

McGill

STATE OF CALIFORNIA
State Water Rights Board

1401 21ST STREET
P. O. BOX 1592
SACRAMENTO 7, CALIFORNIA

Henry Holsinger, Chairman
W. P. Rowe, Member
Ralph J. McGill, Member

L. K. Hill
Executive Officer

March 21, 1958

Decision on Major Applications to Appropriate
Water from American River System

To: Applicants, Protestants,
and Other Interested Parties

Attached is a copy of Decision D 893 of the State Water Rights Board adopted on March 18, 1958, in connection with the subject applications.

The Board found that unappropriated water normally exists in the American River system except during the months of August, September and October, and ordered that permits be issued to the City of Sacramento, Georgetown Divide Public Utility District and the United States Bureau of Reclamation subject to certain terms and conditions set forth on pages 61 through 74 of the decision.

Applications by all other agencies were denied upon the basis that said agencies either lacked right of access to Folsom and Nimbus Reservoirs of the United States from which they sought to appropriate, were not in position to proceed within a reasonable time with construction work and in applying the water to beneficial use, or that approval of the applications would not be in the public interest.

Although the applications of Placer and El Dorado Counties were denied the Board has ordered certain terms and conditions be inserted in the permits to be issued to the City of Sacramento and the United States so that future upstream development in those counties will not be hampered by the projects of the City and the Federal Government. Also, the Board has ordered that conditions be inserted in permits of the United States which will preclude the contracting for water service on a permanent basis outside of the counties of Placer, Sacramento and San Joaquin until the water users within those counties have had a reasonable opportunity, 10 years, to obtain a water supply from the United States at Folsom and Nimbus Reservoirs.

Very truly yours,

L. K. Hill
L. K. Hill
Executive Officer

Encl.

STATE OF CALIFORNIA
STATE WATER RIGHTS BOARD

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In the Matter of Applications 12140, 12183, 12231, 12235, 12236, 12277, 12278, 12295, 12300, 12314, 12315, 12321, 12322, 12324, 12325, 12326, 12399, 12421, 12422, 12423, 12440, 12441, 12456, 12457, 12603, 12622, 12623, 12667, 12682, 12755, 12759, 12779, 12780, 12781, 12782, 12785, 12786, 13370, 13371, 13372, 14242, 14243, 14662, 14744, 15635, 15636, 15644, 15954, 15955, 16014, 16015, 16016, 16017, 16018, 16019, 16044, 16060, 16212, 16243, 16385, 16386, 16688, and 16819 by the City of Sacramento and other applicants, to appropriate waters of the American River and its tributaries.

Decision No. D 893

Decided March 18, 1958

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Appearances at Hearing Conducted at Sacramento commencing on November 27, 1956, by Henry Holsinger, Chairman, John B. Evans, Member, and W. P. Rowe, Member, State Water Rights Board:

Sacramento Municipal Utility District	)	Stephen B. Downey, Attorney
	)	Martin McDonough, Attorney
	)	David S. Kaplan, Attorney
City of Sacramento	)	Stephen B. Downey, Attorney
City of North Sacramento	)	Martin McDonough, Attorney
County of Sacramento	)	
Sacramento River Water and Delta Association	)	
Santa Clara Valley Water Conservation District	)	Albert T. Henley, Attorney
Hollister Irrigation District	)	
Campbell Water Company	)	
City of San Jose	)	
State Department of Water Resources	)	Mark Nosler, Attorney
Elk Grove Irrigation District	)	Denslow B. Green, Attorney
Galt Irrigation District	)	
State Department of Fish and Game	)	Lucian B. Vandegrift
	)	Deputy Attorney General
Pacific Gas and Electric Co.	)	Joseph Sheeks, Attorney

Reclamation Districts 348, 2029, 2036, 756, 802 and 1614	)	Tom H. Louttit, Attorney
Lockeford Protection District	)	
Mokelumne River Irrigation District	)	
Woodbridge Water Users Conservation District	)	
City of Stockton	)	Monroe Langdon, Attorney
City of Roseville	)	Robert A. Boone
County of Placer	)	Ralph M. Brody, Attorney
Stockton and East San Joaquin Water Conservation District	)	
County of El Dorado	)	Ralph M. Brody, Attorney
El Dorado Irrigation District	)	Jack Winkler, Attorney
Georgetown Divide Public Utility District	)	George Maul, Attorney
	)	John Cousens, Attorney
North San Joaquin Water Conservation District	)	R. P. Rott, Attorney
	)	E. G. Chandler, Attorney
State Park Commission	)	John Morris
	)	Deputy Attorney General
Fair Oaks Irrigation District	)	Philip F. Driver, Attorney
San Juan Suburban Water Company	)	L. K. Jordan
California Water Service Co.	)	Carl F. Mau
San Jose Water Works	)	
Augusta Bixler Farms and Numerous Other Delta Landowners	)	John A. Wilson, Attorney
	)	
San Joaquin County Flood Control and Water Conservation District	)	Richard W. Dickenson
	)	San Joaquin County Counsel
Sierra Club and the Federation of Western Outdoor Clubs	)	Harold Bradley
	)	
Sacramento Sierra Sportsmen's Council and Associated Sportsmen's Clubs	)	Sam Grosch
	)	
Citrus Heights Irrigation Dist.	)	William A. Sitton, Attorney
E. Clemens Horst Company	)	George E. Miller, Jr.
United States of America Bureau of Reclamation	)	John K. Bennett,
	)	Assistant Regional Solicitor,
	)	Department of the Interior

Sweetwater Company	)	Bacigalupi, Elkus and Salinger,
	)	Attorneys
El Dorado County Sportsmen's Organization	)	Robert Ramsey
	)	
Unorganized Sportsmen in Sacramento Area	)	Thomas J. McBride, Attorney and Assemblyman, Eighth District

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DECISION

Notice and Hearing

The captioned applications were completed in accordance with the Water Code and applicable administrative rules and regulations and were set for public hearing under the provisions of the California Administrative Code, Title 23, Waters, before the State Water Rights Board (hereinafter referred to as "the Board"), on November 27, 1956, at 10:00 a.m. at Sacramento, California. Of the hearing the applicants and the protestants were duly notified. The hearings extended through later sessions convened on November 28 and 29, December 5, 6, 7, and 10, 1956; and on January 3, 7, 8, 23, 24, 29, 30, and 31, February 5, 6, 7, 8, 26, 27, and 28, March 1, 5, 6, 7, 26, 27, and 28, June 25, and 26, and October 16 and 29, 1957.

Substance of the Applications

Application 12140 by City of Sacramento seeks a permit for 500 cubic feet per second (cfs) by direct diversion, year-round, from American River and 250,000 acre-feet per annum (afa) by storage between October 1 and June 1 from South Fork American River for municipal purposes. Point of diversion to storage is at Coloma Dam within Section 28, T11N, R9E, MDB&M*, and point of direct diversion

*Hereinafter all township and range designations are with reference to Mount Diablo Base and Meridian (MDB&M).

is at the intake to Filtration Plant No. 2 within projected Section 10, T8N, R5E. The place of use aggregates 79,500 acres within City of Sacramento and adjacent areas.

Application 12183 by City of North Sacramento seeks a permit for 21 cfs by direct diversion, year-round, and 15,000 afa by storage between October 1 and June 1 from American River for municipal purposes. Points of direct diversion and diversion to storage are at Folsom Dam within Section 24, T10N, R7E. The place of use includes the City of North Sacramento and environs.

Application 12231 by City of San Jose seeks a permit for 100,000 afa by storage between October 1 and June 1 from American River for municipal purposes. Point of diversion to storage is to be at Folsom Dam and the place of use is to include the City of San Jose and environs.

Application 12235 by Santa Clara Valley Water Conservation District seeks a permit for 50,000 afa by storage, year-round, from American River for industrial and domestic purposes. Point of diversion to storage is at Folsom Dam. The place of use will be within the boundaries of Santa Clara Valley Water Conservation District.

Application 12236 by Santa Clara Valley Water Conservation District seeks a permit for 150,000 afa by storage, year-round, from American River for irrigation and domestic purposes. Point of diversion to storage is at Folsom Dam. The place of use includes 126,000 net acres within a gross acreage of 151,000 acres within the boundaries of the district.

Application 12277 by San Jose Water Works seeks a permit for 37,500 afa by storage between October 1 and June 1 from

American River for municipal purposes. Point of diversion to storage is at Folsom Dam. The place of use includes the cities, towns and/or villages of San Jose, Los Gatos, Saratoga, Cupertino, portions of the City of Campbell and vicinity, and portions of T6S, R1, 2 and 3E; T6S, R1 and 2W; T7S, R1 and 2W; T7S, R1 and 2E; T8S, R1 and 2W; T8S, R1E and T9S, R1W.

Application 12278 by California Water Service Company seeks a permit for 50 cfs by direct diversion, year-round, and 25,000 afa by storage between October 1 and June 1 from American River for municipal purposes. The water is to be diverted and stored at Folsom Dam and will be used at the City of Stockton and environs.

Application 12295 by City of Roseville seeks a permit for 350 cfs by direct diversion, year-round, and 120,000 afa by storage between October 1 and June 1 from American River for municipal purposes. The water is to be diverted and stored at Folsom Dam and will be used at the City of Roseville and environs.

Application 12300 by Fair Oaks Irrigation District seeks a permit for 50 cfs by direct diversion between April 1 and October 31 and 25,500 afa by storage between October 1 and June 1 from American River for irrigation and domestic purposes. The water is to be diverted and stored at Folsom Dam and will be used within Fair Oaks Irrigation District having an irrigable area of approximately 3,600 acres.

Application 12314 by County of Sacramento seeks a permit for 1750 cfs by direct diversion, year-round, and 450,000 afa by storage between October 1 and June 1 from American River for irrigation and domestic purposes. Points of diversion are at Folsom

Dam and at Nimbus Dam within projected Section 16, T9N, R7E. The place of use is within Sacramento County and includes some 340,000 houses to be served, some 1,188,000 persons, and some 367,600 acres to be irrigated.

Application 12315 by County of Sacramento seeks a permit for 500 cfs by direct diversion, year-round, and 250,000 afa by storage between October 1 and June 1 from American River for municipal purposes. Points of diversion are at Folsom and Nimbus Dams. The place of use is within Sacramento County and includes the serving of some 340,000 homes, some 1,188,000 persons, industrial use, irrigating park areas, and supplying swimming pools.

Application 12321 of City of Sacramento by assignment from Sacramento Municipal Utility District seeks a permit for 50,000 afa by storage between October 1 and July 31 from South Fork Silver Creek, 310 cfs by direct diversion, year-round, and 225,000 afa by storage between October 1 and July 31 from Silver Creek for municipal (including domestic, recreational and industrial) purposes. Points of diversion are at Ice House Dam within Section 1, T11N, R14E; Union Valley Dam within Section 20, T12N, R14E; Junction Dam within Section 30, T12N, R14E; Camino Diversion Dam within Section 4, T11N, R13E; and Slab Creek Diversion Dam within Section 19, T11N, R12E. The place of use is within the boundaries of the Sacramento Municipal Utility District.

Application 12322 by Sacramento Municipal Utility District seeks a permit to appropriate from the same sources and for the same amounts and diversion seasons as named in Application 12321 for irrigation (including domestic) purposes. Points of diversion and place of use are also the same as that described under Application 12321 in the preceding paragraph.

Application 12324 by Sacramento Municipal Utility District seeks a permit for 310 cfs by direct diversion, year-round and 200,000 afa by storage between October 1 and July 1 from North Fork American River for municipal (including domestic, recreational and industrial) purposes. The point of diversion is at Auburn Dam within Section 11, T12N, R8E. The place of use is within the boundaries of Sacramento Municipal Utility District.

Application 12325 by Sacramento Municipal Utility District seeks a permit for 1500 cfs, year-round, and 400,000 afa between October 1 and July 1 for irrigation (including domestic) purposes. The point of diversion is to be at Auburn Dam and the water will be used within the boundaries of Sacramento Municipal Utility District.

