

STATE OF CALIFORNIA
STATE WATER RIGHTS BOARD

In the Matter of Applications 18084,
18085, 18086 and 18087 of Placer
County Water Agency to appropriate
from North Fork American River,
Middle Fork American River, Rubicon
River, Duncan Creek, North Fork Long
Canyon and South Fork Long Canyon in
El Dorado and Placer Counties

Decision D 1104

ADOPTED NOV 21 '62

DECISION APPROVING APPLICATIONS

Applications 18084, 18085, 18086 and 18087 were filed by County of Placer and assigned to the Placer County Water Agency (hereinafter referred to as the applicant). The applications are for permits for the applicant's North Fork-Middle Fork American River Project which is designed ultimately to supply water for beneficial purposes in western Placer County. It is planned to first develop the hydroelectric potential of the river system to provide funds to construct and operate the project for irrigation, municipal, industrial, recreational and incidental domestic purposes.

The Middle Fork American River joins the North Fork from the east near the City of Auburn. The Rubicon River enters the Middle Fork from the south about 23 miles upstream from the confluence of the Middle and North Forks. Long Canyon, with its

North and South Forks, lies between the Rubicon River and the Middle Fork American River and is tributary to the Rubicon from the northeast. Duncan Creek joins the Middle Fork American River from the north above the Rubicon-Middle Fork confluence. All of these streams flow in a general southwesterly direction. In order from north to south, they are: Duncan Creek, Middle Fork American River, North Fork Long Canyon, South Fork Long Canyon, and Rubicon River.

The proposed project commences upstream with French Meadow Reservoir on Middle Fork American River. This reservoir (with a gross capacity of 133,700 acre-feet and an active storage capacity of 125,000 acre-feet) will impound the natural runoff of the Middle Fork and also receive water from Duncan Creek, diverted to the Middle Fork via tunnel. From French Meadow Reservoir water will be diverted through a tunnel to the southeast to French Meadow powerhouse on the Rubicon River. Immediately below the powerhouse Hell Hole Dam on the Rubicon will create Hell Hole Reservoir (with a gross capacity of 208,400 acre-feet and an active capacity of 202,600 acre-feet) which will re-regulate the discharge of the powerhouse as well as impound the natural flow of the Rubicon. From this reservoir water will be conveyed through a 10-mile tunnel to the Middle Fork powerhouse on Middle Fork American River. This tunnel will also receive the flow of the North Fork and South Fork Long Canyon. Water from the Middle Fork powerhouse will discharge into Ralston Interbay thence through a tunnel to Ralston powerhouse on the Rubicon about 2.5 miles upstream from the confluence of the Rubicon and Middle Fork.

The total installed capacity of the foregoing powerhouses will be 197,000 kilowatts, and the maximum static head will total about 4,100 feet. An afterbay will be constructed immediately below the confluence of Rubicon River and Middle Fork American River to re-regulate the erratic flows from the Ralston powerhouse. Releases from the Ralston Afterbay will be through a tunnel to the Oxbow (regulator) power plant. The water will then flow down the Middle Fork American River, thence North Fork American River to the Auburn diversion dam. Water will be pumped from the reservoir behind the Auburn diversion dam initially at 20 cubic feet per second (cfs) into a three-mile tunnel and released into Auburn Ravine for use in western Placer County. If and when the Auburn Dam, proposed by the Federal Government, is constructed, water can be released through the tunnel into Auburn Ravine by gravity.

Substance and Background of the Applications

Applications 18084 and 18085 were filed on April 7, 1958, and Applications 18086 and 18087 were filed on April 8, 1958. Applications 7936 and 7937, covering water of the North and Middle Forks American River, were filed May 21, 1934, by the Department of Finance and are now held by the California Water Commission (hereinafter referred to as the Commission) for future disposition. On March 16, 1962, the Commission executed a release from priority of Applications 7936 and 7937 in favor of Applications 18084, 18085, 18086 and 18087, subject to certain terms and conditions.

Thereafter the applicant submitted proposed amendments to its applications to the Commission providing for certain changes in its original project. These changes were approved by the Commission on September 7, 1962, and are now before the Board for its approval.

