek divides into 2 channels. Channel distances from point of division to Sacramento River scale 1.5 miles via northerly channel, 2.0 miles via southerly channel.

The flow of Mill Creek has been measured by the United States Geological Survey at a station termed "Mill Creek near Los Molinos" and located about 0.6 mile above the protestant's uppermost intake and about 5 miles upstream from Sacramento River. The flow of Mill Creek has also
been measured at two Division of Water Resources and United States Bureau of Reclamation cooperative stations, one of these being located approximately 0.5 mile above the mouth of the northerly channel mentioned in the preceding paragraph, and the other approximately 0.8 mile above the mouth of the southerly channel.

According to Water Supply Paper 1181, United States Geological Survey, "Mill Creek near Los Molinos" drains an area of 134 square miles and its discharge which has been recorded continuously since 1928 has ranged from 49 second-feet to 23,000 second-feet and has averaged 270 second-feet. Since, according to the same reference, the discharge for the water-year 1949-50 averaged 251 second-feet, the discharge for that period evidently was approximately 251/270 or 93% of normal. Discharges during June, July, August and September of that slightly subnormal water-year, according to Water Supply Paper 1181, ranged and averaged (in second-feet) as follows:

<table>
<thead>
<tr>
<th>Month</th>
<th>Maximum Daily Mean</th>
<th>Minimum Daily Mean</th>
<th>Mean for Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>513</td>
<td>232</td>
<td>310</td>
</tr>
<tr>
<td>July</td>
<td>248</td>
<td>128</td>
<td>172</td>
</tr>
<tr>
<td>August</td>
<td>123</td>
<td>91</td>
<td>106</td>
</tr>
<tr>
<td>September</td>
<td>110</td>
<td>89</td>
<td>95.6</td>
</tr>
</tbody>
</table>

During the same 4-month period discharges at the cooperative stations, in second-feet, ranged and averaged as follows:
North channel, 0.5 mile above mouth:

<table>
<thead>
<tr>
<th>Month</th>
<th>Maximum Daily Mean</th>
<th>Minimum Daily Mean</th>
<th>Mean for Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>15</td>
<td>2.6</td>
<td>6.9</td>
</tr>
<tr>
<td>July</td>
<td>3.5</td>
<td>1.0</td>
<td>1.9</td>
</tr>
<tr>
<td>August</td>
<td>4.3</td>
<td>0.7</td>
<td>2.2</td>
</tr>
<tr>
<td>September</td>
<td>4.8</td>
<td>0.4</td>
<td>2.3</td>
</tr>
</tbody>
</table>

South channel, 0.8 mile above mouth:

<table>
<thead>
<tr>
<th>Month</th>
<th>Maximum Daily Mean</th>
<th>Minimum Daily Mean</th>
<th>Mean for Month</th>
</tr>
</thead>
<tbody>
<tr>
<td>June</td>
<td>374</td>
<td>106</td>
<td>185</td>
</tr>
<tr>
<td>July</td>
<td>115</td>
<td>2.8</td>
<td>52.8</td>
</tr>
<tr>
<td>August</td>
<td>2.8</td>
<td>1.0</td>
<td>1.8</td>
</tr>
<tr>
<td>September</td>
<td>12</td>
<td>0.9</td>
<td>2.3</td>
</tr>
</tbody>
</table>

