In the Matter of Applications 11792, 12537, 12910, 12911, 12912, 13091, 13092, 13093, 18727, 18728, 19148 and 19149 of Calaveras County Water District;
Applications 12860, 13011A, 14372, 14373, 19664, 19665 and 19666 of Tuolumne County Water District No. 2; and
Applications 13211, 13212, 14374, 14375 and 17408 of Oakdale and South San Joaquin Irrigation Districts to Appropriate from Stanislaus River and Tributaries in Calaveras, Tuolumne, and Alpine Counties.

DECISION APPROVING APPLICATIONS OF CALAVERAS COUNTY WATER DISTRICT IN WHOLE OR IN PART; APPROVING IN PART APPLICATIONS 14372 AND 14373 AND DENYING APPLICATIONS 12860, 13011A, 19664, 19665 AND 19666 OF TUOLUMNE COUNTY WATER DISTRICT NO. 2; AND DENYING ALL APPLICATIONS OF OAKDALE AND SOUTH SAN JOAQUIN IRRIGATION DISTRICTS
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Substance of the Applications</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Protests and Hearing</td>
<td>6</td>
</tr>
<tr>
<td>Plan of Calaveras County Water District</td>
<td>7</td>
</tr>
<tr>
<td>Stage &quot;A&quot; Development</td>
<td>8</td>
</tr>
<tr>
<td>Stage &quot;B&quot; Development</td>
<td>9</td>
</tr>
<tr>
<td>Financial Feasibility</td>
<td>10</td>
</tr>
<tr>
<td>Stage &quot;A&quot; Development</td>
<td>10</td>
</tr>
<tr>
<td>Stage &quot;B&quot; Development</td>
<td>12</td>
</tr>
<tr>
<td>Plan of Tuolumne County Water District No. 2</td>
<td>13</td>
</tr>
<tr>
<td>North Fork-Middle Fork Project</td>
<td>13</td>
</tr>
<tr>
<td>Kennedy Meadows Project</td>
<td>14</td>
</tr>
<tr>
<td>Financial Feasibility</td>
<td>15</td>
</tr>
<tr>
<td>Plan of Oakdale and South San Joaquin Irrigation Districts</td>
<td>15</td>
</tr>
<tr>
<td>Water Supply</td>
<td>16</td>
</tr>
<tr>
<td>Availability of Water for Power Generation</td>
<td>16</td>
</tr>
<tr>
<td>Availability of Water for Consumptive Use</td>
<td>18</td>
</tr>
<tr>
<td>The California Water Plan</td>
<td>19</td>
</tr>
<tr>
<td>Conclusions</td>
<td>21</td>
</tr>
<tr>
<td>Order</td>
<td>26</td>
</tr>
</tbody>
</table>
Substance of the Applications

This decision concerns 24 applications by three applicants to appropriate unappropriated waters of Stanislaus River and tributaries. A map of the Stanislaus River system showing the relative location of the various features referred to in this decision is appended as Plate I. A map showing the proposed service areas is appended as Plate II.

The salient features of the applications herein considered are summarized in Tables 1, 2 and 3. The information shown in Table 1 and on Plate I incorporates the changes proposed by the Calaveras County Water District (hereinafter referred to as the Calaveras District) in Applications 11792, 12910, 12911, 13092, 18727, 18728, 19148 and 19149 by petition received on December 7, 1960, and in Application 13093 by petition received on June 25, 1962. Only the Stanislaus River portions of the project proposed under Application 11792 are considered herein. Further hearing will be required before the Board takes action upon the Calaveras River appropriation requested in that application.

Table 2 summarizes the applications of Tuolumne County Water District No. 2 (hereinafter referred to as the Tuolumne District) and reflects the deletion of 70,000 acre-feet of storage at Donnells Reservoir from Applications 14372 and 14373 and a deletion of the Spring Gap and McCormick Powerhouses from Application 14373 in accordance with the testimony received at the hearing (RT 447, 723).

Table 3 summarizes the applications of Oakdale and South San Joaquin Irrigation Districts (hereinafter sometimes referred to as the Tri-Dam Districts).
<table>
<thead>
<tr>
<th>Appl. No.</th>
<th>Date</th>
<th>Source</th>
<th>Direct Source</th>
<th>Location of Direct Source</th>
<th>Storage</th>
<th>Purpose of Storage</th>
<th>Place of Use</th>
</tr>
</thead>
</table>
| 11792    | 3-24-47| NF Stanislaus Ganns | 6N 17E              | 52,000 10/1-7/1           | I,D,Ln,R | 150,449 acres (net) within service areas 1, 2, 4, 5, 7, 8, 9, 10, 11, 12, 14, 15 of CCWD and foothill areas  
|          |        | Squaw Hollow  | 6N 15E              | 2,000 10/1-7/1            |         |                   |                                                  |
|          |        | Big Trees     | 5N 16E              | 24,500 10/1-7/1           |         |                   |                                                  |
| 12537    | 6-7-49 | Black Creek Black Res. | 1N 12E              | 5,000 11/1-1/1            | I,D     | 50,000 (net) acres southwestern Calaveras County |
| 12910    | 1-25-49| NF Stanislaus Ganns | 4N 15E 400 c          | 124,078 acres (net) within service areas 5, 7, 8, 9, 10, 11, 12, 14, 15 of CCWD and foothill areas  
|          |        | Squaw Hollow  | 4N 12E              | 3/1-10/31                 |         |                   |                                                  |
| 12911    | 1-25-49| NF Stanislaus Ganns | 1B 15E 400 c          | 56,000 10/1-7/1           | P       | Big Trees Powerhouse |
|          |        | Squaw Hollow  | 1B 15E              | 2,000 10/1-7/1            |         | Boards Crossing powerhouse |
|          |        | Big Trees     | 1B 15E              | 18,500 10/1-7/1           |         | Collierville Powerhouse |
| 12912    | 1-25-49| NF Stanislaus Ramsey | 6N 16E 10 1/1-12/31   | 39,078 acres (net) within service areas 5, 7, 8, 9, 10, 11, 12, 14, 15 of CCWD and foothill areas  
|          |        |               |                     | 63,000 10/1-7/1           | I,D,S   | Toms within Calaveras County Ebbetts Pass Domestic System |
| 13091    | 5-13-49| Highland Cr. Spicer | 6N 18E              | 63,000 10/1-7/1           |         | Sand Flat, Boards Crossing  
|          |        | Meadows      |                     | 39,078 acres (net) within service areas 5, 7, 8, 9, 10, 11, 12, 14, 15 of CCWD and foothill areas  
|          |        |              |                     | 63,000 10/1-7/1           |         | Big Trees and Collierville Powerhouses  
| 13092    | 5-13-49| Highland Cr. Spicer | 6N 18E              | 63,000 10/1-7/1           | P       | Toms within Calaveras County  
|          |        | Meadows      |                     | 23,000 10/1-7/1           |         | County W.D.  
| 13093    | 5-13-49| Highland Cr. Schneider | 6N 18E              | 40,000 10/1-7/1           | M       | Big Trees Powerhouse  
|          |        |               |                     | 13,100d 10/1-7/1           |         | Collierville Powerhouse  
| 15727    | 5-20-59| Beaver Cr. Upper | 5N 16E 60 c          | 13,100d 10/1-7/1           | P       | Big Trees Powerhouse  
|          |        | Lower        | 5N 15E 60 c          | 12,500 10/1-7/1           |         | Collierville Powerhouse  
|          |        | NF Stanislaus Big Trees | 5N 15E               | 12,500 10/1-7/1           |         | Big Trees Powerhouse  

**TABLE 1**

SUMMARY OF APPLICATIONS OF CALAVERAS COUNTY WATER DISTRICT TO APPROPRIATE WATER FROM STANISLAUS RIVER AND TRIBUTARIES AS AMENDED BY PETITIONS FILED 12-7-60
### Table 1 Cont.