Application 12326 by Sacramento Municipal Utility District seeks a permit for 2,000 cfs by direct diversion, year-round, and 500,000 afa by storage between October 1 and July 1 from North Fork American River and 2,000 cfs by direct diversion, year-round and 500,000 afa by storage between October 1 and July 1 from South Fork American River for power purposes. Points of diversion are at Auburn and Coloma Dams and the water will be used to generate power at Auburn Power House within Section 14, T12N, R8E, and at the Coloma Power House within Section 29, T11N, R9E.

Application 12399 by City of Stockton seeks a permit for 100,000 afa by storage between December 1 and June 30 from American River for municipal purposes. Points of diversion are at Folsom and Nimbus Dams. The place of use includes the City of Stockton and environs.

Application 12421 by Georgetown Divide Public Utility District seeks a permit for a total of 140 cfs by direct diversion,

year-round, consisting of 20 cfs from Buck Island Lake, 30 cfs from Gerle Creek, 30 cfs from South Fork Rubicon River, 50 cfs from Pilot Creek, and 10 cfs from Greenwood Creek. The application also seeks a permit for 100,800 afa by storage, year-round, consisting of 10,000 afa from Rock Bound Lake and/or Buck Island Lake, 32,500 afa from Loon Lake, 8,000 afa from South Fork Rubicon River, 10,300 afa from Gerle Creek, 30,000 afa from Pilot Creek, and 10,000 afa from Greenwood Creek. Points of diversion are at Rock Bound Lake within Section 6, T13N, R16E; Buck Island Lake within Section 6, T13N, R16E; Loon Lake within Section 5, T13N, R15E; Gerle Creek Dam within Section 2, T13N, R14E; Loon Lake Auxiliary Dam within Section 7, T13N, R15E; South Fork Rubicon River within Section 17, T13N, R15E; Gerle Creek within Section 15, T13N, R14E; South Fork Rubicon River within Section 27, T13N, R14E; Pilot Creek within Section 7, T12N, R13E; Pilot Creek within Section 12, T12N, R12E; Pilot Creek within Section 11, T12N, R12E; and Greenwood Creek within Section 18, T12N, R10E. The water is to be used for irrigation, domestic, and stockwatering purposes within Georgetown Divide Public Utility District.

Application 12422 by Georgetown Divide Public Utility District seeks a permit for a total of 20 cfs by direct diversion and 6,600 afa by storage, year-round, consisting of 5 cfs and 1600 afa from Rock Canyon Creek, and 15 cfs and 5,000 afa from Empire Creek. The water is to be used for irrigation, domestic, and stockwatering purposes within the boundaries of Georgetown Divide Public Utility District. The points of diversion are within Section 7, T12N, R11E, and Sections 13, 18, and 27, all within T12N, R10E.

Application 12423 by Georgetown Divide Public Utility District seeks a permit for a total of 100 cfs by direct diversion

and 80,800 afa by storage, year-round, consisting of 20 cfs from Buck Island Lake, 30 cfs from Gerle Creek, 50 cfs from Pilot Creek, 10,000 afa from Rock Bound Lake or Buck Island Lake, 32,500 afa from Loon Lake, 8,000 afa from South Fork Rubicon River, 10,300 afa from Gerle Creek and 20,000 afa from Pilot Creek. The location of points of diversion are tabulated as follows:

1. Rock Bound Lake, Section 6, T13N, R16E.
2. Buck Island Lake, Section 6, T13N, R16E.
3. Loon Lake, Section 5, T13N, R15E.
4. Loon Lake Auxiliary Dam, Section 7, T13N, R15E.
5. South Fork Rubicon River, Section 17, T13N, R15E.
6. Gerle Creek, Section 2, T13N, R14E.
7. Pilot Creek, Section 11, T12N, R12E.

The water is to be used for power purposes at Gerle Creek powerhouse No. 1 within Section 36, T14N, R14E, Gerle Creek powerhouse No. 2 within Section 11, T13N, R14E, and Pilot Creek powerhouse within Section 33, T13N, R12E. The water will be released to Pilot Creek within Section 33, T13N, R12E.

Application 12440 by North San Joaquin Water Conservation District seeks a permit for 200 cfs by direct diversion and 70,000 afa by storage, year-round from American River for irrigation and domestic purposes. Points of diversion are at Folsom and Nimbus Dams. The place of use is within the boundaries of North San Joaquin Water Conservation District.

Application 12441 by North San Joaquin Water Conservation District seeks a permit for 200 cfs by direct diversion and 70,000 afa by storage, year-round, from American River for municipal (including domestic, recreational, and industrial) purposes. Water is to be diverted at Folsom and Nimbus Dams. The place of use includes the Cities of Lodi, Lockeford, Collierville, Victor, and Acampo and other urban areas within the boundaries of North

San Joaquin Water Conservation District.

Application 12456 by County of Placer seeks a permit for a total of 700 cfs by direct diversion and 279,200 afa by storage, year-round, from Duncan Creek, Middle Fork American River, Rubicon River, and Long Canyon. The maximum simultaneous rate of direct diversion from all sources is not to exceed 700 cfs. The water is to be diverted at: (1) Duncan Creek within Section 24, T15N, R13E; (2) Middle Fork American River at French Meadows Reservoir within Section 36, T15N, R13E; (3) Rubicon River at Lower Hellhole Reservoir within Section 16, T14N, R14E; (4) Rubicon River at Parsley Bar Reservoir within Section 32, T14N, R14E; (5) Long Canyon within Section 34, T14N, R13E; and (6) Middle Fork American River at American Bar Reservoir within Section 33, T14N, R11E. The water is to be used for irrigation, domestic, and stockwatering purposes within a gross area of 792,610 acres within the County of Placer.

Application 12457 by County of Placer seeks a permit for a maximum of 1280 cfs by direct diversion and 279,200 afa by storage, year-round, from the same sources and at the same points as indicated in the preceding paragraph under Application 12456. The use to which the water is to be applied, however, is power. The places of use are at French Meadows powerhouse within Section 9, T14N, R14E, Lower Hellhole powerhouse within Section 21, T14N, R14E, Ralston powerhouse within Section 2, T13N, R11E, and American Bar powerhouse within Section 6, T13N, R11E. The water will be released to Middle Fork American River within Section 6, T13N, R11E.

Application 12603 by the Campbell Water Company seeks a permit for 850 afa by storage, year-round, from American River for industrial and domestic purposes. The water is to be diverted at

Folsom Dam and will be used at the community of Campbell in Santa Clara County.

Application 12622 of City of Sacramento by assignment from Sacramento Municipal Utility District seeks a permit for 500 cfs by direct diversion, year-round, and 75,000 afa by storage between October 1 and July 31, from Rubicon River, 200 cfs by direct diversion, year-round, and 14,000 afa by storage between October 1 and July 31 from Rock Bound Creek, 25,000 afa by storage between October 1 and July 31 from Gerle Creek, and 500 cfs by direct diversion, year-round, and 200,000 afa by storage between October 1 and July 31, from South Fork Rubicon River, for municipal (including domestic, recreational, and industrial) purposes. The maximum direct diversion is not to exceed 500 cfs at any time and will be diverted first from South Fork Rubicon River supplemented only if necessary from Rock Bound Creek and Rubicon River. Points of diversion are within Sections 6 and 9, T13N, R16E; Section 5, T13N, R15E; Section 21, T13N, R14E; Sections 20 and 30, T12N, R14E; Section 4, T11N, R13E; and Section 19, T11N, R12E. The water is to be used within the boundaries of Sacramento Municipal Utility District.

Application 12623 of Sacramento Municipal Utility District is identical with Application 12622 with the exception that the water is to be used for irrigation purposes.

Application 12667 by Citrus Heights Irrigation District seeks a permit for 50 cfs by direct diversion, year-round, and 28,000 afa by storage between October 1 and June 1 from American River for irrigation and domestic purposes. The water is to be diverted at Folsom Dam and will be used within Citrus Heights Irrigation District.

Application 12682 by the Campbell Water Company seeks a permit for 150 afa by storage, year-round, from American River for irrigation and domestic purposes. The water is to be stored at Folsom Reservoir and used for domestic purposes at the community of Campbell and for the irrigation of 200 of the 600 acres included within the boundaries of the Campbell Water Company.

Application 12755 by County of Placer seeks a permit for 2,860 cfs by direct diversion and 768,000 afa by storage, year-round, from North Fork American River for power purposes. The water is to be diverted and stored at Auburn Dam for use at Auburn powerhouse within Section 26, T12N, R8E. The water is to be returned to North Fork American River within said Section 26.

Application 12759 by County of Placer seeks a permit for 800 cfs by direct diversion and 241,300 afa by storage, year-round, for irrigation, domestic and stockwatering purposes. The water is to be diverted at Auburn Dam and used for irrigation of a net area of 212,000 acres, domestic and stockwatering uses all within a gross area of 792,610 acres within the County of Placer.

Application 12779 by County of El Dorado seeks a permit to appropriate 100 cfs by direct diversion and 67,000 afa by storage, year-round, from Silver Fork American River, 75 cfs by direct diversion and 23,800 afa by storage, year-round, from Alder Creek for power purposes. The water is to be diverted at Silver Fork Diversion Dam within Section 21, T10N, R16E and at Alder Creek Dam within Section 8, T10N, R15E. Use is to be made of the water within Section 36, T11N, R14E and it will be released to Alder Creek within said Section 36.

Application 12780 by County of El Dorado seeks a permit for 115,000 afa by storage, year-round, from South Fork American River for power purposes. The water is to be diverted at a point within Section 19, T11N, R16E and stored at Junction Reservoir within Section 30, T12N, R14E. Use of the water is to be made at Jaybird powerhouse within Section 4, T11N, R13E and at Camino powerhouse within Section 15, T11N, R12E. The water will be released below each of the powerhouses to Silver Creek and South Fork American River, respectively.

Application 12781 by County of El Dorado seeks a permit for 100 cfs by direct diversion and 67,600 afa by storage, year-round, from Silver Fork American River, 75 cfs by direct diversion and 23,800 afa by storage, year-round, from Alder Creek, 115,000 afa by storage, year-round, from South Fork American River and 10,000 afa by storage, year-round, from Plum Creek for irrigation, domestic, and stockwatering purposes. Points of diversion are as follows: (1) Silver Fork American River within Section 21, T10N, R16E; (2) Alder Creek Storage Dam within Section 8, T10N, R15E; (3) South Fork American River to Junction Reservoir within Section 19, T11N, R16E; and (4) Plum Creek within Section 32, T11N, R14E. The place of use includes 59,000 irrigable acres located within the 233,000 acres constituting the South Fork Service Unit.

Application 12782 by County of El Dorado seeks a permit for a total of 20 cfs by direct diversion and 10,000 afa by storage, year-round, from either or both Silver Fork American River and Alder Creek, for municipal purposes. The water is to be diverted at points within Section 21, T10N, R16E, and Section 8, T10N, R15E. Use of water is to be at Placerville and other towns in the South Fork Service Area.

Application 12785 by County of El Dorado seeks a permit for 25 cfs by direct diversion and 6,425 afa by storage, year-round, from North Fork Weber Creek for irrigation, domestic, and stock-watering purposes. The water is to be diverted within Section 18, T10N, R12E, and will be used in a net area of 59,000 irrigable acres within a gross area of 233,000 acres within El Dorado County.

Application 12786 by County of Placer seeks a permit for 7 cfs by direct diversion and 2400 afa by storage, year-round, from North Fork American River for recreational and domestic purposes. The water is to be diverted within Section 13, T16N, R14E, and used along a 40-mile reach of North Fork American River extending from The Cedars to the projected Auburn Reservoir.

Application 13370 by United States of America, Bureau of Reclamation, seeks a permit for 8,000 cfs by direct diversion, year-round, and 1,000,000 afa by storage to be collected between October 1 and July 1 from American River for irrigation, salinity control, and flood control purposes. Point of diversion is at Folsom Dam. The place of use includes portions of the Central Valley Project Service Area.