According to the 23-year published record of the flow of Mill Creek near Los Molinos, flow at the gage has fallen below 150 cubic feet per second (the flow that the protestant claims to be essential for its purposes) on dates as follows and almost invariably has remained below that figure for the remainder of the calendar year:
<table>
<thead>
<tr>
<th>Year</th>
<th>Day</th>
<th>cfs*</th>
<th>Year</th>
<th>Day</th>
<th>cfs*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1929</td>
<td>June</td>
<td>26</td>
<td>150</td>
<td>1941</td>
<td>August 21</td>
</tr>
<tr>
<td>30</td>
<td>July</td>
<td>3</td>
<td>255</td>
<td>42</td>
<td>August 16</td>
</tr>
<tr>
<td>31</td>
<td>June</td>
<td>1</td>
<td>121</td>
<td>43</td>
<td>August 5</td>
</tr>
<tr>
<td>32</td>
<td>July</td>
<td>5</td>
<td>214</td>
<td>44</td>
<td>July 6</td>
</tr>
<tr>
<td>33</td>
<td>July</td>
<td>1</td>
<td>150</td>
<td>45</td>
<td>July 25</td>
</tr>
<tr>
<td>34</td>
<td>June</td>
<td>1</td>
<td>166</td>
<td>46</td>
<td>July 16</td>
</tr>
<tr>
<td>35</td>
<td>July</td>
<td>13</td>
<td>290</td>
<td>47</td>
<td>June 21</td>
</tr>
<tr>
<td>36</td>
<td>July</td>
<td>19</td>
<td>270</td>
<td>48</td>
<td>August 3</td>
</tr>
<tr>
<td>37</td>
<td>July</td>
<td>6</td>
<td>219</td>
<td>49</td>
<td>June 22</td>
</tr>
<tr>
<td>38</td>
<td>August</td>
<td>20</td>
<td>566</td>
<td>50</td>
<td>July 21</td>
</tr>
<tr>
<td>39</td>
<td>June</td>
<td>4</td>
<td>156</td>
<td>1951</td>
<td>July 11</td>
</tr>
<tr>
<td>1940</td>
<td>July</td>
<td>13</td>
<td>389</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Mean discharge during year ending September 30.

The date upon which the flow of Mill Creek has fallen below 150 second-feet thus has ranged, during the 4-month periods of the years considered, from June 1 to August 21. On average it has been July 12. Average discharges in second-feet in each water year of the 23-year period have been included in the tabulation.

**Discussion**

While the protestant states in its protest that its irrigation season extends from March through October it also states in effect that it does not object to the appropriation sought by the applicant except
during the more critical months of June, July, August and September and it states further that the protest may be disregarded and dismissed if the flow of the creek remains above 150 second-feet. These statements amount to a concession by the protestant that unappropriated water exists, except at such times during June, July, August and September as the flow of Mill Creek is less than 150 second-feet. The stream flow data indicate that the flow of Mill Creek holds above 150 second-feet in an average season until July 12. Mr. Counts (protestant's representative) stated moreover (at the investigation) that the protestant's period of maximum use extends from July 1 to August 15 and that after the latter date the protestant's needs diminish rapidly. Mr. Counts' statements cast doubt upon the implication in the protest that the protestant needs 150 second-feet in late August and in September and suggest that unappropriated water in small amounts may exist throughout an average season except possibly for about a month between about mid-July and about mid-August. Further doubt that the protestant needs the full flow of Mill Creek during the period of maximum irrigation demand is cast by Mr. Counts' statements that he has been with the protestant Company since 1948, that he is unaware that the Company has ever suffered a water shortage, that the only purpose of filing a protest was to be on record as having downstream rights and that normally water is passing the Company's dams even during periods of maximum use. That the full flow of Mill Creek is not diverted by the protestant is strongly suggested by the flows recorded in 1950 at the two cooperative gages below the protestant's lowermost dam, set forth in an earlier paragraph. That suggestion is strengthened by Mr. Counts' statement to the
effect that the flows measured at the cooperative gages correspond reasonably with amounts by-passing protestant's dams.

If the protestant wastes water past its lowermost dam, as it appears to do, such wastage, which is more by far than the applicant seeks to appropriate, may be considered to be subject to appropriation. Should however the protestant eliminate wastage as by waterproofing its dams and proceed under its claimed rights to utilize the full low-stage flow of Mill Creek its protest against Application 14396 would still carry little weight. This is because of the remoteness of the applicant's point of diversion (38 miles upstream), the small amount that the applicant seeks (0.02305 cubic foot per second) and the information secured by field investigation to the effect that the applicant's project has been in partial operation for many years and that use thereunder is largely non-consumptive.
Summary and Conclusion

The applicant seeks to appropriate 0.02305 cubic foot per second from 3 unnamed springs tributary to Mill Creek in Tehama County for domestic purposes within the Mill Creek Tract, Lassen National Forest. Improvements at one of the springs were installed in 1925, improvements at the other two in 1950. In July, 1951 when the application was filed the project was said to be 75% complete.