**Summary of Applications of Calaveras County Water District to Appropriately Water from Stanislaus River and Tributaries as Amended by Petitions Filed 12-7-60**

<table>
<thead>
<tr>
<th>Appl. No.</th>
<th>Date</th>
<th>Source</th>
<th>Name</th>
<th>Location</th>
<th>Quantity</th>
<th>Purpose(s)</th>
<th>Place of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>18728</td>
<td>5-20-59</td>
<td>Beaver Cr.</td>
<td>Lower</td>
<td>NW SE 36</td>
<td>5N 15E 10</td>
<td>3/1-10/31</td>
<td>13,100^a 11/1-0/1 I, D, S</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beaver Cr.</td>
<td>Upper</td>
<td>NE SW 16</td>
<td>5N 16E 10</td>
<td>3/1-10/31</td>
<td>9,100 11/1-8/1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NF Stanislaus</td>
<td>Big Trees</td>
<td>NE SW 18</td>
<td>5N 16E 590°</td>
<td>3/1-10/31</td>
<td>20,000^a 11/1-8/1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>NF Stanislaus</td>
<td>Squaw Hollow</td>
<td>NE NW 2</td>
<td>4N 15E 590°</td>
<td>3/1-10/31</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stanislaus</td>
<td>Goodwin</td>
<td>SE NE 10</td>
<td>3N 12E 590°</td>
<td>3/1-10/31</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tulloch</td>
<td>NW NE 7</td>
<td>3N 13E 590°</td>
<td>3/1-10/31</td>
<td>151,440 11/1-8/1</td>
<td></td>
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<tr>
<td>19148</td>
<td>12-23-59</td>
<td>NF Stanislaus</td>
<td>Silver Cr.</td>
<td>SW SE 20</td>
<td>5N 18E 600</td>
<td>1/1-12/31</td>
<td>52,000^c 11/1-6/30 P</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beaver Cr.</td>
<td>Upper</td>
<td>NE SW 16</td>
<td>5N 16E 340</td>
<td>1/1-12/31</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NF Stanislaus</td>
<td>Big Trees</td>
<td>NE SW 13</td>
<td>5N 16E</td>
<td>1/1-12/31</td>
<td>27,200 11/1-6/30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Highland Cr.</td>
<td>Spicer M.</td>
<td>NW NE 9</td>
<td>6N 18E</td>
<td>1/1-12/31</td>
<td>52,000^c</td>
</tr>
<tr>
<td>19149</td>
<td>12-23-59</td>
<td>NF Stanislaus</td>
<td>Squaw Hollow</td>
<td>NE NW 2</td>
<td>4N 15E 25°</td>
<td>3/1-10/31</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Beaver Cr.</td>
<td>Lower</td>
<td>NW SE 36</td>
<td>5N 15E 340</td>
<td>3/1-10/31</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Stanislaus</td>
<td>Goodwin</td>
<td>SE NE 10</td>
<td>3N 12E 25°</td>
<td>3/1-10/31</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>NF Stanislaus</td>
<td>Big Trees</td>
<td>SE NW 13</td>
<td>5N 16E</td>
<td>3/1-10/31</td>
<td>42,200 11/1-6/30 I, D, S</td>
</tr>
<tr>
<td></td>
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<td>NF Stanislaus</td>
<td>Silver Cr.</td>
<td>SW SE 20</td>
<td>5N 13E</td>
<td>3/1-10/31</td>
<td>37,000 11/1-6/30</td>
</tr>
</tbody>
</table>

---

a I = Irrigation; D = Domestic; S = Stockwatering; P = Power; In = Industrial; R = Recreational; M = Municipal
b Esperanza portion of Service Area 12 (See Plate I-2, CC Ex. 3)
c Combined diversion from any one or a combination of points of diversion
d Petitions of 12-7-60 amended to show 13,100 acre-feet from Beaver Creek in accordance with information received at hearing. (CC Ex. 3, Table 111-5 and opening brief of Calaveras County)
e Offstream storage in Jesus Maria Reservoir
### TABLE 2
**SUMMARY OF APPLICATIONS TO APPROPRIATE WATER FROM STANISLAUS RIVER AND TRIBUTARIES BY TUOLUMNE COUNTY WATER DISTRICT NO. 2 AS AMENDED AT THE HEARINGS HELD DURING 1962**

<table>
<thead>
<tr>
<th>Appl. No.:</th>
<th>Date:</th>
<th>Location of Point of Diversion:</th>
<th>Direct Diversion:</th>
<th>Storage:</th>
<th>Purposes:</th>
<th>Place of Use:</th>
</tr>
</thead>
<tbody>
<tr>
<td>12360</td>
<td>12-16-48</td>
<td>NF Stanislaus Silver Cr. Spicer M. NW NE 9 6N 15E 350 b</td>
<td>1/1-10/31</td>
<td>79,000 b 10/1-7/15</td>
<td>P</td>
<td>Spicers, Donnels, Beardsley Sand Bar, Stanislaus, Melones and Tulloch Powerhouses</td>
</tr>
<tr>
<td>13011A</td>
<td>3-31-49</td>
<td>Highland Cr. Spicer M. NW NE 9 6N 13E</td>
<td></td>
<td></td>
<td></td>
<td>Same as Application 12360</td>
</tr>
<tr>
<td>14372</td>
<td>6-28-51</td>
<td>Relief Cr. Kennedy Meadows NE SW 2 5N 20E</td>
<td></td>
<td>17,300</td>
<td>1/1-12/31</td>
<td>P</td>
</tr>
<tr>
<td>14373</td>
<td>6-28/51</td>
<td>Relief Cr. Kennedy Meadows NE SW 2 5N 20E</td>
<td></td>
<td>20,000</td>
<td>1/1-12/31</td>
<td>P</td>
</tr>
<tr>
<td>19664</td>
<td>3-17-60</td>
<td>NF Stanislaus Silver Cr. Spicer M. NW NE 9 6N 18E 350 b</td>
<td>1-1/1-12/31</td>
<td>65,000 b 10/1-7/15</td>
<td>I,D,M</td>
<td>25,000 acres (net) within O &amp; SSID and TCWD No. 2</td>
</tr>
<tr>
<td>19665</td>
<td>8-17-60</td>
<td>NF Stanislaus Silver Cr. Spicer M. NW NE 9 6N 18E</td>
<td></td>
<td>25,000</td>
<td>10/1-7/15</td>
<td>P</td>
</tr>
<tr>
<td>19666</td>
<td>8-17-60</td>
<td>NF Stanislaus Beardsley SW SE 15 4N 17E 660</td>
<td></td>
<td>1/1-12/31</td>
<td>P</td>
<td>Sand Bar Powerhouse</td>
</tr>
</tbody>
</table>

a I - Irrigation; D - Domestic; P - Power; M - Municipal

b Combined diversion from any one or a combination of points of diversion
TABLE 3
SUMMARY OF APPLICATIONS TO APPROPRIATE WATER FROM STANISLAUS RIVER
AND TRIBUTARIES BY OAKDALE AND SAN JOAQUIN IRRIGATION DISTRICTS
AS AMENDED AT HEARING DURING 1962

<table>
<thead>
<tr>
<th>Appl. No.</th>
<th>Date Filed</th>
<th>Source</th>
<th>Location of Applies</th>
<th>Direct Storage</th>
<th>Purposes</th>
<th>Place of Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>13211</td>
<td>7-7-49</td>
<td>NW</td>
<td>NW SW 27 7N 19E</td>
<td>70,000 $^b$</td>
<td>1/1-7/15</td>
<td>Irrigation Districts</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NW NE 9 6N 12E</td>
<td>70,000 $^b$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SE NE 10 1S 12E</td>
<td>180</td>
<td>1/1-12/31</td>
<td></td>
</tr>
<tr>
<td>13212</td>
<td>7-7-49</td>
<td>NW</td>
<td>NW SW 27 7N 18E</td>
<td>70,000 $^b$</td>
<td>1/1-7/15</td>
<td>Spicer, Donnells, Beardsley</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NW NE 9 6N 12E</td>
<td>70,000 $^b$</td>
<td></td>
<td>Sand Bar, Stanislaus,</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SE NE 10 1S 12E</td>
<td>180</td>
<td>1/1-12/31</td>
<td>Mowon and Tulloch Powerhouses</td>
</tr>
<tr>
<td>14374</td>
<td>6-28-51</td>
<td>NE</td>
<td>NE SW 2 7N 20E</td>
<td>20,000</td>
<td>1/1-7/1</td>
<td>Same as Application 13211</td>
</tr>
<tr>
<td>14375</td>
<td>6-28-51</td>
<td>NE</td>
<td>NE SW 2 5N 20E</td>
<td>20,000</td>
<td>1/1-7/1</td>
<td>Same as Application 13212</td>
</tr>
</tbody>
</table>

$^a$ I - Irrigation; P - Power

$^b$ Combined diversion from any one or a combination of points of diversion
Protests and Hearing

The subject applications were completed in accordance with the provisions of the Water Code and applicable rules and regulations. Protests having been received, public hearings were held in Sacramento, California, before Board Members Ralph J. McGill (acting Chairman) and William A. Alexander on March 6, 7 and 8, May 15, 16 and 17, June 25 through June 29, and concluding on July 5, 1962, due notice having been given to all parties of the various sessions of the hearing.