Application 13371 by United States of America, Bureau of Reclamation, seeks a permit for 700 cfs by direct diversion, year-round, and 300,000 afa by storage to be collected between October 1 and July 1 from American River, for municipal, industrial, domestic, and incidental recreational purposes. Point of diversion is at Folsom Dam. The place of use is within designated areas of the Central Valley Project Service Area.

Application 13372 by United States of America, Bureau of Reclamation, seeks a permit for 8,000 cfs by direct diversion,

year-round, and 1,000,000 afa by storage to be collected between October 1 to July 1 from American River for power purposes. The water is to be diverted at Folsom and Nimbus Dams and will be used to generate power at the Folsom and Nimbus powerhouses.

Application 14242 by County of El Dorado seeks a permit for 750 cfs by direct diversion and 50,000 afa by storage, year-round, from Silver Creek for irrigation, domestic, and stockwatering purposes. Point of diversion is at Junction Dam within Section 30, T12N, R14E, and the water will be used within a gross area of 233,000 acres having a net irrigable acreage of 59,000 acres within the South Fork Service Area.

Application 14243 by County of El Dorado seeks a permit for 750 cfs by direct diversion and 50,000 afa by storage, year-round, from Silver Creek, for power purposes. Point of diversion is at Junction Dam; use is to be at Jaybird and Camino powerhouses. The water will be returned to Silver Creek and/or to South Fork American River below the two powerhouses.

Application 14662 by United States of America, Bureau of Reclamation, seeks a permit for 300,000 afa by storage to be collected between October 1 and July 1 from American River, for power purposes. Points of diversion are at Folsom and Nimbus Dams. Use of water is to be at the Folsom and Nimbus powerhouses and the water will be returned to American River below each of the powerhouses.

Application 14744 by Hollister Irrigation District seeks a permit for 60,000 afa by storage to be collected, year-round, from American River for irrigation and incidental domestic purposes. The water is to be stored in Folsom Reservoir and used within the boundaries of Hollister Irrigation District.

Application 15635 by Elk Grove Irrigation District seeks a permit for 900 cfs by direct diversion between March 1 and November 1 of each year and 200,000 afa by storage to be collected between October 1 and July 15 from American River for irrigation and domestic purposes. The water is to be diverted at Folsom and Nimbus Dams and used within the boundaries of the district having a present gross area of 73,000 acres with a net irrigable area of 66,500 acres and adjacent to the district in a gross area of 7,000 acres with a net irrigable area of 3,500 acres.

Application 15636 by Elk Grove Irrigation District seeks a permit for 2,000 cfs by direct diversion, year-round, and 800,000 afa by storage to be collected between October 1 and July 15 from South Fork American River for power purposes. Points of diversion are at Sutter Dam within Section 10, T11N, R9E, and at Salmon Falls Dam within Section 30, T11N, R9E. Use of water is to be at Coloma powerhouse within Section 10, T11N, R9E, and at Salmon Falls powerhouse within Section 30, T11N, R9E. The water is to be returned to South Fork American River below each powerhouse.

Application 15644 by Elk Grove Irrigation District seeks a permit for 800,000 afa by storage to be collected between October 1 and July 15 from South Fork American River and 2,000 cfs by direct diversion between March 1 and November 1 of each year from American River for irrigation and domestic purposes. The water is to be diverted at Sutter and Nimbus Dams and stored in Marshall Reservoir. The water is to be used within the boundaries of Elk Grove Irrigation District, Galt Irrigation District, and in areas adjacent to the said districts having a gross area of 200,000 acres.

Application 15954 by Elk Grove Irrigation District, County of Sacramento, and Galt Irrigation District seeks a permit for

240,000 afa by storage from South Fork American River, 1,000,000 afa by storage from Middle Fork American River, and 500,000 afa by storage from North Fork American River to be collected between October 1 and August 1 for irrigation and domestic purposes. Points of diversion are at Big Bend Dam within Section 1, T13N, R9E, Poverty Bar Dam within Section 35, of the same township, Sutter Dam within Section 10, T11N, R9E, Salmon Falls Dam within Section 30 of the same township and rediversion at Nimbus Dam. The place of use includes ultimate irrigable acreages of 70,000 acres within Elk Grove Irrigation District, 40,000 net irrigable acres within Galt Irrigation District, and 60,000 net irrigable acres within the County of Sacramento.

Application 15955 by Elk Grove Irrigation District seeks a permit for 5,600 cfs by direct diversion, year-round, and 540,000 afa by storage to be collected between October 1 and August 1 from South Fork American River, 3,400 cfs by direct diversion, year-round, and 1,000,000 afa by storage to be collected between October 1 and August 1 from Middle Fork American River and 1,500 cfs by direct diversion, year-round, and 500,000 afa by storage to be collected between October 1 and August 1 from North Fork American River for power purposes. Points of diversion are at Big Bend Dam, Poverty Bar Dam, Sutter Dam, and Salmon Falls Dam. Use of water is to be at Coloma and Salmon Falls powerhouses and the water will be released to South Fork American River below the Salmon Falls powerhouse.

Application 16014 by Sacramento Municipal Utility District seeks a permit for 2,000 cfs by direct diversion, year-round, and 4,000 afa by storage to be collected between October 1 and July 31 from South Fork American River for municipal (including domestic,

recreational, and industrial) purposes. Diversion is to be at Salmon Falls Dam and at points on the American River between Folsom Dam and Sacramento. The water will be used within the boundaries of Sacramento Municipal Utility District.

Application 16015 by Sacramento Municipal Utility District seeks a permit for 2,000 cfs by direct diversion between March 15 and October 31 of each year and 4,000 afa by storage to be collected between October 1 and July 31 from South Fork American River for irrigation purposes. Point of diversion is at Salmon Falls Dam, and the water will be used within the boundaries of the Sacramento Municipal Utility District.

Application 16016 by Sacramento Municipal Utility District seeks a permit for 2,000 cfs by direct diversion, year-round, and 4,000 afa by storage to be collected between October 1 and July 31 from South Fork American River for power purposes. The water is to be diverted at Salmon Falls Dam. Use of water is to be made at Salmon Falls powerhouse and the water will be returned to South Fork American River below the powerhouse.

Applications 16017, 16018, and 16019 by Sacramento Municipal Utility District each seek to appropriate 1,000 cfs by direct diversion and 30,000 afa by storage from South Fork American River. The season of direct diversion is year-round for Applications 16017 and 16019 and extends from March 15 to October 31 of each year for Application 16018. The season of storage contemplated in each application extends from October 1 to July 31. The water sought under these three applications is to be used for municipal, irrigation, and power purposes, respectively. Diversion of water is to be at Kelsey Dam within Section 27, T11N, R10E. The water is to be used

within the boundaries of Sacramento Municipal Utility District, except that under Application 16019 power is to be generated at the Kelsey powerhouse within Section 27, T11N, R10E.

Application 16044 by Georgetown Divide Public Utility District seeks a permit for 40 cfs by direct diversion, year-round, and 9,500 afa by storage to be collected between November 1 and June 1 from Canyon Creek for irrigation, domestic, and stockwatering purposes. Point of diversion is at Canyon Creek Dam within Section 33, T13N, R10E. Use of water is to be made within the boundaries of Georgetown Divide Public Utility District.

Application 16060 by City of Sacramento seeks a permit for 175 cfs by direct diversion, year-round, from American River and 300,000 afa by storage to be collected between October 1 and July 1 from South Fork American River for municipal purposes. Points of diversion are at Coloma Dam within Section 28, T11N, R9E, and at Filtration Plant No. 2 within projected Section 10, T8N, R5E. Use of water is to be made within the City of Sacramento and adjacent areas having a total area of 79,500 acres.

Application 16212 by Georgetown Divide Public Utility District seeks a permit for 75 cfs by direct diversion and 7,000 afa by storage to be collected, year-round, from Mutton Canyon, Pilot Creek, Bacon Canyon, Deep Canyon, 5 unnamed canyons and branches of First, Second, and Third Otter Creeks. The water is to be used for irrigation, domestic, and stockwatering purposes. Points of diversion are within T12N, R12E, and T13N, R11 and 12E, and the water will be applied to beneficial use within the boundaries of Georgetown Divide Public Utility District.

Application 16243 by Southside County Water District seeks a permit for 25 cfs by direct diversion, year-round, and 5,000 afa by storage to be collected between October 1 and May 1 from South Fork Weber Creek for irrigation, domestic, and stockwatering purposes. Point of diversion is at South Fork Weber Creek Dam within Section 22, T10N, R12E, and use of the water is to be made within the boundaries of Southside County Water District.

Applications 16385 and 16386 by Stockton and East San Joaquin Water Conservation District seek permits for identical appropriations of 400 cfs by direct diversion, year-round, (February 15 to October 15 under Application 16386) and 120,000 afa by storage, year-round, from American River. Application 16385 is for municipal, industrial, and recreational purposes, and Application 16386 is for irrigation and domestic purposes. The water is to be diverted at Folsom and Nimbus Dams. Use of the water applied for is to be within the boundaries of Stockton and East San Joaquin Water Conservation District.

Application 16688 by Georgetown Divide Public Utility District seeks a permit for 30 cfs by direct diversion, year-round, and 4,000 afa by storage to be collected, year-round, from Onion Creek for irrigation, domestic, and stockwatering purposes. The water is to be diverted within Section 16, T12N, R13E, and will be stored in either Stumpy Meadows Reservoir within Section 11, T12N, R12E, or Greenwood Reservoir within Section 18, T12N, R10E. Use of water is to be made within the boundaries of Georgetown Divide Public Utility District.

Application 16819 by County of Placer seeks a permit for a total of 85 cfs by direct diversion and 59,600 afa by storage, year-round, for irrigation and domestic purposes. The sources of the proposed appropriation are Secret and Black Canyons, El Dorado Creek, Bullion Creek, Forbes Creek, Branch of Forbes Creek, and North Shirttail Canyon. Points of diversion are within T15N, R12E; T15N, R11 and 12E; T14 and 15N, R11E. The place of use is to include 15,400 acres of irrigable land on Forest Hill Divide within T13, 14, and 15N; R9, 10 and 11E.

Protests

Some 2,040 protests were filed, the number of protests per application ranging from 3 to 35 and averaging about 31, the number of applications protested by a single protestant ranging from one to 64 and averaging about 29.

Reasons alleged in protests for opposing various applications include the following:

Insufficiency of flow, at times, to serve applicants' wants without interference with the exercise of downstream rights.

Nonexistence of unappropriated water in view of present and future needs of riparian owners.

Impossibility, after the commingling of waters in Delta channels, of determining at any given time how much the holder of some prior right may divert.

Increase of saline intrusion resulting from proposed diversion and/or regulation of natural flow.

Interference with natural drainage of certain Delta lands.

Interference with integrated operation of Central Valley Project; incompatibility of releases, on call, by individual appropriators, with existing law and federal policy.

Hindrance to gravity diversions from Delta channels if water surfaces thereof are lowered; hindrance to gravity disposal of return water if water surfaces in said channels are raised, with consequent accumulation of salts on affected properties.

Destruction of the barrier, now provided by natural flow, to intrusion of saline waters.

Increased costs of levee maintenance due to higher water levels in Delta channels under operation contemplated in the applications.

Lack, by certain applicants, of rights of access essential to the operation of their projects.

Prohibition, if certain of the applications are approved, of the full development of American River basin.

Increased irrigation costs and impairment of water quality resulting from changing the water surface elevations and reversing the direction of flow in certain Delta channels.

Apprehension of upheaval of natural water rights and conditions in the Delta if the applications are approved, with consequent confusion and controversy.

Destruction of fish unless adequate flows in the various channels are maintained.

Inundation of points of historic interest.

Deprivation of protestants' opportunity to expand.

Impropriety of exportation, by certain applicants, of water reasonably needed to supply protestants, in view of settled policy that only surplus waters are to be exported.

Imposition upon diverters below the confluence of Sacramento and American Rivers of a portion of the cost of works that do not benefit them.

Answers to Protests

Among the applicants' answers to protests are statements to the effect that:

The mountain counties are entitled to water supplies commensurate with their needs under the County of Origin statute.

The American River contributes a part only of the supply available to users who divert at points below the mouth of that stream.