The Coneland Water Company protests the application. It diverts from Mill Creek at 2 points, about 2 miles apart, the uppermost some 38 miles downstream from the applicant's development. It utilizes water for "farm land irrigation of 10,000 acres owned by some 450 individuals." It claims that decreed rights allow it "the use of all water flowing in Mill Creek at the company's lower diversion dam". It states further that its claim is based upon "rights, court decrees and uses dating back and prior to 1914." It states finally

"We do not object to this small quantity of water being diverted during the less critical irrigation season (other than the months of June, July, August and September)."

"This protest may be disregarded and dismissed if the total flow of Mill Creek remains above 150 second-feet of water during irrigation season or if winter runoff water is impounded and stored for the applied for use."

The answer to the protest states in part

"... our filing was done to enable us to install a system which would provide the same amount of water as is now being used, but in an uncontaminated and safe condition. Most of this use will probably be considered non-consumptive."
The parties having stipulated to proceedings in lieu of hearing, a field investigation was conducted on September 29, 1953. During the investigation the developments were visited and the parties' representatives interviewed. The protestant's representative at the investigation stated that the protestant Company serves 8,000 acres from Mill Creek and 2,000 acres from Antelope Creek, the period of maximum use normally extending from July 1 to August 15, after which the Company's needs diminish rapidly; that since 1948, to his knowledge, the protestant has never suffered from a shortage of water; that the only purpose of filing a protest was to be on record as having downstream rights; that water is usually passing the protestant's dams even during periods of maximum use; that the protestant is under no obligation to by-pass water to lower users.

Mill Creek has been gaged at a point approximately 0.6 mile above the protestant's uppermost point of diversion on that stream. The two channels into which Mill Creek divides, about 0.7 mile below the protestant's lowermost point of diversion, have also been gaged. According to a 23-year record, annual flow at the uppermost station has averaged 270 second-feet; in the water-year 1949-50 it averaged 251 second-feet (slightly below normal) and in the critical months of that water-year flow averaged 310 second-feet during June, 172 second-feet during July, 106 second-feet during August, 95.6 second-feet during September. During the same water-year flow in the 2 channels into which Mill Creek divides below the protestant's lowermost intake averaged 6.9 plus 185
or 191.9 second-feet during June, 1.9 plus 52.8 or 54.7 second-feet during July, 2.2 plus 1.8 or 4 second-feet during August and 2.3 plus 2.3 or 4.6 second-feet during September. The protestant's representative (Mr. Counts) concedes that flows passing the protestant's lowermost dam are of the same order, approximately, as those measured at the gaging stations on the 2 channels into which Mill Creek divides.

Wastage past the protestant's lowermost dam is plainly subject to appropriation, currently. Should the protestant at some future time divert the entire low-stage flow of Mill Creek, as it claims the right to do, it still would not suffer appreciable injury through the appropriation that the applicant seeks, the latter's project being 38 miles up-river, the amount applied for relatively small, the use in large part non-consumptive.

The information summarized points to the conclusion that unappropriated water probably exists in Mill Creek even at times when demands by the protestant are greatest, that such water may be taken and used beneficially in the manner proposed by the applicant without injury to the protestant and that the protest is an insufficient bar to the approval of the application. It is the opinion of this office therefore that Application 14396 should be approved and permit issued, subject to the usual terms and conditions.
ORDER

Application 14396 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 14396 be approved and that a permit be issued to the applicant, 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 3rd day of June, 1954.

A. D. Edmonston
State Engineer