The United States Bureau of Reclamation submitted a letter dated March 5, 1962, at the commencement of the hearing, advising that none of the proposed projects would conflict with the New Melones Project on the Stanislaus River as planned by the Federal Government.

Representatives of the County of Alpine made a brief statement regarding a possible loss in tax base and the need for protection of the County of Alpine as a "county of origin."

Pacific Gas and Electric Company (hereinafter referred to as P. G. & E.) addressed a letter to the Board stating that it had no objection to the developments proposed by any of the applicants and that the Company believed that any conflict of interest could be settled by negotiations.
Plan of Calaveras County Water District

The water sought to be appropriated from the Stanislaus River system by the Calaveras District is only part of the water that will ultimately be required from various sources to supply the future requirements of Calaveras County and portions of the Foothill area outside of the county between the Stanislaus and Mokelumne Rivers. Development of the hydroelectric potential of the North Fork will provide finances required to construct works to divert water from the Stanislaus, Calaveras and Mokelumne Rivers to beneficial use (CCWD Exh. 3; RT 41, 42, 108 and 109).

The place of use proposed under the Calaveras District's plan includes a total of 180,449 acres of irrigable land of which about 85,000 acres are within the Foothill area outside the present boundaries of the District (RT 223, 354, 355 and Plate II).

The District estimates that under ultimate development 585,808 acre-feet of water will be required for irrigation purposes for the aforementioned service area (CCWD 3, Table III-10). According to Table III-11 of the Calaveras Exhibit 3, 79,600 afa will be derived from the North Fork Stanislaus River for use in Calaveras County and the remaining requirements will be met from developments on other streams. In addition to the irrigation requirements, it is estimated that 10,000 afa will be required for domestic use within the District's service area (CCWD 3, Table III-11).
The project contemplated by the Calaveras District will be constructed in two stages (Stages "A" and "B") (RT 273-274 and CCWD Exhs. 3 and 7) and includes construction of facilities on other watersheds in addition to those proposed on the Stanislaus River system.

**Stage "A" Development**

The initial development on the Stanislaus River system commencing upstream would include Spicer Meadows Dam and Reservoir with a capacity of 130,000 acre-feet (af) on Highland Creek; Ebbetts Pass Road domestic system diverting by means of a pump from North Fork near the Ramsey site; Big Trees Dam and Reservoir on North Fork with a capacity of 162,000 a.f.; a diversion from Upper Beaver Creek into Big Trees Reservoir; Big Trees Tunnel and power facilities with an installed capacity of 50,000 kw on the North Fork, a diversion from Lower Beaver Creek to Squaw Hollow Reservoir (interbay) with a capacity of 2,000 a.f.; construction of Murphys Tunnel and Collierville power facilities with an installed capacity of 115,000 kw; and pumped storage facilities from the Stanislaus River to Littlejohns Reservoir to be constructed on Littlejohns Creek with a capacity of 225,000 af (RT 272-273; CCWD Exh. 3, pp. V-17 and V-18).

In addition to construction of the foregoing features, the Calaveras District also proposes the purchase of the P. G. & E. Utica Ditch system. This system diverting water through the Murphys and Angels Powerhouses uses about 60,000 afa. This water will be
required for use through the proposed Collierville Powerplant (RT 58, 59, 313, 314; CCWD Exh. 3; Staff Exhs. 5 and 6).

Under Stage "A" development the Stanislaus River will initially furnish a firm yield of at least 75,000 afa to the Foothill area as well as allowing 30,000 afa now being diverted from the South Fork to the Middle Fork to be consumptively used elsewhere (CCWD Exh. 17; RT 76, 117, 118, 313). On an average yield basis 153,000 afa will be available to the Foothill area (CCWD Exh. 3 p. viii). The initial development also proposes a diversion of about 5,800 afa from the North Fork for use within the area to be served by the Ebbetts Pass Road domestic system (CCWD Exh. 3, p. III-41 and V-19). No irrigation water will be supplied from the North Fork to central Calaveras County under Stage "A" development.

Stage "B" Development

It is contemplated that power revenue in excess of construction cost of Stage "A" development and sale of water from Littlejohns Reservoir will provide sufficient funds to assist in the construction of other proposed power and conservation facilities under Stage "B" development. It is estimated that Stage "B" construction will commence about 15 to 20 years after start of construction of Stage "A" (RT 273). In downstream order the facilities on the Stanislaus System will consist of the North Fork Diversion Dam with a tunnel to Spicer Meadows Reservoir, Spicer Tunnel and Sand Flat Powerplant with an installed capacity of 25,000 kw below Spicer Meadows Dam; Ganns Dam and Reservoir with a capacity of 60,000 af; Ganns Tunnel and Boards Crossing
Powerplants with an installed capacity of 85,000 kw below Ganns Dam; Calaveras Conduit with a maximum capacity of 400 cubic feet per second and installation of an additional turbine of 46,000 kw capacity at the Collierville Plant (RT 273, CCWD Exh. 3, p. V-20).

The Calaveras District contemplates that diversions through the Calaveras Conduit from North Fork Stanislaus River to central Calaveras County will start upon completion of Stage "B" construction and will increase to about 40,000 af (CCWD Exh. 3, Table IV-5) by the end of the payoff period of Stage "A" and will increase to 75,000 af as the demands occur (RT 353; CCWD Exh. 3). As diversions are made to central Calaveras County, the water available for diversion to the Foothill service area will be decreased accordingly. It is contemplated that the water requirements of the Foothill area will then be supplemented by water from other projects (RT 353, 1193, 1194).

Financial Feasibility

Stage "A" Development

The estimated total construction cost for the essential components of Stage "A" North Fork power facilities is $67,933,000 (CCWD Exh. 3, p. V-18). Interest at 9 per cent during construction would add $6,114,000 requiring a bond issue of $74,047,000 (CCWD Exh. 33). On the basis of a 4 per cent annual bond service cost over the 47-year payout period (CCWD Exh. 33) and an annual operation and maintenance cost of $490,000, the total annual cost for the Stage "A" Project would be $4,009,000.
The estimated annual revenue from power sales as calculated by the Calaveras District totals $5,035,700. This estimate assumes values of $22.00 per kw of installed capacity and $0.0033 per kwh (CCWD Exh. 3). These figures were adopted by comparison with an estimated cost of a steam plant furnishing equivalent power. It was further assumed that the power would be delivered to the P. G. & E. Stanislaus Plant. The costs for transmission facilities were included in the estimates (RT 342, CCWD Exh. 3).

The difference between estimated annual cost and annual revenues from the Stage "A" Power Project indicates that there would be $1,026,700 of revenue in excess of costs realized annually. Thus, with favorable construction bids and a successful sale of bonds, revenue from power sales would be available to assist with the construction of the other facilities contemplated for conservation and use of water for irrigation and domestic purposes.