Permits to appropriate unappropriated water are granted subject both to existing rights and to appropriate limitations and conditions.

Analysis indicates that the amount of unappropriated water in American River is enough to meet both the applicants' requirements and the requirements set forth in the Fish and Game Code.

Right of way necessities will be adjusted either by negotiation or by relocation of proposed works.

The proposed development will not harm and may benefit downstream users.

Better regulation will tend both to reduce unwanted surpluses in winter and spring and to augment the low flows prevalent in summer and fall.

The applicant will recognize and respect all prior rights.

The operation of the Federal Central Valley Project will provide a coordinate development of the Sacramento, American, and San Joaquin rivers.

The applicant disclaims any intention of diverting any unregulated flow; its project therefore cannot aggravate the saline encroachment problem.

The flow of American River at times, especially at times of high stage, is in excess of requirements under prior rights in the Delta.

The grounds stated in certain protests are insufficient in view of relative priorities.

Since applicant seeks only to appropriate unappropriated water, its project cannot interfere with the exercise by protestant of any prior right.

Applications insofar as they contemplate municipal and domestic use are entitled to the priorities provided in the Water Code.

Applicants expect to pay a reasonable charge for the use of protestant's facilities.

Protection of rights of various protestants and priorities may be provided by the employment of suitable permit clauses.

Uses proposed by applicant are higher than uses made by protestant.

Applicant claims a paramount right to sufficient water to satisfy its ultimate needs under Section 111460 and 111463 of the Water Code.

The only water sought under the application is water that would otherwise waste.

The U. S. Bureau of Reclamation claims a right to the integrated operation of Folsom Reservoir with the rest of the Central Valley Project and argues that issuance of a permit to an individual would transgress that right. The California Department of Fish and Game's protests are based upon Section 525 (now Section 5937) of the Fish and Game Code which provides that the owner of any dam shall allow sufficient water at all times to pass that dam to keep in good condition any fish that may be planted or exist below it. In protesting applications proposing storage projects that would inundate the gold discovery site, the State Park Commission bases its protest upon Section 10001.5 of the Water Code. Under the County of Origin law, the Counties of El Dorado and Placer claim rights to enough water for any future expansions.

The following portions of this decision include a summary and discussion of evidence in the record of the hearing.

Watershed

The American River watershed embraces some 1,921 square miles above the United States Geological Survey gaging station "American River at Fair Oaks" which is located approximately at the base of the Sierra Nevada foothills. The gaging station mentioned is located 19.2 river miles above the junction of the American and Sacramento Rivers, roughly 2.5 miles below Nimbus Dam and below all of the points of diversion designated in the applications at issue except Applications 12140 and 16060 by the City of Sacramento. The watershed is bounded on the north, east and south by the drainage basins of the Bear, Yuba, Truckee, Carson and Cosumnes Rivers, and on the west by the Sacramento Valley floor. Elevations rise from about 100 feet to more than 10,000 feet. The basin is some 50 miles wide at the crest of the Sierra Nevada and slopes steeply to the southwest for a

distance of about 60 miles, narrowing to a width at the Fair Oaks gage of about two miles. Subdivisions of the watershed are drained by the river's three main forks - the North Fork, the Middle Fork and the South Fork - and by their tributaries.

Physical features of the American River basin are typical of the Sierra Nevada region. The main water courses generally are deeply incised; they are separated by broad ridges of comparatively moderate slope. The canyon of the North Fork is especially precipitous, being at one point 3,500 feet deep. Forest cover ranges from brushy types in the foothill areas to fairly heavy stands of timber in the central zone. At the higher levels there are large areas of bare granite, dotted with numerous small lakes.

Climate

The climate of the American River basin ranges from temperate in the foothill areas to alpine at the higher levels. Precipitation for the most part occurs during late fall, winter and early spring. At the higher elevations it is usually in the form of snow. Summer thunderstorms are frequent in the mountains but in the aggregate contribute little to runoff. At elevation 3,500 which is about the upper limit for profitable cultivation, precipitation averages about 55 inches.

Streamflow

According to United States Geological Survey Water Supply Paper No. 1345, the flow of the American River passing the Fair Oaks gage during the 49 complete water years of published record has ranged from 3.6 to 180,000 cubic feet per second and has averaged 3,770 cubic feet per second, equivalent to about 2,729,000 acre-feet per annum.

Monthly mean flows of the American River passing the Fair Oaks gage as recorded in the Water Supply papers (SWRB Exh. 13) over the 20 most recent water-years of published record (1933-34 to 1953-54) are tabulated below. Also shown in the tabulation are the medians of the corresponding monthly mean flows and the minimum monthly mean flows that are of record as having occurred in each of the months of the year, within the same 20-year period.

Month	Flows		
	Monthly mean	Median of monthly mean	Minimum monthly mean
January	4777	3936	901
February	6169	6665	1468
March	6735	5756	2572
April	8875	8664	3819
May	9221	8816	2583
June	4935	4455	784
July	1217	1031	165
August	355	301	106
September	312	283	108
October	518	476	219
November	1959	1069	516
December	3410	1539	629

The flow of the American River has been estimated sufficient by the former State Water Resources Board in its

Bulletin No. 21, (SWRB Exh. 8, pp. 5-1 and 5-2) with Folsom Reservoir completed (as it is now), to irrigate around 400,000 acres, with some allowance for urban use. It has been estimated sufficient (in the same reference), after full basin development as proposed in Bulletin No. 21 but without conjunctive use of natural ground water storage capacity, to supply upstream requirements, to maintain at all times a substantial flow in its bed, to serve an urban population of 500,000 and to irrigate a total of up to 500,000 acres.

State Filings

Applications by the State Department of Finance to appropriate water from the American River and tributaries for consumptive use within the Counties of Placer and El Dorado above Folsom Dam aggregate 1,031,325 acre-feet. The places of use are limited to 260,000 acres within Townships 8 to 13 North, Ranges 8 to 13 East. These filings are prior to all of the applications to be acted upon in this decision. It was not possible to set them for hearing due to their incomplete status. It is apparent that this reservation of water for the areas of origin represents some 38 per cent of total flow that passes the Fair Oaks gage during a normal year. Hence, in the absence of further consideration it would appear that the development potential of American River for downstream use is seriously hampered by the existence of these filings.

Although the situation is not unique, it is a problem confronting the Board in determining the extent water is available

for downstream long-time development which, in order to do so, requires a realistic estimate of the needs of these areas of origin. Evidence in this connection is far from conclusive. County of Placer estimates that under ultimate development the county will require annually a supplemental supply of 518,800 acre-feet. Although it is admitted that the entire quantity will not come from the American River system, the record is silent as to that county's expected ultimate needs therefrom (R.T. 3/26/57, Sec. 2, p. 39). The State Water Resources Board estimates for the same area are considerably more conservative. Its estimates include not only a higher duty of water but also take into consideration the available sources and the probability of ultimate development based upon geographic location and topography. That agency concludes that a total of 57,600 acre-feet of additional water will be required, of which 28,100 acre-feet would logically come from the American River (SWRB Exh. 8, pp. 3-26). The United States Bureau of Reclamation (hereinafter referred to as the "United States") takes the position that "the studies made by the State do not include a determination of the economic feasibility of these possible developments. Preliminary studies made by the United States indicate that except for the Pleasant Valley Area of the South Fork Service Area and some areas within the El Dorado Irrigation District and the Georgetown Divide Public Utility District most of the potential future irrigation in the upper American River watershed is economically infeasible under presently foreseeable economic conditions" (R.T. 1/3/57, a.m., p. 46).

Accordingly, the only area in Placer County that the United States considers potentially susceptible for development is the Forest-hill Service Area, and the ultimate needs for that area would be satisfied with an annual diversion of 7,200 acre-feet (R.T. 1/3/57, a.m., p. 46).

The same general disagreement as to water requirements of County of El Dorado is manifest by the record. Witness for the County of El Dorado testified that under ultimate development the total annual supplemental water requirement from the American River for the county will total some 245,900 acre-feet exclusive of the needs of Southside County Water District (R.T. 2/27/57, a.m., p. 40). The State in Bulletin No. 21 estimates the ultimate supplemental needs of the County of El Dorado from the American River to be 188,400 acre-feet annually (SWRB Exh. 8, pp. 3-26), and the United States concludes that a supplemental supply of 59,900 acre-feet annually from the American River will be adequate therefor under ultimate development (R.T. 1/3/57, a.m., p. 44).

In view of the foregoing, it is apparent that the reservation of water for the counties of origin under Department of Finance applications is far in excess of their ultimate needs, varying between about 135% to 1500% depending on whether the estimates of the counties, the State, or the United States are accepted.

There are also on file Department of Finance applications with points of diversion at and above Folsom Dam covering considerable quantities of water for consumptive purposes upon

the Sacramento and San Joaquin Valley floors which, together with the State filings previously discussed, far exceed the total flow of the American River in a normal year. However, the places of use of most of the applications being considered in this decision are within the service area of these State filings, and beneficiaries of permits to be issued pursuant to this decision have either obtained assignments, or waivers of priority to overcome the present advantage of these State filings.

In addition to these practical advantages which to an undeterminable extent may in the future be relied upon by these areas of origin, affirmative action is herein taken in their favor.*

Aggregate of Amounts Sought by Applicants

A summation of the amounts the applicants seek to appropriate (other than for the nonconsumptive purpose of power generation) is of the order of 29,000 cubic feet per second plus 9,150,000 acre-feet per annum. The amounts the applicants seek to appropriate plainly exceed the normal, annual flow of American River at the Fair Oaks gaging station.

Overlap of Proposed Places of Use

The United States under Applications 13370 and 13371 seeks to appropriate a total of 8,700 cubic feet per second plus

*In this connection reference is made to the following portions hereof: Page 49; item 9 on page 62; item 1 on pages 63 and 64; item 11 on page 71.

1,300,000 acre-feet per annum for municipal, domestic, irrigation, and other purposes within a designated service area. That service area (delineated on USBR Exh. 6) extends from the north boundary of Placer County to the vicinity of Mendota. It lies mainly within the Sacramento and San Joaquin Valleys and is so extensive as to include substantially all the places of use designated in all of the other applications at issue except the applications by the Counties of El Dorado and Placer, by the Georgetown Divide Public Utility District, and by the Southside County Water District.

Items contained in the hearing testimony and/or exhibits and relating to Applications 13370 and 13371 and/or to the intentions of the applicant United States with respect thereto are summarized as follows:

Application 13370 is to provide a new or supplemental irrigation supply for a net area of 500,000 acres in any one year. Application 13371 will provide water for municipal, industrial, domestic, and incidental recreational purposes for the present or future requirements of cities, towns, and other municipalities within the overall service area (R.T. 1/3/57 a.m., pp. 21-22).

Delivery of water from the Folsom project will be conditioned upon the execution of valid contracts for such deliveries (R.T. 1/3/57 a.m., p. 22).

There are about 500,000 acres of land south of the American River in Sacramento and San Joaquin Counties that are in need of an additional water supply to offset present overdrafts on ground water and to provide opportunity for development of additional irrigable lands (R.T. 1/7/57, p.14). A report on the feasibility of a water supply development for this area is contained in a publication by the United States Bureau of Reclamation entitled "Folsom South Unit, Central Valley Project, California", dated April, 1956 (SWRB Exh. 24). That report concludes that in Sacramento County 27,000 acres were irrigated in 1946, that 54,000 acres were irrigated in 1953 and that ultimately 149,500 acres may be irrigated in any one year with a diversion from the American River of 440,000 acre-feet per year.

Reconnaissance studies by the United States in San Joaquin County have considered diversion of about 378,000 acre-feet per year from the American River to supplement present overdraft and to provide for the ultimate needs of an area of about 300,000 acres (R.T. 1/7/57, p. 17).