Applications 18084 and 18086 are for power and recreational purposes and as amended by the pending petition propose the following direct diversions, year-round, and diversions to storage from November 1 of each year to July 1 of the succeeding year:

Source	:Direct Diversion:		Storage		Reservoir or dam
	: Amount	(cfs)	: Amount	(afa):	
	: A18084	A18086	: A18084	A18086:	
Duncan Creek	150	50	25,000*	-	French Meadows
M.F. American River	290	110	95,000	10,000	French Meadows
Rubicon River	675	155	129,000	36,000	Hell Hole
N.F. Long Canyon	100	-	-	7,000*	Hell Hole
S.F. Long Canyon	400	-	-	13,000*	Hell Hole
M.F. American River	1,000	-	-	-	Ralston Interbay
M.F. American River	1,225	705	-	-	Ralston Afterbay
		Total	249,000	66,000	

*Off-stream storage

Applications 18085 and 18087 are for irrigation and incidental domestic, recreational, municipal and industrial purposes. These applications are for permits to appropriate by direct diversion 1,225 and 800 cfs, respectively, from November 1 of each year

to July 1 of the succeeding year at the Auburn pumping plant located near the City of Auburn. Permits are also requested for the following amounts of storage during the same season:

Source	Storage		
	Amount	(afa)	
	A 18085	A 18087	Reservoir
Duncan Creek*	25,000	-	French Meadows
M.F. American River	95,000	10,000	French Meadows
Rubicon River	129,000	36,000	Hell Hole
S.F. Long Canyon*	-	13,000	Hell Hole
N.F. Long Canyon*	-	7,000	Hell Hole

The water under these two applications will be used for irrigation of 159,600 acres within a gross area of 250,610 acres of the Valley Foothill Unit of the applicant, being within T10 to 15N, R5 to 14E, MDB&M, in Placer County.

Hearing

Applications 18084, 18085, 18086 and 18087 were completed in accordance with the Water Code and applicable administrative rules and regulations. Protests having been received, a public hearing under the provisions of the California Administrative Code, Title 23, "Waters," was held before the Board on May 22 and 23 and July 17, 1962, at Sacramento, California, before Board Members Kent Silverthorne (Chairman), Ralph J. McGill, and William A. Alexander. The applicant, protestants, and other interested parties were duly notified of all sessions of the hearing.

*Off-stream storage

Availability of Unappropriated Water

The flow of the American River at USGS Gaging Station "at Fair Oaks," which measures the flow of the entire American River stream system, for a 50-year period of study, has ranged from 3.6 cfs on August 16, 1924, to 180,000 cfs on November 21, 1950, and has averaged 3,826 cfs, equivalent to about 2,770,000 acre-feet per annum (afa). Monthly mean flows passing this gaging station for the period 1933-1954 have averaged from 283 cfs during September to 8,816 cfs during May. Inasmuch as the applicant's diversion season under Applications 18085 and 18087 (the consumptive use applications) is from November 1 of each year to July 1 of the succeeding year, only the flows during this period need be considered.

An operation study of Folsom Reservoir covering a dry period from 1928-1935, modified to show the effect of the applicant's project and to eliminate inflow from the Pacific Gas and Electric Company's South Canal heading on Auburn Ravine which may be discontinued in the future, has been prepared. This study indicates that after providing for prior downstream water rights on the American River, fish releases, that part of the Delta consumptive and salinity requirements apportioned to the American River, rights of the City of Sacramento, a flood control reservation of 400,000 acre-feet and a minimum pool of 90,000 acre-feet, there would be at least 121,000 acre-feet per annum of water available to the applicant which could be diverted for consumptive purposes.

Feasibility of Project

The estimated total annual demand for water in the applicant's proposed service area by the year 2013 is in excess of 400,000 acre-feet. Of this quantity, 120,000 acre-feet will be supplied from the applicant's project, the remainder to be supplied from local projects and purchased water from the United States Bureau of Reclamation.

A feasibility study of a major development on the Middle Fork American River to meet this demand and develop sufficient hydroelectric energy to support, in part, its construction was made by the applicant. Negotiations were entered into with the Pacific Gas and Electric Company resulting in a proposal by the company to purchase all of the electric energy developed by the project for a period of 45 years for an annual payment of \$6,400,000. A special election held within the District has approved the issuance of bonds secured by revenue from the project in the principal amount of \$140,000,000 to provide construction costs.

A subsequent feasibility report has been made reflecting the changes in the project contemplated by the proposed amendments in the applications. The proposed changes reduce the power revenue to \$5,300,000 per year but also decrease the project costs to be financed by the revenue bonds to \$109,445,800. The capital equivalent of the revenue from the project as now proposed, with interest of 4 per cent being paid on the bonds, is \$110,187,000. This would provide payment for the complete American River Project including

\$6,540,000 for construction of the Auburn Ravine tunnel and pumping plant. Any surplus derived from the sale of bonds at a lower interest rate than 4 per cent would be used for the construction of additional features within western Placer County for re-regulation and re-storage of water of the American River for use in that area.