The total construction cost for Stage "A" irrigation and domestic facilities from the Stanislaus River system is estimated to be $10,475,000. This includes contingencies, engineering and administration (CCWD Exh. 3, p. V-18). Assuming a net interest of 9 per cent during construction, the cost could be met by a bond issue of $11,418,000 (CCWD Exh. 33). With bond service of a 47-year period at 4 per cent costing $54,260 annually and power for pumping estimated at $211,000 per annum, the total annual cost of the irrigation and domestic portion of the project would be $265,260 (CCWD Exh. 33).
The estimated annual revenue would be about $939,000 based on ultimate water sales in the Foothill area and from the Ebbetts Pass system (CCWD Exh. 3, p. V-19). Thus, the Stage "A" facilities for irrigation and domestic uses would produce an estimated $674,000 of revenue annually in excess of costs.

Although ultimate water sales will not be achieved upon completion of these project works because of the lack of distribution facilities, water sales could yield a substantial revenue toward the cost of the basic irrigation and domestic supply facilities in connection with the Littlejohns and Ebbetts Pass developments.

**Stage "B" Development**

The Stage "B" North Fork Project would cost an estimated $60,526,000 to build. This figure includes an allowance of 5 percent for escalation of construction costs over present cost estimates (CCWD Exh. 3, p. V-21; Table IV-2; RT 318, 139). Assuming $12,000,000 being available from Stage "A" water sales, a bond issue of $52,893,000 would be required. Assuming a 4 percent annual bond service cost over a 47-year construction period and operation and maintenance costs of $146,000, the estimated annual cost of Stage "B" would be $2,659,000.

Based on the District's assumption that powerplants may be operated at a 34 per cent annual capacity factor and power sold at $22.00 per kw installed capacity and $0.0033 per kwh, the power revenue per year would be $3,442,000. This indicates an excess of revenue over cost of $763,000 annually from Stage "B" North Fork Power Project.
As water is diverted to central Calaveras County through the Calaveras Conduit, revenues from power generation would be decreased. However, on the basis of assumed conditions, revenues should be sufficient to meet the payoff obligations of revenue bonds (RT 105-107, CCWD Exh. 3).

Plan of Tuolumne County Water District No. 2

The Tuolumne District proposes the construction of two projects—Applications 12860, 13011A, 19664, 19665 and 19666 cover the North Fork-Middle Fork Project and Applications 14372 and 14373 cover the Kennedy Meadows Project.

North Fork-Middle Fork Project

The North Fork-Middle Fork Project (RT 467 et seq.) consists of developments on the North Fork Stanislaus River and tributaries, including an enlarged storage reservoir on Highland Creek at the Spicer Meadows Reservoir site from which water would be diverted to the Middle Fork Stanislaus River for power generation purposes at the proposed Spicer and Sand Bar Powerplants, an enlarged Donells Powerplant and through existing facilities at Beardsley and Stanislaus Powerplants. This project would divert substantial quantities of water that would be required by the Calaveras District and without which the Calaveras project would be infeasible.

The North Fork-Middle Fork Project as proposed by the Tuolumne District does not provide for any irrigation water to be diverted directly from either the North Fork or Middle Fork Stanislaus River for consumptive use in Tuolumne County. The
project would, however, increase the usable supply of water in the Stanislaus River, particularly in dry years, by virtue of the increased upstream storage facilities. It is the plan of the Tuolumne District to negotiate with the Tri-Dam Districts and with P. G. & E. for exchange of water from the Middle Fork for water originating in the South Fork which can be diverted through existing facilities for use within the Tuolumne District.

Kennedy Meadows Project

The Kennedy Meadows Reservoir site is located a short distance below the existing Relief Reservoir of P. G. & E. on the Middle Fork Stanislaus River. Water released from Kennedy Meadows Reservoir would be utilized primarily for power generation at Donnels, Beardsley and Stanislaus Powerplants. The reservoir would provide 20,000 acre-feet of storage (RT 702). In conjunction with release of water for power generation, considerable flexibility would be adopted in the schedule of releases to provide maximum recreational benefits and to improve streamflow conditions.

This project would under certain conditions reduce the irrigation deficiencies of the Tri-Dam Districts (RT 704). The Tuolumne District proposes an exchange of the water supply developed at Kennedy Meadows to offset depletion of supply at Melones and Tulloch Reservoirs which would arise from a diversion of 5,000 acre-feet of water by Tuolumne County from the South Fork in addition to quantities presently being delivered to the
area through existing facilities. Since the Tuolumne District does not have an application before the Board to cover such a diversion, any exchange of water will be a matter of future negotiations. There is no conflict between the Calaveras District's Project and the Kennedy Meadows Project.

Financial Feasibility

The construction cost of the power facilities of the Kennedy Meadows Project was estimated at $2,100,000. The project may qualify for a grant of $300,000 under the Davis-Grunsky Act (Chapter 6 of Part 6 of Division 6 of the Water Code). With this contribution the annual cost of the project would be $90,000. Without considering Tuolumne County depletions an average production of 38,000,000 kwh could be produced with a revenue of $104,000 annually, based on sale of energy at 2.73 mills per kwh. The project would be operated without depletion of the water supply for consumptive purposes in Tuolumne County until the cost is amortized or until other funds are available (RT 720). After that time a depletion of 5,000 afa for use in Tuolumne County could be realized provided an exchange agreement can be negotiated.

Plan of Oakdale and South San Joaquin Irrigation Districts

The project proposed by the Tri-Dam Districts is, except for differences in reservoir capacities, essentially the same project as proposed by the Tuolumne District, that is, enlargement of Spicer Meadows Reservoir and construction of a reservoir at the Kennedy Meadows site. Water from these reservoirs would be used
through the proposed Spicer and Sand Bar Powerplants and through existing Donnels, Beardsley, Stanislaus, Melones and Tulloch Powerplants. The Districts estimate that the benefits in excess of costs from such a development would be $410,000 annually (RT 963). The applicants do not intend to proceed with their project unless all features of the project, i.e., Spicer Dam and Powerplant, Kennedy Reservoir and Sand Bar Powerplant can be constructed. Permits on the Kennedy Reservoir only are not desired (RT 1052).

According to O&SSJID Exhibit 15, the Districts would have experienced a shortage in their irrigation supply during 7 years of the 26-year period from 1921 to 1946, even with the added supply from their existing Tri-Dam Project. According to CCWD Exhibit 12 no water would have been available to the Tri-Dam Districts from their proposed project during the three most critical years of shortage (1924, 1929, and 1931) and only a small amount of water would have been available during the other four years (1926, 1928, 1934 and 1939).

**Water Supply**

Operation studies and other hydrologic data based on available records were submitted by each applicant which indicate that, disregarding the other applicants, water is available to satisfy the requirements of its respective project without substantial interference with vested rights.

**Availability of Water for Power Generation**

The records of flow of the Stanislaus River and its tributaries as published in the U. S. Geological Survey Water
Supply Papers furnish information relative to availability of water. The average flow of Highland Creek below Spicer Meadows Reservoir (within the SW¼ of Section 3, T6N, R18E) for nine years of record between October 1952 and September 1961 was 77,460 acre-feet per year. The average flow for the North Fork Stanislaus River below Silver Creek (within the SE¼ of Section 20, T7N, R18E) for the same nine-year period was 48,290 acre-feet per year. The average flow of the North Fork Stanislaus River near Avery (within the NE¼ of Section 35, T15N, R15E) for a ¼4-year period of record (1914-25 and 1928-60) was 293,280 acre-feet per year.

The only vested rights of any consequence on the North Fork and tributaries are the existing Alpine, Union, Utica, and Spicer Meadows Reservoirs and Utica Ditch system of P. G. & E. The Utility Company claims a right for diversion of 88 cubic feet per second and a combined storage capacity of about 13,000 acre-feet. It is the plan of the Calaveras District to purchase the Utica system and thereby substantially eliminate the conflict with the present vested rights of the Utility Company.

The Calaveras District has entered into an agreement with the Department of Fish and Game (F & G 4) which provides for releases of flows ranging from 16.5 cfs or the natural flow of the stream below Spicer Meadows Dam to an amount of 60 cfs or the natural flow below Big Trees Dam.