Reconnaissance studies by the United States of water problems in Sacramento and Placer Counties north of American River are given in a report entitled "Folsom North Unit, Central Valley Project, California", dated March, 1956 (SWRB Exh. 23). In that report it is estimated that as of 1954, 111,000 acre-feet were used in the area each year, that future water requirements may reach 225,000 acre-feet by year 1980, about 300,000 acre-feet by year 2,000, that part of the area is now supplied from the American River, that in most of the area adequate and economical ground water supplies are presently being obtained, but that various organizations are considering ways and means of obtaining additional water from the American River (R.T. 1/7/57, p. 22).

The average annual yield of Folsom Reservoir operated in conjunction with other Central Valley Project Reservoirs is 1,100,000 acre-feet (page xi, SWRB Exh. 24 - "Folsom South Unit").

Ultimately the yield of Folsom Reservoir will not be sufficient to meet the Folsom North and South and Delta requirements (R.T. 1/7/57, p. 32).

The Bureau of Reclamation has received requests for water service or for studies in connection therewith from the City of Roseville, San Juan Suburban Water District, Citrus Heights and Fair Oaks Irrigation Districts, Sacramento County Board of Supervisors, Clay Water District, City of Stockton, North San Joaquin Water Conservation District, San Joaquin County Board of Supervisors, City of Lodi, and Stockton and East San Joaquin Water Conservation District (R.T. 1/7/57, pp. 18-19-20-25).

The County of Sacramento under Applications 12314 and 12315 seeks a total of 2,250 cubic feet per second plus 700,000 acre-feet per annum for municipal, domestic, and irrigation purposes within Sacramento County. The amounts so sought apparently represent Sacramento County's estimate of the amounts that should be obtained from the American River to meet full, ultimate requirements within its boundaries for the purposes stated.

Apart from the applications by the Bureau of Reclamation and by the County of Sacramento there are applications by other entities to appropriate from the American River system for municipal, domestic and/or irrigation purposes within Sacramento County, as follows:

By the City of Sacramento	675 cfs* plus 550,000 afa*
By the City of North Sacramento	21 15,000
By Fair Oaks Irrigation District	50 25,500
By Sacramento Municipal Utility District	10,830 1,846,000
By Citrus Heights Irrigation District	50 28,000
By Elk Grove Irrigation District**	<u>2,900</u> <u>2,740,000</u>
	14,526 cfs plus 5,204,500 afa

*cfs and afa: cubic feet per second and acre-feet per annum.

**These filings are now held jointly with County of Sacramento and Galt Irrigation District.

Watershed Protection Considerations

Water Code Section 11128 provides:

"The limitations prescribed in Sections 11460 and 11463 shall also apply to any agency of the State or Federal Government which shall undertake the construction or operation of the project (State Central Valley Project) or any unit thereof, including, besides those specifically described, additional units which are consistent with and which may be constructed, maintained, and operated as a part of the project and in furtherance of the single object contemplated by this part."

Water Code Section 11265 added by Statutes of 1957, Chapter 1121, Section 1, declares the American River Development as described by Federal legislation (Ch. 690, 63 Stat. 852) a feature of the State Central Valley Project.

Water Code Section 11460 provides:

"In the construction and operation by the department of any project under the provisions of this part a watershed or area wherein water originates, or an area immediately adjacent thereto which can conveniently be supplied with water therefrom, shall not be deprived by the department directly or indirectly of the prior right to all of the water reasonably required to adequately supply the beneficial needs of the watershed area, or any of the inhabitants or property owners therein."

Water Code Section 11463 provides:

"In the construction and operation by the authority of any project under the provisions of this part, no exchange of the water of any watershed or area for the water of any other watershed or area may be made by the authority unless the water requirements of the watershed or area in which the exchange is made are first and at all times met and satisfied to the extent that the requirements would have been met were the exchange not made, and no right to the use of water shall be gained or lost by reason of any such exchange."

Any permits of the United States for consumptive use purposes must be considered subject to requirements of Water Code Sections 11460 and 11463.

Flow Requirements for Fish Conservation

The State Department of Fish and Game has indicated (R.T. 1/24/57, p. 106) that flows in the American River below Nimbus Dam, in the interest of fish conservation, should not ordinarily fall below 250 cubic feet per second between January 1 and September 15, or below 500 cubic feet per second at other times. It concedes (R.T. 1/24/57, p. 107) that deficiencies of up to 50% may be tolerated in critically dry years; and it agrees (R.T. 3/27/57, a.m., pp. 15-17) that critically dry years may be considered to be those years during which the estimated natural* inflow to Folsom Reservoir

*State Water Resources Board, Bulletin No. 1, (SWRB Exhibit 3) p. 45, defines natural flow as "Flow of a stream unaltered by diversions or storage of its waters, or by importation of water from another drainage basin."

between April 1 and September 30 is less than 600,000 acre-feet.

The said Department has also testified (in connection with its Exhibits 5, 7, and 13) as to flows that should be maintained, for fish conservation purposes, below certain of applicants' proposed structures on tributaries of American River above Folsom Reservoir.

The United States and the City of Sacramento have both entered into agreements with the California Department of Fish and Game. The agreements cover times and amounts of diversions that may be made from the American River and/or tributaries, under those applicants' applications, without undue injury to fish life. Copies of said agreements are appended to said Department's closing brief.

The Georgetown Divide Public Utility District agreed orally with conditions proposed by the State Department of Fish and Game under which that district might divert under its pending applications (R.T. 3/7/57, Sec. 2, p. 34). Those conditions were subsequently modified, however, for purposes of clarification, and the conditions as modified were introduced in evidence as F & G Exh. No. 15 (R.T. 3/27/57, p. 2). There is no indication that the modified conditions are unacceptable to the applicant district but no formal agreement in the matter is of record.

Flow Requirements for Salinity Control

The tendency of salt water from the Pacific Ocean to intrude into the lower reaches of the Sacramento River and into the channels of the Sacramento-San Joaquin Delta is opposed by the flushing action of the outflow of the Sacramento River stream system. The greater said outflow, the lesser, manifestly, the extent of

saline intrusion. In the present state of knowledge it is considered by the United States that an outflow of 3,300 cubic feet per second should be maintained in Sacramento River (R.T. 2/5/57 a.m., p. 33) and that such outflow will prevent excessive salinity above the vicinity of Antioch. However, studies are currently under way to determine the feasibility of conserving a portion of this required outflow by the construction of a barrier or barriers across certain of the Delta channels. For example, the so-called, "Biemond plan" envisions that the present degree of salinity control can be accomplished with a flow of about 1,200 cubic feet per second with the plan in operation (page 64, SWRB Exh. 49, Bulletin No. 60, Salinity Control Barrier Investigation).

As to salinity repulsion in the delta, DWR Exhibit 8 (the California Water Plan for the American River Basin, Water Supply and Summary of Works and Accomplishments of Basin Plan) states in effect that prior to completion of Folsom Reservoir there were no regulated releases from American River for salinity repulsion, that with Folsom Reservoir in operation releases therefrom for that purpose are to be coordinated with those from Shasta Reservoir and that after full development of the American River basin regulated outflow from downstream service areas will provide the American River's proportionate contribution for salinity control. In the same connection, the principal witness for the United States testified (R.T. 1/7/57 p. 28) to the effect that a function of the Central Valley Project involves delivery into Delta-Mendota Canal at a point subject to salinity intrusion, that it is therefore necessary to keep the Delta channels flushed and that coordinated releases from Shasta and Folsom reservoirs for quality control become a primary

demand upon those reservoirs. Salinity control is one of the purposes for which the United States seeks under Application 13370 to appropriate at Folsom Dam.

As to the surface flow required to accomplish sufficient flushing of the Delta channels, SWRB Exhibit 43 (Appendix E of the Report to the Water Project Authority of the State of California on Feasibility of Construction by the State of Barriers in the San Francisco Bay System, a 1955 publication by the Division of Water Resources) contains statements (on pages E11 and E12) to the effect that salinity control outflows from the Delta depend not only upon hydraulics and hydrology but also upon the degree of control considered necessary, that the conclusion that Antioch should be the salinity control point is not irrevocable and that experiments to ascertain the consequences of a lesser degree of control are in progress.

In 1952 the State Engineer of California, the United States Bureau of Reclamation, and an association of interested water users entered into an agreement among themselves with a view to conducting investigations that might serve as a basis for negotiations in lieu of litigation in settling differences arising from the use of water in the Sacramento River and the Sacramento-San Joaquin Delta (R.T. 1/3/57, p. 73). According to the testimony in that connection, trial water distribution programs, consisting of studies conducted individually and/or jointly by the parties to the agreement, were put into effect and carried on during 1954 and 1955. A joint working committee representing those parties has analyzed the available hydrographic data and a joint report of engineering findings (in two volumes) is in evidence as DWR Exhibits 11 and 12. The United States,

in support of its applications involved in this decision, has prepared and submitted, among other exhibits, USBR Exhibits 20 through 28. Those exhibits are based largely upon data gathered by the joint working committee. They indicate that of the total flow of 1,400,000 acre-feet tentatively deemed necessary for salinity repulsion in the Delta from April through October (equivalent to a continuous flow of 3,300 cubic feet per second), some 64,000 acre-feet during the same 7-month period (equivalent to a continuous flow of about 151 cubic feet per second) is the share that logically should be provided from the American River.

Flows Apparently Required for Satisfaction
of Existing Rights

Downstream from the gaging station "American River at Fair Oaks" there are demands upon the American River itself and upon the Sacramento River below the mouth of the American River. The former demands according to USBR Exhibit 19 amount on an average between April 1 and October 31 to some 150 cubic feet per second, equivalent within that period to about 63,700 acre-feet; the latter demands involve consumptive uses within the Sacramento-San Joaquin Delta and devolve upon the Sacramento River stream system at large, of which the American River is but one of several elements. The amount of water to which water users within the Delta area are entitled and the proportionate part of that amount which should be supplied by the American River has not been determined. USBR Exhibits 20 and 26 indicate that consumptive demands within the Delta are of the order of 1,329,000 acre-feet per average irrigation season and that of this amount some 61,000 acre-feet may rightfully be supposed to accrue from the American River.

Navigation

None of the applications at issue is protested on the basis of alleged interference with navigation. Navigation on the American River is limited to pleasure boating between the mouth thereof and Nimbus Dam (R.T. 3/7/57, p.m., p. 10). On the Sacramento River it is considered that the interests of navigation require the maintenance of a flow of 5,000 cubic feet per second between Chico Landing and Knights Landing; to that end lesser flows are supplemented as necessary by releases from Shasta Reservoir (R.T. 1/8/57, p. 53). The American River enters the Sacramento River a considerable distance below the Chico Landing-Knights Landing reach of the latter stream.

Flood Control

In Folsom Reservoir, which is operated on a seasonal basis (R.T. 1/7/57, p. 85), up to 400,000 acre-feet of storage capacity, depending upon the wetness of the season, are allocated, from mid-October until the end of March, to flood control (R.T. 1/7/57, p. 47). During April and thereafter the space allocated to flood control may be permitted to fill; the earliest date that filling may be accomplished is about May 10 (R.T. 1/8/57, p. 21). Since April and May are usually months of maximum runoff, Folsom Reservoir may be assumed to fill and to function with substantial effectiveness as a conservation reservoir, notwithstanding its utilization, prior to April 1, for flood control.

Time of Occurrence of Unappropriated Water

Unappropriated water may be deemed to exist in the American River at such times as flows passing Fair Oaks exceed requirements below that point for consumptive purposes along the American River, for fish conservation in the American River, and for that portion of the requirements for consumptive purposes and salinity repulsion in the Delta that devolves upon the American River to provide.

The requirements discussed in the preceding paragraphs (neglecting the sharply reduced consumptive requirements during non-irrigation months) appear to be:

1. For consumptive purposes along the American River - an average flow of some 150 cubic feet per second between April 1 and October 31.

2. For fish conservation in the American River - 250 cubic feet per second from January 1 to September 15, and 500 cubic feet per second during the balance of the year.

3. For consumptive purposes in the delta - an average flow of 143.5 cubic feet per second between April 1 and October 31.