The California Water Plan

The major feature of the American River Unit of the California Water Plan is a large dam below the City of Auburn on the North Fork American River. It also contemplates headwater development consisting of a reservoir at French Meadows on the Middle Fork American River and a dam and reservoir at the Hell Hole site on the Rubicon River, along with development of the hydroelectric potential of the stream system. Other storage and diversion facilities included in the California Water Plan have already been constructed by the Sacramento Municipal Utility District on the headwaters of the American River. Under the plan, water conserved in upstream reservoirs and in Auburn Reservoir will be diverted either to western Placer County through a tunnel near the City of Auburn or exported for use outside of the watershed.

The Board finds that the project presented by the applicant is in conformity with the California Water Plan.

Disposition of Protests

The United States Bureau of Reclamation withdrew its protest during the course of the hearing through an agreement with the applicant predicated upon changes being made in the applicant's project as set forth in the requested amendements to the applications, following which, the Santa Clara Valley Water Conservation District and the Santa Clara-Alameda-San Benito Water Authority withdrew their protests.

Protestants Carmichael Irrigation District, M. V. and W. E. Holthouse, and Marie Sproule hold licenses and/or permits and claim riparian and prescriptive rights to divert from the American River below Folsom Dam and from the Sacramento-San Joaquin Delta. The Bureau of Reclamation in the operation of its Folsom Reservoir makes provisions for the satisfaction of these rights. In view of the agreement between the Bureau and applicant, the rights of these users are deemed adequately protected.

Protestants Sacramento Municipal Utility District and the City of Sacramento entered into agreements with the applicant (PCWA Exhs. 21 and 22) which provided for dismissal of their protests upon the incorporation of said agreements in any permit or permits that may be issued to the applicant.

The applicant entered into a written stipulation with the San Juan Suburban Water District providing for the withdrawal of the latter's protest and the recognition of certain rights of the District as being prior to any rights obtained pursuant to the subject applications (PCWA Exh. 20).

Protestant California Department of Fish and Game entered into an agreement with the applicant providing for the dismissal of its protest if any permits or licenses issued to the applicant include certain provisions for the protection of fish and wildlife, which include project minimum stream flows and reservoir levels (PCWA Exh. 19).

Time Required for Construction of
Project and Placing Water to Beneficial Use

The applicant contemplates that by April 1963, necessary permission to proceed will have been obtained from the Federal Power Commission and that it will be ready to commence construction. It estimates that construction can be completed by August 1966, with the exception of the Auburn Ravine tunnel and pumping plant, which is scheduled for completion in the spring of 1967.

The applicant has entered into an agreement with the United States Bureau of Reclamation for the purchase of Central Valley Project water. The agreement sets forth a schedule of diversions from applicant's project covering five-year periods along with a schedule of deliveries of purchased water (PCWA Exhs. 16 and 16-1). The applicant's scheduled consumptive use of water from its project increases from 5,000 acre-feet for the period 1967-71, when such use commences, to 120,000 acre-feet in the year 2007 when all the water sought by the subject applications will be placed to beneficial use.

Proposed Permit Terms and Conditions

The El Dorado County Water Agency and Georgetown Divide Public Utility District appeared at the hearing as interested parties and requested that the right to store and use water for power purposes under the permits be made subject to diversions for domestic and irrigation uses regardless of priority and that all diversions under the permits be subject to depletion of stream flows for present and future uses in El Dorado County, and further that diversions under the permits for use outside the watershed of the Middle Fork American River be made subject to appropriations for use within said watershed regardless of priority.

The applicant's project is designed to ultimately be operated on a schedule for irrigation and other consumptive uses with the development of power to be secondary. To condition the permits as suggested could well jeopardize the ability of the applicant to finance the project. In view of the foregoing, inclusion of the suggested permit term subjecting use for power purposes to diversions for domestic and irrigation uses is not believed advisable.

The objective of the other proposed permit terms relating to El Dorado County will be satisfied to the extent the water originates in said county by the inclusion of a term essentially restating one of the conditions imposed by the California Water Commission in its order releasing the subject applications from the priority of the previously referred to State filings, which subjects the release to the following:

"(1) The prior rights of any county in which the water sought to be appropriated originates to the use of such water as may be necessary for the development of such county as provided for in Section 10505 of the Water Code."