The record indicates that the amounts of water requested for storage under the Calaveras District's North Fork Power Project, which total 246,680 acre-feet including 13,100 acre-feet from Beaver Creek, would be available in about 30 years out of the
45-year period of record between 1915 and 1960 and that something less than full supply would be available in other years. This quantity is based on the assumption that the Calaveras District is successful in purchasing the Utica system of P. G. & E. and flows as provided for by agreements are released for preservation of fishlife. Accordingly, sufficient quantities of water to supply the amounts sought under the applications of the Calaveras District are available to warrant approval of the applications.

The flows of the Middle Fork at Sand Bar Flat (within SE 1/4 of Section 19, T4N, R17E) have been recorded since 1905. The greater part of this water supply is controlled and used for generation of power by the Tri-Dam Districts and P. G. & E. However, it is estimated that water could be stored in Kennedy Meadows Reservoir and utilized in a manner proposed by the Tuolumne District in about four out of five years without interference with vested rights (RT 703).

Availability of Water for Consumptive Use

The studies of all parties made for the purpose of showing surplus water were based upon bypassing sufficient natural flow to satisfy the claimed rights of the Tri-Dam Districts to 570,000 afa at Goodwin Dam. This amount is considered as full irrigation supply to the Districts and has been used when available under rights initiated prior to 1914 and subsequent appropriations.

Annual recorded flows of the Stanislaus River for the 41-year period from 1920 through 1960 after allowing for satisfaction of these rights in accordance with Tri-Dam operation studies
(Bonner Study) indicate that the outflow from Goodwin Dam would have averaged 476,000 afa.

Assuming a repetition of the hydrologic cycle, this quantity with minor depletions would be available on the average for consumptive uses. However, due to extremely dry periods such as from 1929-1931 and from 1959-1961, any feasible project must include a three-year carryover storage to provide a firm water supply.

The Tri-Dam Districts have a right under the terms of the Stanislaus River Decree to divert up to 1816.6 cfs for consumptive use purposes. At such times as the Districts' demands cannot be satisfied from the natural flow of the Stanislaus River, releases are made from their storage reservoirs. These releases normally begin about July 1 (Staff Exh. 5) and continue through the irrigation season which extends to the latter part of October (RT 871, 956). Therefore, it is apparent that unappropriated water seldom exists during the season from July 1 through October 31.

The California Water Plan

Under the California Water Plan for the development of the Stanislaus River, an enlarged reservoir would be constructed at the existing Spicer Reservoir site on Highland Creek. The water supply of Highland Creek would be augmented by diverting water from North Fork through a tunnel from Union Reservoir to the Spicer Meadows Reservoir. Water released from Spicer Reservoir would flow down the natural channel of Highland Creek to Ganns diversion site on the North Fork where water would be diverted out on
to the ridge between the Stanislaus and Calaveras Rivers, thence down the ridge through power drops at White Pines Powerhouse, Avery Powerhouse, and a third drop back into the Stanislaus River at Clark Flat Powerhouse. From this conveyance system water could be diverted to several reservoirs that would be constructed on tributaries of the Calaveras and Mokelumne Rivers for supplementing yields of reservoirs on those streams. It has been envisioned that reservoirs would be constructed at Campground Reservoir site on Forest Creek, Hunter Creek Reservoir on Hunter Creek, and an enlarged Schaad Reservoir on the Middle Fork Mokelumne River to supply water to Calaveras County. Construction of Railroad Flat Reservoir on the South Fork Mokelumne River would yield water to supplement the present yield of the water that is being diverted down to the Mokelumne Hill and San Andreas area. Swiss Ranch Reservoir on Jesus Maria Creek would receive supplemental water from the Calaveras Conduit for reregulation and service to the upper service area in Calaveras County (DWR 3).

Under the California Water Plan the Tuolumne County requirements from Stanislaus River would be met from increased diversions of water through the Tuolumne Ditch down through Phoenix Powerhouse into an enlarged Phoenix Reservoir (RT 1462).

In comparing the three proposed projects the Calaveras plan will most nearly accomplish the objectives proposed under The California Water Plan for development of the North Fork Stanislaus River (DWR Exh. 3).
Conclusions

The evidence indicates, and the Board finds, that there is sufficient unappropriated water available in the Stanislaus River system to warrant the issuance of permits for diversion year-round for power purposes and from about November 1 to July 1 for consumptive uses, which water can be appropriated under proper conditions without injury to prior vested rights.

Tuolumne District's Application 12860 for storage at Spicer Meadows Reservoir is prior in time to those of the Calaveras District for storage at the same site. In the absence of other factors to be taken into consideration, when there are conflicting applications, the earlier one should be favored. However, the Board is directed by law to reject an application when in its judgment the proposed appropriation would not best conserve the public interest (Water Code Sec. 1255). Furthermore, where conflicting applications request water for a coordinated plan for the development of a large segment of a river system, as is the case here, consideration must be given to the entire plan. The Calaveras District's Application 11792 for storage at Ganns, Squaw Hollow and Big Trees Reservoir sites is earlier in time than any of the applications for storage at Spicer Meadows Reservoir involved in this proceeding. Spicer Meadows Reservoir operation is to be integrated with that of Ganns, Squaw Hollow and Big Trees Reservoirs.
The basic problem before the Board is which of the projects will provide the widest benefits and more fully develop the natural resources of the State in the public interest.

The Board concludes that the project of the Calaveras District will best conserve the public interest and that the applications of that District should be approved, including Application 11792 insofar as it relates to diversions from the Stanislaus River system as set forth in the District's operation studies. For all practical purposes the Calaveras District's project will fully develop the North Fork with over 577,000 acre-feet of storage capacity as compared to 160,000 acre-feet under the Tuolumne District's project and 60,000 acre-feet under the Tri-Dam Districts' project. The evidence indicates that the Calaveras District's project will furnish an average yield for consumptive uses of 153,000 afa to the Foothill area during the initial stage, plus about 10,000 afa for use along the Utica Ditch system and Ebbetts Pass Road domestic system. This yield and the financial feasibility of the project were calculated on the assumption of an upstream depletion by consumptive use in Tuolumne County of 30,000 afa from the Middle or South Forks. This quantity is assumed to be in addition to the existing Tuolumne County diversions through Tuolumne Ditch, is about the amount now diverted by means of Philadelphia Ditch from the South Fork to the
Middle Fork and represents the supplemental water requirement for future development within the Tuolumne District's service area by year 2020.

Although the Calaveras District's project features under Stage "B" construction are marginal from an economic standpoint, it appears in the public interest to allow the Calaveras District's applications for full development of the North Fork.

Applications 12860, 13011A, 19664, 19665 and 19666 of the Tuolumne District should be denied. The proposed project does not develop any water for direct use in Tuolumne County, does not fully develop the stream system, and would for all practical purposes preclude construction of any other sizable project. Its project would, however, furnish a firm yield of at least 30,000 afa to exchange for water now being diverted from the South Fork to the Middle Fork through the Philadelphia Ditch. It is contemplated that the Tuolumne District would start using this water about 1985 and reach the full use of 30,000 afa by the year 2020.

In consideration of the future needs of Tuolumne County, the fact that it is a county of origin of water in the Stanislaus River and that diversions from the Stanislaus River averaging 30,000 afa for use in Tuolumne County will not materially impair the feasibility of the Calaveras project, the Board concludes that permits issued to the Calaveras District should be subject to a future depletion of streamflow above Goodwin Dam excluding North Fork.
Stanislaus River and tributaries not to exceed 90,000 acre-feet in any three-year period by lawful appropriations of water for reasonable beneficial use within the service area of the Tuolumne District without regard to the time such appropriations are initiated.

Such a reservation will afford an opportunity for future developments within Tuolumne County for storage and wintertime diversions from the Stanislaus River up to 90,000 acre-feet in any three-year period or an average of 30,000 afa without interference with any right obtained by the Calaveras District under permits covering the North Fork project. This amount may be slightly less than a safe yield of 30,000 afa; however, the hydrologic cycle in the past indicates that a three-year carryover storage will provide a substantially firm water supply.