4. For salinity control in the delta - an average flow of 151 cubic feet per second between April 1 and October 31.

While the consumptive requirements along the American River and in the Delta, from April 1 to October 31, appear to average some 150 and 143.5 cubic feet per second, respectively, average monthly requirements for consumptive purposes vary considerably. That variation, based on Sacramento-San Joaquin Valley average demands, according to USBR Exhibit 31, is as set forth in the following tabulation. To the table have been added columns showing average monthly consumptive demands along the American River and in the Delta, computed on the assumption that the figures in the United States exhibit are applicable to those areas:

Month	:Percentage of demand:		Probable consumptive demand*	
	: in month of		:	
	: maximum use		:Along American River:	In the delta
April	47		107.5	102.8
May	73		161.7	154.5
June	87		199.3	190.8
July	100		221.7	212.0
August	92		204.0	195.0
September	52		119.3	114.2
October	16		35.5	33.9

* In cubic feet per second.

The gross requirements in cubic feet per second that devolve upon the American River to meet from flows passing the Fair Oaks gage may be summarized as follows:

Month or Period	: American : River : consumptive:	: American : River, : fish	: Delta, : consumptive:	: Delta, : salinity: control:	: Total
January		250			250
February		250			250
March		250			250
April	107.5	250	102.8	151	611
May	161.7	250	154.5	151	717
June	199.3	250	190.8	151	791
July	221.7	250	212.0	151	835
August	204.0	250	195.0	151	800
Sept. 1-15	119.3	250	114.2	151	635
Sept. 16-30	119.3	500	114.2	151	885
October	35.5	500	33.9	151	720
November		500			500
December		500			500

Inasmuch as the requirements for salinity control and for consumptive use within the Delta will themselves cover the requirements for fish conservation between April 1 and September 15; inasmuch further as the requirements for fish conservation will adequately provide for salinity control and Delta consumptive use requirements between September 15 and October 31, the net flows which should be allowed to pass the Fair Oaks gage to cover downstream needs in cubic feet per second, may be considered to approximate the following:

Month or Period	: American : River : consumptive:	: American : River, : fish	: Delta, : consumptive:	: Delta : salinity: control :	: Total
January		250			250
February		250			250
March		250			250
April	107.5		102.8	151	361
May	161.7		154.5	151	467
June	199.3		190.8	151	541
July	221.7		212.0	151	585
August	204.0		195.0	151	550
Sept. 1-15	119.3		114.2	151	385
Sept. 16-30	119.3	500			619
October	35.5	500			536
November		500			500
December		500			500

The Water Supply Papers (SWRB Exh. 13) indicate that the flow of the American River at Fair Oaks has sufficed to meet the above assumed downstream requirements through June in 32 of the last 36 years of published record (1917-18 to 1953-54), but that it has fallen below the assumed July requirements on dates ranging between May 29 and August 24, the median of such dates being July 24. The Water Supply Papers also indicate that said flow has thereafter remained insufficient (within the same 36-year period) to meet the assumed downstream requirement of 536 cubic feet per second during October until dates ranging between September 24 and December 11, the median of such dates being October 25.

Probable Amount of Unappropriated Water

An approximation as to the amount of water that is subject to appropriation from the American River may be had by subtracting from the quite definitely known gross flow passing the USGS gage at Fair Oaks (2,729,000 acre-feet in an average year) the estimated downstream demands (discussed in the preceding paragraphs) upon the American River. The result of that subtraction shows that a minimum of 2,409,000 acre-feet or 88.3% of the gross annual flow passing the aforementioned gage in an average year is available for appropriation both above and below Folsom Dam.

A Statutory Limitation

Section 10001.5 of the Water Code declares that the project known as the Coloma Dam and Reservoir constitutes no part of the State Water Plan. It further declares:

"In no event shall a permit to appropriate water be issued by the State for the purpose of a project which will flood any portion of the Gold Discovery Site State Park at Coloma unless such issuance is specifically authorized by law."

The declaration quoted affects adversely the eligibility for approval of several of the applications at issue.

A Recommended Permit Term for Protection of Lands Dependent upon the Sacramento River

A permit term was recommended, in testimony on behalf of the Sacramento River and Delta Water Association (R.T. 2/8/57, p. 87), for inclusion in any permit to be issued to United States

in connection with the Folsom Project. The term (SRDWA Exh. 3) was endorsed in substance in testimony on behalf of the State Department of Water Resources (R.T. 2/8/57, p. 87). It would subject any such permit to a prospective agreement between the United States and certain water users with respect to releases from Folsom and Nimbus Reservoirs for consumptive uses and salinity control in the Sacramento-San Joaquin Delta, provided said agreement is reached by a certain date and approved by the State Water Rights Board; if said agreement is not reached by said certain date it would subject any permit to be issued to the United States in connection with the Folsom Project to further order by the State Water Rights Board, preceded by further hearing.

In view of the fact that the equitable proportion of the flow of the American River which should be dedicated to the consumptive use requirements and salinity control in the Delta area has not been determined, a permit term substantially as recommended should be included in permits to be issued to the United States.

Disposition of the Issues

The numerous protests by water users who divert or benefit from the Sacramento River below the junction of the American River therewith or from the various Delta channels fed by the Sacramento River are, individually or collectively, an insufficient bar to the approval of any of the applications at issue. The evidence does not indicate that diversions proposed

in the applications need so disturb flow conditions in the Sacramento River or in channels connecting therewith as to deny diverters from such channels the enjoyment of such rights as they now possess. Apprehension by users dependent upon said river and channels that flow therein will become inadequate as a result of the applicants' proposed diversions, or that the quality of such flows will for the same reason deteriorate, appears groundless. The rights of diverters from the waters mentioned, while not as yet defined by formal legal process, may and will be protected by the insertion of appropriate conditions in such permits as may be issued pursuant to these proceedings.

The protests by the California State Fish and Game Commission and by its successor, the California Department of Fish and Game, may be satisfied by so conditioning any permits issued pursuant to applications protested by either of those agencies as to ensure the by-passing or release at specified points and times, of flows sufficient to meet the necessities of fish conservation.

The protests by the California State Park Commission are valid and must be sustained insofar as the protested applications contemplate inundation of any portion of the Gold Discovery Site State Park.

The protests by the United States stress the impracticability of surrendering to water users the operation of its reservoirs and the incompatibility of such surrender with Federal law. The United States has, however, indicated willingness to

serve applicants insofar as mutually acceptable agreements between itself and parties desiring such service may be reached.

The protests by users dependent upon the American River below Nimbus Dam reflect apprehension that diversions proposed by upstream applicants will unduly reduce stream flow in that particular reach. The requirements of such users should and will be protected by the conditioning of any permits to appropriate at points above them.

Of the protests not discussed in the immediately preceding paragraphs some assert their own claimed rights and express apprehension that the diversions that the applicants propose, or some of them, will leave insufficient stream flow to satisfy those rights; others, filed by entities who are themselves applicants, set forth reasons why, in their opinion, their own applications should have precedence. None of these remaining protests appear to be of sufficient substance to warrant denial of the applications against which they are directed.

The protestants' objections, except the State Park Commission's objections--the latter so effectively supported by Water Code Section 10001.5--do not in themselves necessitate denial of any of the applications. They focus attention, however, upon the necessity of so conditioning permits in certain instances as to prevent injuries that the protestants apprehend. The circumstances indicate that certain applications should be approved, subject to appropriate terms and conditions, and that other applications should be denied. In no instance does it

appear that deferment of action upon an application is warranted, notwithstanding the expressed desire by some applicants that that course be followed. The action that the circumstances indicate should be taken with respect to each of the applications awaiting disposition are set forth in paragraphs that immediately follow:

Applications 12140 and 16060 by the City of Sacramento may be approved without interference with the exercise of prior rights insofar as those applications relate to diversions of unappropriated water from American River between about November 1 and about August 1. They should be denied insofar as they relate to diversions between about August 1 and about November 1 because unappropriated water during such periods is ordinarily nonexistent, and they should be denied insofar as they relate to storage at any time at the site of the proposed Coloma Reservoir, in view of Water Code Section 10001.5. Permits granted pursuant to these applications should also be so conditioned that rights thereunder remain subject to reduction in the event of future appropriations of water for reasonable, beneficial use within the watershed tributary to the city's points of diversion.* They should also be so conditioned as to limit diversions thereunder to excesses over releases past Nimbus Dam for the satisfaction of downstream rights and for purposes of fish conservation on the American River and salinity control in Sacramento-San Joaquin Delta.

* This condition is employed under authority contained in Section 1253 of the Water Code. It accords also with the principle set forth in Section 11460. It ensures that meritorious upstream projects which are as yet unready to proceed with development will not be foreclosed from diverting their requirements in due course.

Applications 12321 and 12622, assigned to the City of Sacramento by Sacramento Municipal Utility District (City of Sacramento Exh. 11), may be approved without injury to downstream users provided that diversions thereunder are limited to periods extending from about November 1 of each year to about August 1 of the next, provided that releases past permittee's project works are sufficient at all times to meet reasonable requirements for fish conservation and provided that diversions under the permits do not exceed excesses that occur at permittee's various points of diversion over requirements, if any, for beneficial purposes within the watersheds. The upstream works contemplated under these applications are substantially the same as those proposed under Permits 10703, 10704 and 10705 (Applications 12323, 12624 and 14963) of Sacramento Municipal Utility District issued by this Board pursuant to Decision D 870. The City's project will also require passage of water downstream through the Folsom and Nimbus facilities of the United States. It is not anticipated that any operational difficulties will be encountered as the City has entered into agreements in this connection with both Sacramento Municipal Utility District (City of Sacramento Exh. 11) and with the United States (City of Sacramento Exh. 10).

Application 12421 insofar as it relates to diversions from Lower Pilot Creek, Application 16212 insofar as it relates to the direct diversions therein described, and Application 16688 in its entirety, all by Georgetown Divide Public Utility District, are eligible for approval, provided that permits issued pursuant to those applications limit diversions thereunder to periods extending from about November 1 of each year to about August 1 of the next, provided that direct diversions and diversions to storage under permit issued pursuant to Application 12421 do not exceed 50 cubic feet per second and 20,000 acre-feet per annum respectively, provided that diversions under permit issued pursuant to Application 16212 be limited to direct diversions aggregating not in excess of 75 cubic feet per second,* and provided that releases past the various project works shall be sufficient at all times to meet reasonable requirements for fish conservation.

Applications 12780 and 14243 by the County of El Dorado having been withdrawn (EDC Exh. 22, p. 6), further consideration of those applications in these proceedings is unnecessary.

Applications 13370, 13371, 13372, and 14662, by the United States, are eligible for approval provided that permits issued pursuant to those applications include terms restricting diversions thereunder to periods extending from about November 1 of each year to about August 1 of the next, provided that rights

* References: Page 2, statement of 9/16/57 on behalf of applicant; Page 4 of opening brief for Sacramento Municipal Utility District

acquired thereunder remain subject to reduction by appropriation of water for reasonable, beneficial use within the watershed above Folsom Reservoir, provided that releases past Nimbus Dam are sufficient at all times to satisfy demands under downstream rights and requirements for fish conservation and salinity control, provided that deliveries outside of Placer, Sacramento, and San Joaquin Counties are sufficiently restricted to ensure the satisfaction of such demands as developed within those counties, provided such development is undertaken within a reasonable period, and provided that licenses when issued shall be issued to the public agencies of the State within which the water is found to have been put to beneficial use.*

While not attempting to define the area which may be entitled to preferential consideration under Water Code Section 11460, the Board nevertheless concludes that in view of that code section, the demonstrated needs for additional water in Sacramento, San Joaquin, and Placer Counties, the provisions of Water Code Sections 1253, 1255, and 1257, and considerations of public interest, the three counties mentioned should be allowed a reasonable period, say ten years, within which to negotiate with the United States for water from the American River, before the supply available from that source is permanently committed to use in a more remote area.

Applications 12140, 12321, 12622, and 16060, initiated by or assigned to the City of Sacramento, Applications 12421, 16212,

*Reference: "Legislative Resolutions Citing Necessity for Special Terms and Conditions in Permits and Licenses for Federal Reclamation Projects." - Pages 57 and 58, SWRB Exh. 1

and 16688, standing in the name of the Georgetown Divide Public Utility District, and Applications 13370 and 13371 by the United States, insofar as those nine applications relate either to direct diversion or to accumulation in storage, between about August 1 and about November 1 should be denied, the evidence indicating nonexistence of unappropriated water at that time of year. Applications 13372 and 14662 by the United States Bureau of Reclamation, insofar as those applications relate to accumulation in storage during the same three-month period, should be denied for the same reason.

Application 12183 by the City of North Sacramento, Application 12295 by the City of Roseville, Application 12300 by the Fair Oaks Irrigation District, Application 12667 by the Citrus Heights Irrigation District, Application 12231 by the City of San Jose, Applications 12235 and 12236 by the Santa Clara Water Conservation District, Application 12277 by the San Jose Water Works, Applications 12603 and 12682 by the Campbell Water Company, Application 14744 by the Hollister Irrigation District, Application 12278 by the California Water Service Company, Application 12399 by the City of Stockton, Applications 12440 and 12441 by the North San Joaquin Water Conservation District, Applications 16385 and 16386 by the Stockton and East San Joaquin Water Conservation District, Applications 12314 and 12315 by the County of Sacramento, and Application 15635 by the Elk Grove Irrigation District should be denied, the evidence indicating that the approval of those applications would serve no useful purpose.

The point or points of diversion under each of those applications is Folsom Dam and/or Nimbus Dam to which right of access has not been acquired by the applicants. Accordingly, issuance of permits to those applicants would be meaningless in view of the obvious necessity of contracting with the United States for a supply of water from the Federal facilities. The service areas which those applicants desire to supply may be supplied equally well and with less administrative confusion by contract with the United States. Permits are being issued to the United States to appropriate enough American River water to adequately supply the applicants naturally dependent on that source and availability of water to such applicants is reasonably assured by the terms to be contained in the permits to be issued to the United States restricting exportation of water under those permits insofar as exportation interferes with fulfillment of needs within Placer, Sacramento and San Joaquin Counties. Other applicants in more remote areas must if necessary seek water from other sources.

The record is also abundantly clear in regard to the applications by California Water Service Company, City of Stockton, North San Joaquin Water Conservation District, and Stockton and East San Joaquin Water Conservation District that the applicants have no immediate plan or purpose to proceed promptly with construction and/or with the application to beneficial use of the water sought. In such cases the Board has little choice in the action to be taken since it is a settled principle that an application to appropriate is not a proper instrument to make a reservation of water for a development at an indefinite and uncertain time in the future.

The Elk Grove Irrigation District has advanced plans to construct its own main conduit system in lieu of utilizing a similar conduit proposed by the Bureau of Reclamation as a part of the Central Valley project. This applicant recognizes that delivery of water to the proposed service areas must await construction of a main conduit system, either by the United States or by the applicant itself. The United States has allegedly made a fairly firm offer for canal-side delivery of water at a rate based upon the overall ability of the land to pay. On the other hand the applicant contends that the land cannot support the price of water as offered and that by private construction of the canal, financed under an interest-free Federal loan, and payment of a reasonable price to the United States for use of its storage and diversion facilities, water can be delivered to the users at a lesser rate. For this reason the applicant desires permits issued to it.

In order for the applicant to deliver water to the users through a privately constructed conduit at the price quoted in the record, it must meet all of several estimates of costs of construction and expected demands for water. Not only are the estimates subject to considerable change from those used in the studies due to the present unstable economic conditions, but the evidence and testimony submitted by the applicant's witness, upon which the anticipated accomplishments are based, are unconvincing.

Applications 12322 and 12623 by Sacramento Municipal Utility District should be denied. These applications contemplate utilization of Silver Creek drainage for irrigation. The evidence

does not indicate any real intent on the part of the applicant to proceed under the applications but on the contrary indicates (in applicant's opening brief) willingness that Applications 12322 and 12623 be assigned to the United States or to the County of Sacramento, "whichever the Board shall select as the permittee on other applications to supply permanent water to the county". The record reveals no manifestation of interest on the part of either the United States or the County of Sacramento in the proffer just mentioned. The availability of a supply sufficient to meet irrigation needs within Sacramento County via the Federal facilities at Folsom and/or Nimbus Dams appears amply protected by terms in permits to be issued to the United States. In view of the circumstances, approval of Applications 12322 and 12623 is unwarranted.

Applications 12324, 12325, and 12326 by Sacramento Municipal Utility District should be denied. These applications contemplate development of the proposed Auburn and Coloma reservoir sites for municipal, irrigation and/or power purposes. By Paragraph 9 of agreement of July 1, 1957, between the County of Placer and Sacramento Municipal Utility District, the party last named--the initiator of the applications in question--agreed in effect that when construction of Auburn Dam by a State or Federal agency is authorized, it will assign Applications 12325 and 12326 to such agency. From that statement it may be presumed that Sacramento Municipal Utility District does not itself intend to undertake the construction involved at the Auburn site. The evidence contains no indication as to when construction by a State or Federal agency

at the Auburn site may be authorized or as to when, if at all, Water Code Section 10001.5 may be so modified as to permit the proposed construction at the Coloma site. Under Section 778 of the California Administrative Code, Chapter 2, Title 23, Waters, an attempt to reserve water for future use where there is no intent to proceed promptly cannot be countenanced.

Applications 12422, 12423, and 16044 by Georgetown Public Utility District should be denied. Paragraph 9c of the agreement of April 23, 1957, between Sacramento Municipal Utility District and Georgetown Divide Public Utility District (EDC Exh. 21) provides that Georgetown Divide Public Utility District will withdraw Applications 12421 and 12423 or will amend them so that they will not conflict with the Sacramento Municipal Utility District applications. By statement of September 16, 1957, on behalf of Georgetown Divide Public Utility District and certain other applicants, the State Water Rights Board is requested to defer final action upon Applications 12422 and 16044 and other related applications pending the filing of additional State applications and/or releases of priority under certain existing State applications. From that agreement and/or that statement it is apparent that the applicant is not disposed to proceed promptly with development under Applications 12422, 12423, or 16044, or to proceed with such development within any predictable time or at all; the applicant's request for deferment is therefore inconsistent with the provisions of Section 778 of the California Administrative Code, Chapter 2, Title 23, Waters, and cannot be entertained. In lieu of the deferment requested, a measure of protection against unavailability of a water

supply sufficient for the applicant's future needs is afforded by clauses incorporated in permits to be issued in connection with down-river projects, subjecting rights acquired under those permits to reduction by appropriation of water for reasonable, beneficial use within the contributory watershed.

Applications 12456, 12457, 12755, 12759, 12786, and 16819 by the County of Placer, Applications 12779, 12781, 12782, 12785, and 14242 by the County of El Dorado and Application 16243 by Southside County Water District should be denied without prejudice to the filing of new applications at such time as these applicants are ready and able to proceed with construction of works and beneficial utilization of the water which they seek to appropriate. The applicant counties and district are evidently unable or indisposed to proceed with development under any of their applications at the present time. On page 2 of the statement of September 16, 1957, submitted on their behalf they request that their applications be held in abeyance, their position being (as set forth on page 5 of the same statement) that supplemental State filings are necessary to carry out the legislative policy of county of origin protection, that the filing of such supplemental applications by the State is under contemplation and that until a decision is reached and action taken in that regard, the priorities established by the filing of their own applications should be preserved. Protection is afforded these applicants and other potential users within upstream sub-areas of the American River watershed by terms to be inserted in permits to divert at points below them to the effect that diversions under

those permits are and shall remain subject to reduction in the event of appropriation for use within the watersheds that lie above the diversion works relating to those permits. In view of that protection the holding in abeyance of the applications herein discussed appears unnecessary and unwarranted.

Applications 15636 and 15955 by Elk Grove Irrigation District and Applications 15644 and 15954 by Elk Grove Irrigation District, Galt Irrigation District, and County of Sacramento, jointly, should be denied because storage at the proposed Marshall Reservoir site is an essential element in each of these applications. Since the filling of the proposed Marshall Reservoir would result in partial inundation of the Gold Discovery Site State Park, approval of these applications is prohibited by Section 10001.5 of the State Water Code.

Applications 16014, 16015, 16016, 16017, 16018, and 16019 by Sacramento Municipal Utility District should be denied for much the same reason as expressed in the preceding paragraph. On page 2 of Sacramento Municipal Utility District's opening brief appears a statement to the effect that those six applications are regarded by that district (The initiator of those applications) as inextricably linked with a development at Coloma proposed in a portion of Sacramento Municipal Utility District's Application 12326 and that the disposition of those applications is therefore requested by deferment or dismissal "in exactly the same way as may be determined for all other pending Coloma applications".

Conclusions

The evidence indicates and the Board finds that unappropriated water normally exists in the American River stream system in sufficient amounts to satisfy City of Sacramento under Applications 12140, 12321, 12622, and 16060, Georgetown Divide Public Utility District under Applications 12421, 16212 and 16688 and the United States, under Applications 13370, 13371, 13372 and 14662; that said applicants are in a position to proceed within a reasonable time with construction and with application to beneficial use of the waters they seek to appropriate under those applications, that such waters in general, but with certain exceptions and subject to certain conditions, may be taken and used as proposed without interference with the exercise of prior rights and that those applications should be approved and permits issued pursuant thereto, subject to the usual terms and conditions and subject to those additional terms and conditions indicated hereinabove for the protection of prior rights and in the public interest. The Board finds that as so conditioned the developments proposed in those applications will best develop, conserve and utilize in the public interest the waters sought to be appropriated. With respect to the applications at issue other than those above enumerated, the evidence indicates and the Board concludes that all such applications should be denied, for reasons set forth in this decision.

ORDER

Applications 12140, 12183, 12231, 12235, 12236, 12277, 12278, 12295, 12300, 12314, 12315, 12321, 12322, 12324, 12325, 12326, 12399, 12421, 12422, 12423, 12440, 12441, 12456, 12457, 12603, 12622, 12623, 12667, 12682, 12755, 12759, 12779, 12781, 12782, 12785, 12786, 13370, 13371, 13372, 14242, 14662, 14744, 15635, 15636, 15644, 15954, 15955, 16014, 16015, 16016, 16017, 16018, 16019, 16044, 16060, 16212, 16243, 16385, 16386, 16688 and 16819 for permits to appropriate unappropriated water having been filed with the former Division of Water Resources, protests having been filed, jurisdiction of the administration of water rights including the subject applications having been subsequently transferred to the State Water Rights Board, a public hearing having been held by the Board and said Board now being fully informed in the premises:

IT IS HEREBY ORDERED that Applications 12140 and 16060 of City of Sacramento insofar as those applications relate to diversions from the American River be, and the same are hereby approved, and that permits be issued to the applicant, subject to vested rights and to the following terms and conditions, to wit:

1. The amount of water to be appropriated shall be limited to the amount which can be beneficially used.

2. The amount of water to be appropriated under permit issued pursuant to Application 12140 shall not exceed 500 cubic feet per second by direct diversion to be diverted from the American River between about November 1 of each year and about August 1 of the succeeding year.

3. The amount of water to be appropriated under permit issued pursuant to Application 16060 shall not exceed 175 cubic feet per second by direct diversion to be diverted from the American River between about November 1 of each year and about August 1 of the succeeding year.

4. The maximum amounts herein stated may in license be reduced if investigation so warrants.

5. Actual construction work shall begin on or before July 1, 1961, and shall thereafter be prosecuted with reasonable diligence, and if not so commenced and prosecuted, this permit may be revoked.

6. Construction work shall be completed on or before December 1, 1965.

7. Complete application of the water to the proposed use shall be made on or before December 1, 2030.

8. Progress reports shall be filed promptly by permittee on forms which will be provided annually by the State Water Rights Board.

9. The amounts which may be diverted under rights acquired or to be acquired under these permits are and shall remain subject to reduction by future appropriation of water for reasonable, beneficial use within the American River watershed tributary to permittee's points of diversion.

10. Permittee shall limit its diversion from American River to such flows as may be in excess of releases past Nimbus Dam in satisfaction of downstream prior rights, for purposes of

fish conservation in the American River and for salinity control in Sacramento-San Joaquin Delta.