Although State Application 5649 which covers collection to storage of 59,000 afa from the South Fork may be assigned to the Tuolumne District, utilization of that filing alone may not adequately cover a project conceived by the Tuolumne District or some other entity in the future. Therefore, the above-mentioned reservation will place the Calaveras District on notice that Tuolumne County has a priority ahead of the Calaveras District for adequate carryover storage potential to develop an average of 30,000 afa, including water obtained under an assignment of the State filing and allow flexibility in place of use within the boundaries of the Tuolumne District.
Applications 14372 and 14373 of the Tuolumne District in support of Kennedy Meadows Project should be approved in part as modified at the hearing.

Applications 13211, 13212, 14374, 14375 and 17408 of the Tri-Dam Districts should be denied. These Districts do not provide for carryover storage in their project and therefore cannot firm up the existing supply in extremely dry years. The existing program of replacing unlined ditches and laterals with pipe or concrete-lined sections to reduce losses and the possible installation of additional wells appears to be a more logical approach to resolve the water shortages in the Districts' service area. If additional water is needed, these Districts should look to the proposed New Melones Project for a supplemental supply. It would not be in the public interest to approve construction of the Districts' project and thus prevent full development of the stream system.

Alpine County, appearing as a "county of origin", failed to present evidence of future need for water. Instead, it claims that acquisition of existing P. G. & E. facilities by applicants would result in a loss of tax revenue for which the county should be compensated and that construction of additional facilities in the county would require it to provide public services for which it should also be compensated. None of these matters are within the jurisdiction of the Board to consider.
The California Department of Fish and Game and the California Division of Beaches and Parks have negotiated agreements with all parties where conflicts existed. The available information indicates that the flows specified in the agreements between the Department of Fish and Game and the Applicant Districts are sufficient to maintain the fishery on the river. Permits should be made subject to the agreements insofar as they relate to matters within the jurisdiction of the Board.

The Department of Fish and Game requested that the Board reserve jurisdiction over the matter of releases of water below Goodwin Dam for salmon fisheries until hearings are held on the New Melones Project applications (RT 442). The Calaveras District will have little or no control over waters released from Tulloch and Goodwin Dams. Therefore, the Board concludes that a reservation of jurisdiction as requested, pursuant to Section 1394 of the Water Code, is not warranted.

ORDER

IT IS HEREBY ORDERED that the proposed changes in points of diversion and places of use as set forth in petitions submitted on December 7, 1960 and June 25, 1962, by Calaveras County Water District and amendments to the applications in accordance with evidence received at the hearing as Calaveras County Water District Exhibit 3 in connection with Applications 11792, 12910, 12911, 13092, 13093, 18728, 19148 and 19149 be, and the same are, approved.
IT IS FURTHER ORDERED that Applications 11792, as amended, be, and the same is, approved insofar as that application relates to water from North Fork Stanislaus River. Further, that Applications 12537, 12911, 13091, 13092, 13093, 18727, 19148, as amended, be, and the same are, approved and that Applications 12910, 12912, 18728 and 19149, as amended, be, and the same are, approved in part and that permits be issued to the Calaveras County Water District subject to vested rights and the following limitations and conditions:

1. The amount of water to be appropriated under permit issued pursuant to Application 11792 for irrigation, domestic, industrial and recreational purposes shall be limited to the amount which can be beneficially used and shall not exceed 78,500 acre-feet per annum by storage to be collected from about November 1 of each year to about July 1 of the succeeding year in the amounts and at the locations specified as follows:
   (a) 52,000 afa at Ganns Reservoir
   (b) 2,000 afa at Squaw Hollow Reservoir
   (c) 24,500 afa at Big Trees Reservoir

2. The amount of water to be appropriated under permit issued pursuant to Application 12537 for irrigation and domestic purposes shall be limited to the amount which can be beneficially used and shall not exceed 5,000 acre-feet per annum by storage at Black Creek Reservoir to be collected from about November 1 of each year to about April 1 of the succeeding year.
3. The amount of water to be appropriated under permit issued pursuant to Application 12910 for irrigation, domestic and stockwatering purposes shall be limited to the amount which can be beneficially used and shall not exceed a total of 400 cubic feet per second to be diverted from about March 1 to about July 1 of each year at Squaw Hollow or Goodwin Dams.

4. The amount of water to be appropriated under permit issued pursuant to Application 12911 for power purposes shall be limited to the amount which can be beneficially used and shall not exceed 400 cubic feet per second by direct diversion year-round and 78,500 acre-feet per annum by storage to be collected from about November 1 of each year to about July 1 of the succeeding year in the amounts and at the locations specified as follows:

   (a) 400 cfs by direct diversion and 58,000 afa by storage at Ganns Reservoir,

   (b) 2,000 afa by storage at Squaw Hollow Reservoir,

   (c) 18,500 afa by storage at Big Trees Reservoir.

5. The amount of water to be appropriated under permit issued pursuant to Application 12912 for municipal purposes shall be limited to the amount which can be beneficially used and shall not exceed 10 cfs to be diverted from about November 1 of each year to about July 1 of the succeeding year.
6. The amount of water to be appropriated under permit issued pursuant to Application 13091 for irrigation, domestic and stockwatering purposes shall be limited to the amount which can be beneficially used and shall not exceed 63,000 acre-feet per annum by storage to be collected from about November 1 of each year to about July 1 of the succeeding year at Spicer Meadows Reservoir.

7. The amount of water to be appropriated under permit issued pursuant to Application 13092 for power purposes shall be limited to the amount which can be beneficially used and shall not exceed 63,000 acre-feet per annum by storage to be collected from about November 1 of each year to about July 1 of the succeeding year at Spicer Meadows Reservoir.

8. The amount of water to be appropriated under permit issued pursuant to Application 13093 for municipal purposes shall be limited to the amount which can be beneficially used and shall not exceed 63,000 acre-feet per annum by storage to be collected from about November 1 of each year to about July 1 of the succeeding year as follows:

(a) 23,000 afa at Spicer Meadows Reservoir
(b) 40,000 afa at Big Trees Reservoir

9. The amount of water to be appropriated under permit issued pursuant to Application 18727 for power
purposes shall be limited to the amount which can be beneficially used and shall not exceed 700 cubic feet per second year-round by direct diversion and 25,900 acre-feet per annum by storage to be collected from about November 1 of each year to about July 1 of the succeeding year as follows:

(a) 60 cfs to be diverted at either Upper or Lower Beaver Creek Diversion Dams or a combination diversion not to exceed 60 cfs at the two points of diversion and 13,100 afa to off-stream storage at Big Trees Reservoir at a maximum rate of 800 cfs from Upper Beaver Creek Diversion Dam.

(b) 640 cfs by direct diversion and 12,800 afa by storage at Big Trees Reservoir.

10. The amount of water to be appropriated under permit issued pursuant to Application 18728 for irrigation, domestic and stockwatering purposes shall be limited to the amount which can be beneficially used and shall not exceed 600 cubic feet per second by direct diversion to be diverted from about March 1 to about July 1 of each year and 193,640 acre-feet per annum by storage to be collected from about November 1 of each year to about July 1 of the succeeding year. These diversions may be made as follows provided the
combined direct diversion from Big Trees, Squaw Hollow, Goodwin and Tulloch Reservoirs shall not exceed 590 cfs.

(a) 10 cfs from Lower Beaver Creek Diversion Dam.

(b) 13,100 afa to off-stream storage at a maximum rate of 800 cfs from Upper Beaver Creek Diversion Dam to Big Trees Reservoir.

(c) 590 cfs by direct diversion and 9,100 afa by storage from the North Fork Stanislaus River at Big Trees Reservoir.

(d) 590 cfs by direct diversion and 20,000 afa to off-stream storage at a maximum rate of 400 cfs from Squaw Hollow Reservoir to Jesus Maria Reservoir.

(e) 590 cfs by direct diversion from Goodwin Dam.

(f) 590 cfs by direct diversion and 151,440 afa to off-stream storage at a maximum rate of 2,500 cfs from Tulloch Reservoir to Littlejohns Reservoir.

11. The amount of water to be appropriated under permit issued pursuant to Application 19148 for power purposes shall be limited to the amount which can be beneficially used and shall not exceed 940 cubic feet
per second year-round by direct diversion and 79,200 acre-feet per annum by storage to be collected from about November 1 of each year to about June 30 of the succeeding year as follows:

(a) 600 cfs by direct diversion and 52,000 afa by off-stream storage at Spicer Meadows Reservoir at a maximum rate of 1,000 cfs from North Fork Stanislaus River below the Silver Creek confluence.

(b) 340 cfs by direct diversion from Upper Beaver Creek Diversion Dam.

(c) 27,200 afa from North Fork Stanislaus River at Big Trees Reservoir.

(d) 52,000 afa by storage from Highland Creek at Spicer Meadows Reservoir.

Provided the amount collected to storage at Spicer Meadows Reservoir shall not exceed 52,000 afa from the combined diversions from North Fork Stanislaus River and Highland Creek.

12. The amount of water to be appropriated under permit issued pursuant to Application 19149 for irrigation, domestic and stockwatering purposes shall be limited to the amount which can be beneficially used and shall not exceed 365 cfs by direct diversion to be
diverted from about March 1 to about July 1 of each year and 79,200 acre-feet per annum by storage to be collected from about November 1 of each year to about June 30 of the succeeding year as follows:

(a) A total of 25 cfs to be diverted at either Squaw Hollow or Goodwin Dams.
(b) 340 cfs from Lower Beaver Creek Diversion Dam.
(c) 342,200 afa by storage at Big Trees Reservoir.
(d) 37,000 afa by off-stream storage at a maximum rate of diversion of 1,000 cfs from North Fork Stanislaus River to Spicer Meadows Reservoir.

13. The maximum amount of water to be collected to storage under all permits during any one season shall not exceed:

(a) 130,000 acre-feet at Spicer Meadows Reservoir.
(b) 60,000 acre-feet at Ganns Reservoir.
(c) 162,000 acre-feet at Big Trees Reservoir.
(d) 2,000 acre-feet at Squaw Hollow Reservoir.
(e) 151,400 acre-feet at Littlejohns Reservoir.
(f) 20,000 acre-feet by off-stream storage at Jesus Maria Reservoir.
(g) 5,000 acre-feet at Black Creek Reservoir.
14. The maximum amounts herein stated may be reduced in the licenses if investigations warrant.

15. Actual construction work shall begin on or before September 1, 1965, and shall thereafter be prosecuted with reasonable diligence and if not so commenced and prosecuted these permits may be revoked.

16. Construction work shall be completed under all permits except the one issued pursuant to Application 12537 on or before December 1, 1990. Construction work under permit issued pursuant to Application 12537 shall be completed on or before December 1, 1968.

17. Complete application of the water to the proposed uses under all permits except the one issued pursuant to Application 12537 shall be made on or before December 1, 2015. Complete application of the water to the proposed use under permit issued pursuant to Application 12537 shall be made on or before December 1, 1975.

18. Progress reports shall be filed promptly by permittee on forms which will be provided annually by the State Water Rights Board until licenses are issued.

19. All rights and privileges under these permits including methods of diversion, methods of use and quantities of water diverted are subject to the continuing authority of the State Water Rights Board in accordance with law and in the interest of the public
welfare to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said waters.

20. These permits do not authorize collection of water to storage during the period outside the collection seasons specified in Paragraphs 1 through 12 of this order to offset evaporation or seepage losses, or for any other purpose.

21. Permittee shall allow representatives of the State Water Rights Board or other parties as may be authorized from time to time by said Board reasonable access to project works to determine compliance with the terms of the permits.

22. In accordance with requirements of Water Code Section 1393, permittee shall clear the site of each of the proposed reservoirs of all structures, trees and other vegetation which would interfere with the use of the reservoir for water storage and recreational purposes.

23. Separate applications for the approval of plans and specifications for construction of the dams described in these approved water right applications shall be filed with and approved by the Department of Water Resources prior to commencement of construction of the dams.
24. To the extent that their provisions relate to matters within the jurisdiction of the State Water Rights Board these permits, except the permit issued pursuant to Application 12537, are subject to the terms of agreements between the permittee and the California Department of Fish and Game, dated May 14, 1962, and the Division of Beaches and Parks of the State of California, dated May 10, 1962, which were filed for record at the hearing on Applications 11792 et al., as Fish and Game Exhibit 4 and Beaches and Parks Exhibit 3, respectively.

25. These permits (except for the permit issued pursuant to Application 12537) and all rights acquired or to be acquired thereunder shall be subject to a future depletion of streamflow above Goodwin Dam excluding North Fork Stanislaus River and tributaries not to exceed 90,000 acre-feet of water in any three-year period by lawful appropriations of water for reasonable beneficial use within the service area of Tuolumne County Water District No. 2, without regard to the time such appropriations are initiated.

IT IS FURTHER ORDERED that Applications 14372 and 14373, as amended by Tuolumne County Water District No. 2, be, and the same are, approved in part and that permits be issued to the applicant subject to vested rights and the following limitations and conditions:
1. The amount of water to be appropriated under the permit issued pursuant to Application 14372 for irrigation purposes shall be limited to the amount which can be beneficially used and shall not exceed 17,300 acre-feet per annum by storage at Kennedy Meadows Reservoir to be collected from about November 1 of each year to about July 1 of the succeeding year.

2. The amount of water to be appropriated under the permit issued pursuant to Application 14373 for power purposes shall be limited to the amount that can be beneficially used and shall not exceed 20,000 acre-feet per annum by storage at Kennedy Meadows Reservoir to be collected from about November 1 of each year to about July 1 of the succeeding year.

3. The maximum amount of water to be diverted to storage under these permits during any one season shall not exceed 20,000 acre-feet per annum.

4. The maximum amounts herein stated may be reduced in licenses if investigations warrant.

5. Actual construction work shall begin on or before September 1, 1965, and shall thereafter be prosecuted with reasonable diligence and if not so commenced and prosecuted these permits may be revoked.

6. Construction work shall be completed on or before December 1, 1968.

7. Complete application of the water to the proposed uses shall be made on or before December 1, 1975.
8. Progress reports shall be filed promptly by permittee on forms which will be provided annually by the State Water Rights Board until licenses are issued.

9. All rights and privileges under these permits including methods of diversion, methods of use and quantities of water diverted are subject to the continuing authority of the State Water Rights Board in accordance with law and in the interest of the public welfare to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of said waters.

10. These permits do not authorize collection of water to storage during the period from about July 1 to about November 1 of each season to offset evaporation and seepage losses or for any other purpose.

11. Permittee shall allow representatives of the State Water Rights Board and other parties as may be authorized from time to time by said Board reasonable access to project works to determine compliance with the terms of the permits.

12. In accordance with requirements of Water Code Section 1393, permittee shall clear the site of the proposed reservoir of all structures, trees and other vegetation which would interfere with the use of the reservoir for water storage and recreational purposes.

13. A separate application for approval of plans and specifications for construction of the dam described in these approved water rights applications shall be filed
with and approved by the Department of Water Resources prior to commencement of construction of the dam.

14. To the extent that its provisions relate to matters within the jurisdiction of the State Water Rights Board, these permits are subject to the terms of the agreement between the California Department of Fish and Game and the Tuolumne County Water District No. 2 dated June 25, 1962, and placed on record during the hearing on Applications 11792 et al. as Fish and Game Exhibit No. 5.

IT IS FURTHER ORDERED that Applications 12860, 13011A, 19664, 19665 and 19666 of Tuolumne County Water District No. 2 and Applications 13211, 13212, 14374, 14375 and 17408 of Oakdale and South San Joaquin Irrigation Districts be, and the same are, hereby denied.

Adopted as the decision and order of the State Water Rights Board at a meeting duly called and held at California, on the day of , 1963.