11. For the purpose of defining the by-pass requirements for fish conservation as set forth in condition No. 10, these permits are specifically subject to that certain document entitled "Stipulation for Withdrawal of Protest" between City of Sacramento and California Department of Fish and Game, dated October 15, 1957, filed of record as Fish and Game Exhibit No. 18 of the hearing of Applications 12140 and 16060.

12. All rights and privileges under these permits including method of diversion, method of use and quantity 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 water.

Those portions of Applications 12140 and 16060 seeking direct diversion from American River between about August 1 and about November 1 of each year and/or diversion to storage from South Fork American River are hereby denied.

IT IS FURTHER ORDERED that Applications 12321 and 12622 of the City of Sacramento be and the same are hereby approved and that permits be issued to the applicant, subject to vested rights and to the following terms and conditions, to wit:

1. The amounts of water to be appropriated shall be limited to the amounts which can be beneficially used. They

shall be further limited to such excesses as occur at permittee's points of diversion over requirements, if any, for beneficial purposes, within the watersheds tributary to said points of diversion.

2. The amounts of water to be appropriated under permit issued pursuant to Application 12321 shall not exceed 310 cubic feet per second by direct diversion from Silver Creek, 225,000 acre-feet per annum by storage to be collected from Silver Creek and 50,000 acre-feet per annum by storage, to be collected from South Fork Silver Creek. Diversions under this permit for direct utilization and for accumulation of water storage shall both be restricted to periods extending from about November 1 of each year to about August 1 of the succeeding year.

3. The amounts of water to be appropriated under permit issued pursuant to Application 12622 shall not exceed 500 cubic feet per second by direct diversion from Rubicon River, 500 cubic feet per second by direct diversion from South Fork Rubicon River, 200 cubic feet per second by direct diversion from Rock Bound Creek, 75,000 acre-feet per annum by storage to be collected from Rubicon River, 200,000 acre-feet per annum by storage to be collected from South Fork Rubicon River, 14,000 acre-feet per annum by storage to be collected from Rock Bound Creek and 25,000 acre-feet per annum by storage to be collected from Gerle Creek. Diversions under this permit for direct utilization and accumulation of water in storage shall both be restricted to periods extending from about November 1 of each year to about August 1 of the succeeding year.

4. The maximum amounts herein stated may in license be reduced if investigation so warrants.

5. Actual construction work shall begin on or before July 1, 1959 and shall thereafter be prosecuted with reasonable diligence, and if not so commenced and prosecuted, this permit may be revoked.

6. Construction work shall be completed on or before December 1, 1967.

7. Complete application of the water to the proposed uses shall be made on or before December 1, 1980.

8. Progress reports shall be filed promptly by permittee on forms which will be provided annually by the State Water Rights Board.

9. Permittee shall by-pass down the natural channels of the streams covered under these permits for the purpose of maintaining fish life such flows as are provided for in that certain document entitled "Stipulation for Withdrawal of Protest" between City of Sacramento and California Department of Fish and Game, dated October 15, 1957, filed of record as Fish and Game Exhibit No. 18 of the hearing of Applications 12321 and 12622.

10. All rights and privileges under these permits including method of diversion, method of use and quantity 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 water.

Those portions of Applications 12321 and 12622 seeking direct diversion and diversion to storage, other than the season of about November 1 of each year to about August 1 of the succeeding year, are hereby denied.

IT IS FURTHER ORDERED that Application 12421 insofar as that application relates to diversions from Lower Pilot Creek, Application 16212 insofar as that application relates to the direct diversions therein described and Application 16688 in its entirety, all of Georgetown Divide Public Utility District, be, and the same are hereby approved, and that permits be issued to the applicant subject to vested rights and to the following terms and conditions, to wit:

1. The amounts of water to be appropriated shall be limited to the amounts which can be beneficially used.

2. The amounts of water to be appropriated under permit issued pursuant to Application 12421 shall not exceed 50 cubic feet per second by direct diversion and 20,000 acre-feet per annum by storage. Diversions under this permit shall be restricted to diversions from Lower Pilot Creek, made during periods extending from about November 1 of each year to about August 1 of the succeeding year.

3. The amounts of water to be appropriated under permit issued pursuant to Application 16212 shall not exceed 75 cubic feet per second. Diversions under this permit shall be restricted to direct diversions between about November 1 of each year and about August 1 of the succeeding year from the tributaries of Rubicon River designated in the application.

4. The amounts of water to be appropriated under permit issued pursuant to Application 16688 shall not exceed 30 cubic feet per second by direct diversion to be diverted between about November 1 of each year and about August 1 of the succeeding year from Onion Creek, and 4,000 acre-feet per annum by storage to be collected from the same source between the same approximate dates.

5. The maximum amounts herein stated may in license be reduced if investigation so warrants.

6. Actual construction work shall begin on or before July 1, 1961, and shall thereafter be prosecuted with reasonable diligence, and if not so commenced and prosecuted this permit may be revoked.

7. Construction work shall be completed on or before December 1, 1965.

8. Complete application of the water to the proposed uses shall be made on or before December 1, 1980.

9. Progress reports shall be filed promptly by permittee on forms which will be provided annually by the State Water Rights Board.

10. Permittee shall maintain a daily record of inflow into and outflow from each reservoir that it operated under permits issued pursuant to Applications 12421 and 16688. It shall also maintain a daily record of volumes in storage and water surface elevations in each such reservoir. It shall provide and maintain such measuring facilities as may be necessary for that purpose. It shall make said records of inflow, outflow and fluctuations of

volumes in storage and water surface elevations available to the State Water Rights Board and shall allow authorized representatives of that Board reasonable access to its project works and properties for the purpose of securing supplemental information.

11. Permittee shall by-pass down the natural stream channels of the streams involved in these permits for the purpose of maintaining fish life such flows as are recommended by the California Department of Fish and Game in Fish and Game Exhibit No. 15 of the hearing of Applications 12421, 16212 and 16688.

13. All rights and privileges under these permits including method of diversion, method of use and quantity 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 water.

Those portions of Application 12421 seeking diversions from sources other than Lower Pilot Creek and seeking quantities of water, both by direct diversion and by diversion to storage and seeking seasons of diversion greater than set forth in condition No. 2 of this permit are hereby denied.

Those portions of Application 16212 seeking direct diversion between about August 1 and about November 1 of each year and seeking diversion to storage are hereby denied.

Those portions of Application 16688 seeking either direct diversion or diversion to storage other than the season of about November 1 of each year to about August 1 of the succeeding year are hereby denied.

IT IS FURTHER ORDERED that Applications 13370, 13371, 13372, and 14662 of the United States be, and the same are hereby approved, and that permits be issued to the applicant, subject to vested rights and to the following terms and conditions, to wit:

1. The amount of water to be appropriated shall be limited to the amount that can be beneficially used.

2. The amount of water to be appropriated under permit issued pursuant to Application 13370 shall not exceed 8,000 cubic feet per second by direct diversion to be diverted between about November 1 of each year and about August 1 of the succeeding year, from the American River, and 1,000,000 acre-feet per annum by storage to be collected from the same source between about November 1 of each year and about July 1 of the succeeding year.

3. The amount of water to be appropriated under permit issued pursuant to Application 13371 shall not exceed 700 cubic feet per second by direct diversion to be diverted between November 1 of each year and about August 1 of the succeeding year, from the American River, and 300,000 acre-feet per annum by storage to be collected from the same source between about November 1 of each year and about July 1 of the succeeding year.

4. The amount of water to be appropriated under permit issued pursuant to Application 13372 shall not exceed 8,000 cubic feet per second by direct diversion to be diverted between January 1 and December 31 of each year, from the American River, and 1,000,000 acre-feet per annum by storage to be collected from the same source between about November 1 of each year and about July 1 of the succeeding year.

5. The amount of water to be appropriated under permit issued pursuant to Application 14662 shall not exceed 300,000 acre-feet per annum by storage, to be collected from the American River between about November 1 of each year and July 1 of the succeeding year.

6. The maximum amounts herein stated may in license be reduced if investigation so warrants.

7. Construction work shall be completed on or before December 1, 1970.

8. Complete application of the water to the proposed use shall be made on or before December 1, 1990.

9. Progress reports shall be filed promptly by permittee on forms which will be provided annually by the State Water Rights Board.

10. Permittee shall maintain a daily record of inflow into and outflow from Folsom Reservoir, volumes in storage and water surface elevations. Permittee shall maintain like records with respect to Nimbus Reservoir, Permittee shall provide and maintain such measuring facilities as may be necessary for the formulation of said records. Permittee shall make said records of inflow, outflow, volumes in storage and water surface elevations available to the State Water Rights Board and shall allow authorized representatives of said Board access to its project works and properties for the purpose of securing supplemental information.

11. The amounts which may be diverted under rights acquired or to be acquired under these permits are and shall remain subject to reduction by future appropriation of water for reasonable, beneficial use within the watershed tributary to Folsom Reservoir.

12. These permits shall be subject to an agreement to be entered into between the United States of America and the water users of the Sacramento River and the Sacramento-San Joaquin Delta with respect to releases from Folsom and Nimbus Reservoirs in co-ordination with other units of the Central Valley Project for consumptive uses and salinity control in the Sacramento-San Joaquin Delta, provided such agreement is entered into within one year from date of issuance of a decision by the State Water Rights Board in connection with and after hearing, on Applications 5625, 5626, 9363, 9364, 9365, 9366, 9367, 9368, and 10588 of permittee, and is approved by the State Water Rights Board, or in the event of failure to reach an agreement by that date, these permits shall be subject to further order of the Board, which order shall be preceded by further hearings.

13. Permittee shall by-pass down the natural channel of American River below Folsom Dam and Nimbus Dam for the purpose of maintaining fish life such flows as are provided for in that certain document entitled "Memorandum of Operating Agreement for the Protection and Preservation of Fish Life in the American River as Affected by Folsom and Nimbus Dams and their Related Works and

Diversion of Water Under Contracts with the United States" between the United States and the California Department of Fish and Games, dated October 15, 1957, filed of record as Fish and Game Exhibit 19 of the hearing of Applications 13370, 13371, 13372 and 14462.

14. Deliveries of water under permits issued pursuant to Application 13370 and 13371 shall be limited to deliveries for beneficial use within Placer, Sacramento and San Joaquin Counties and shall not be made beyond the westerly or southerly boundaries thereof, except on a temporary basis, until the needs of those counties, present or prospective, are fully met provided, however, that agreements in accordance with Federal Reclamation laws between permittee and parties desiring such service within said counties are executed by July 1, 1968.

15. The right to divert and store water and apply said water to beneficial use as provided in the permits issued pursuant to Applications 13370 and 13371 is granted to the United States at Trustee for the benefit of the public agencies of the State together with the landowners and water users within such public agencies as shall be supplied with the water appropriated under the permits.

16. Subject to compliance by the public agencies concerned with any and all present and future valid contractual obligations with the United States, such public agencies, on behalf of their landowners and water users, shall, consistent with other terms of the permits, have the permanent right to the use of all water appropriated and beneficially used under permits

issued pursuant to Applications 13370 and 13371, which right, except where water is distributed to the general public by a private agency in charge of a public use, shall be appurtenant to the land to which said water shall be applied, subject to continued beneficial use and the right to change the point of diversion, place of use, and purpose of use, as provided in Chapter 10 of Part 2 of Division 2 of the Water Code of the State of California, and further subject to the right to dispose of a temporary surplus.

17. Upon completion of the appropriation and beneficial use of water under the permits, any license or licenses which may be issued in the matter of Applications 13370 and 13371 pursuant to Chapter 9 of Part 2 of Division 2 of the California Water Code shall be issued to the public agencies of the State within which the water shall have been found by inspection by the Board to have been applied to beneficial use.

18. All rights and privileges under these permits including method of diversion, method of use, and quantity 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 water.

Those portions of Applications 13370 and 13371 seeking either direct diversion or diversion to storage other than the season of about November 1 of each year and about August 1 of the succeeding year are hereby denied.