Kent Silverthorne, Chairman

Ralph J. McGill, Member

W. A. Alexander, Member
STATE OF CALIFORNIA
STATE WATER RIGHTS BOARD
APPLICATIONS
11792 etc
STANISLAUS RIVER SYSTEM

LEGEND
- POINTS OF DIVERSION
- POWERHOUSES
--- TUNNELS
----- DITCHES
- - - - - PIPELINES & CONDUCTS
RES.-EXISTING
RES.-PROPOSED

SCALE

STATE WATER RIGHTS BOARD
APPLICATIONS
11792 etc
STANISLAUS RIVER SYSTEM

DATE: 10/30/61
DRAWN: E.C.W.
CHECKED: A.L.F.
DWG. 2377
STATE OF CALIFORNIA
STATE WATER RIGHTS BOARD

In the Matter of Applications 11792, 12537, 12910, 12911, 12912, 13091, 13092, 13093, 18727, 18728, 19148 and 19149 of Calaveras County Water District; Applications 12860, 13011A, 14372, 14373, 19664, 19665 and 19666 of Tuolumne County Water District No. 2; and Applications 13211, 13212, 14374, 14375 and 17408 of Oakdale and South San Joaquin Irrigation Districts to Appropriate from Stanislaus River and Tributaries in Calaveras, Tuolumne, and Alpine Counties

ORDER DENYING PETITION FOR
RECONSIDERATION OF AND AMENDING DECISION D 1114

A petition for reconsideration of Board's Decision D 1114 was filed on April 15, 1963, by Tuolumne County Water District No. 2. The grounds for such petition are as follows:

"(a) The decision does not contain a clear statement of the Board's findings on the material issues;

"(b) The Board erred in determining that the Calaveras project would more nearly accomplish the objectives of the California Water Plan than the Tuolumne project;
"(c) New evidence, in the form of Bulletin 95 of Department of Water Resources, showing that the diversion of water from North Fork Stanislaus River at Spicers to Middle Fork, as proposed by the Tuolumne plan will help accomplish the objectives of the California Water Plan, has become available since the cause was submitted.

"(d) The Board erred in concluding that the Calaveras project will best conserve the public interest."

We will discuss each of the grounds in the order presented.

(a) Under the heading "No Findings on Material Issues" the petition alleges that "the Board approved the Calaveras project and rejected the Tuolumne project without disclosing the reasons therefor" (p. 2). On page 3, the petition indicates an awareness that the reason for the Board's decision was its conclusion "that the public interest is on the side of the Calaveras project" but complains that the decision is devoid of "any reference to a finding on relevant and material facts to support that conclusion."

Contrary to petitioner's assertion, the facts upon which the Board's conclusion is based are clearly set forth. After reviewing the competing plans of the three applicants and the general plan published by the State for development of the Stanislaus River, the Board found, on page 20 of the decision, that "the Calaveras plan will most nearly accomplish the objectives proposed under the California Water Plan for development of the North Fork Stanislaus River (DWR Exh. 3)."
The Board further found that "For all practical purposes the Calaveras District's project will fully develop the North Fork with over 577,000 acre-feet of storage capacity as compared to 160,000 acre-feet under the Tuolumne District's project and 60,000 acre-feet under the Tri-Dam District's project" (p. 22). This finding is supplemented by a further finding that Tuolumne's project "does not fully develop the stream system, and would for all practical purposes preclude construction of any other sizable project" (p. 23).

The evidence upon which the foregoing findings are based is summarized on pages 22 and 23 of the decision.

The petition complains that the decision does not "reveal any facts whatever about the physical, engineering, economic, or financial feasibility of the Tuolumne project, nor any statement of its estimated costs or anticipated yields in water or revenues" (p. 3). Since the Board determined that the public interest required approval of the Calaveras applications and denial of Tuolumne's applications for the reasons referred to above, no purpose would have been served by discussion of the feasibility of the Tuolumne project.

(b) Under the heading "Objectives of California Water Plan" the petition alleges that the Board erred in determining that the Calaveras plan would more "nearly accomplish the objectives proposed under the California Water Plan for development of the North Fork Stanislaus River" (p. 20).
The California Water Plan as it relates to the Stanislaus River and as outlined on pages 19 and 20 of Decision D 1114 was explained at the hearing by M. Guy Fairchild, Supervising Engineer, Department of Water Resources, and is shown on a large map designated as DWR Exh. 3. According to DWR Exh. 3, water from Spicer Meadows Reservoir would be used for hydroelectric power development and consumptive use purposes on the North Fork Stanislaus River which is in accord with the Calaveras plan. The plan of the Tuolumne District to divert water from Spicer Meadows Reservoir to the Middle Fork Stanislaus River is not part of the California Water Plan as outlined on DWR Exh. 3 and as set forth in Bulletin No. 3 "The California Water Plan," dated May 1957.

(c) Under the heading "New Evidence on California Water Plan" the petition states that Bulletin No. 95 has become available since the cause was submitted and that the report shows that a North Fork-Middle Fork diversion is consistent with and helpful to the California Water Plan.

Bulletin No. 95 entitled "Tuolumne County Water District No. 2 Investigation, Preliminary Edition", dated October 1962 was prepared pursuant to a cooperative agreement between the District and the Department of Water Resources. The resolution of the Board of Directors of the District requested the Department "to make a preliminary investigation and report on a study by said department of the feasibility of constructing the storage and diversion works contemplated by the
California Water Plan, or acceptable alternative thereto, on the Stanislaus River..." (emphasis added).

The Spicer Meadows project described in Bulletin No. 95 is similar in scope to the North Fork-Middle Fork project proposed by Tuolumne. Also Mr. Fairchild testified regarding some of the projects which are described in Bulletin No. 95. Therefore, the Board concludes that Bulletin No. 95 does not contain sufficient new evidence to cause the Board to grant a rehearing nor would it change the findings on the material issues.

The Board does not take issue with the petitioner that a "Basin Group Project" might better achieve the objectives of the California Water Plan as a means for developing water for both Calaveras and Tuolumne Counties. However, such a development would require an agreement between Tuolumne and Calaveras Districts as well as arrangements with Oakdale and South San Joaquin Irrigation Districts and Pacific Gas and Electric Company for use of their existing facilities. By letter dated January 16, 1963, the Board was advised by the Calaveras District that negotiations had resulted only in delay and unacceptable counter proposals and that negotiations between the respective applicants had terminated.

(d) The figures presented by the petition on page 11 indicate a comparison of the Calaveras plan and the "modified Collierville Project" proposed by the Tuolumne District. However, the fact remains that the applications of the Tuolumne District do not include the modified Collierville project and that they were incapable of being so amended to include such a project.
Further, the Calaveras District was opposed to any amendment of its applications to cover only the modified Collierville project. Therefore, the Board acted on the projects proposed by the applications at issue in these proceedings. It should also be noted that the works approved by Decision D 1114 are not in conflict with the "Basin Group Plan" proposed in Tuolumne Exh. 1 entitled "Report and Development Plan Stanislaus River Basin Area for Stanislaus River Basin Group."

The Board, having considered the aforementioned issues raised by the petitioner in its petition for reconsideration of Decision D 1114, and having found no error and having further found that there is no new evidence which would justify a different decision, the petition for reconsideration is hereby denied.

The Board concurs with the petitioner that a mathematical error appears in the decision with regard to the bond service for "Stage A" irrigation and domestic facilities and it is hereby ordered that the figure shown as "54,260" on page 11 of the decision be and the same is stricken and replaced by the figure "542,600"; that the total annual cost shown as "265,260" at the bottom of page 11 be and the same is stricken and replaced by the figure "753,600"; that the reference "CCWD Exh. 33" following each of the amended figures be and the same is stricken; and that the figure of estimated revenue in excess of costs shown as "674,000" on the last line of the first paragraph on page 12 be and the same is stricken and replaced by the figure "185,400."
Adopted as the order of the State Water Rights Board at a meeting duly called and held at Sacramento, California on the 29th day of April, 1963.

Kent Silverthorne, Chairman

Ralph J. McGill, Member

W. A. Alexander, Member