Conclusion

The evidence indicates, and the Board finds, that unappropriated water normally exists in sufficient amounts to satisfy the applicant under Applications 18084, 18085, 18086, and 18087 with amendments as proposed; that such water, subject to certain conditions, may be taken and used as proposed without interference with the exercise of prior rights; that the applications should be approved and permits issued pursuant thereto subject to the terms and conditions set forth in the following Order for the protection of prior rights and in the public interest.

The provisions contained in the agreement between the Department of Fish and Game and the applicant for the protection of fish and wildlife are necessary and in the public interest. Insofar as it relates to matters within the jurisdiction of the Board, permits issued to the applicant will be subjected to this agreement as well as to the agreements and stipulations of the applicant and Sacramento Municipal Utility District, City of Sacramento, and San Juan Suburban Water District.

The proposed changes in points of diversion and place of use as set forth in amended Applications 18084, 18085, 18086, and 18087 submitted for approval would not result in injury to any lawful user of water and should be approved.

ORDER

IT IS HEREBY ORDERED that the proposed changes in points of diversion and places of use as set forth in amended Applications 18084, 18085, 18086, and 18087 be, and the same are, approved.

IT IS FURTHER ORDERED that Applications 18084, 18085, 18086, and 18087, as amended, be, and the same are, approved and that permits be issued to the applicant, subject to vested rights and to the following limitations and conditions:

1. The amount of water to be appropriated under the permit issued pursuant to Application 18084 for power and incidental recreational purposes shall be limited to the amount that can be beneficially used and shall not exceed (a) 150 cubic feet per second (cfs) by direct diversion, year-round, and 25,000 acre-feet (af) to off-stream storage at a maximum rate of 400 cfs from about November 1 of each year to about July 1 of the succeeding year from Duncan Creek to French Meadows Reservoir, (b) 290 cfs by direct diversion, year-round, and 95,000 af by storage from about November 1 of each year to about July 1 of the succeeding year from the Middle Fork American River at French Meadows Reservoir, (c) 675 cfs by direct diversion, year-round, and 129,000 af by storage from about November 1 of each year to about July 1 of the succeeding year from Rubicon River at Hell Hole Reservoir, (d) 400 cfs by direct diversion, year-round, from South Fork Long Canyon to Hell Hole Reservoir (for regulation) or to Middle Fork power plant, (e) 100 cfs by direct diversion, year-round, from North Fork

Long Canyon to Hell Hole Reservoir (for regulation) or to Middle Fork power plant and (f) 1,000 cfs by direct diversion, year-round, from Middle Fork American River at the Ralston Interbay and 1,225 cfs by direct diversion, year-round, from Middle Fork American River at Ralston Afterbay.

2. The amount of water to be appropriated under the permit issued pursuant to Application 18085 for irrigation and incidental domestic, recreational, municipal and industrial purposes shall be limited to the amount that can be beneficially used and shall not exceed (a) 1,225 cfs by direct diversion from about November 1 of each year to about July 1 of the succeeding year from North Fork American River, (b) 25,000 af by off-stream storage, at a maximum rate of diversion of 400 cfs, from about November 1 of each year to about July 1 of the succeeding year from Duncan Creek to French Meadows Reservoir, (c) 95,000 af by storage from about November 1 of each year to about July 1 of the succeeding year from Middle Fork American River at French Meadows Reservoir, (d) 129,000 af by storage from about November 1 of each year to about July 1 of the succeeding year from Rubicon River at Hell Hole Reservoir.

3. The amount of water to be appropriated under Application 18086 for power and recreational purposes shall be limited to the amount that can be beneficially used and shall not exceed, (a) 50 cfs by direct diversion, year-round, from Duncan Creek, (b) 110 cfs by direct diversion, year-round, and 10,000 af by storage from about November 1 of each year to about July 1 of the succeeding year from Middle Fork American River

at French Meadows Reservoir, (c) 155 cfs by direct diversion, year-round, and 36,000 af by storage from about November 1 of each year to about July 1 of the succeeding year from Rubicon River at Hell Hole Reservoir, (d) 13,000 af by off-stream storage from about November 1 of each year to about July 1 of the succeeding year from South Fork Long Canyon, at a maximum rate of diversion of 830 cfs to be stored at Hell Hole Reservoir, (e) 7,000 af by off-stream storage from about November 1 of each year to about July 1 of the succeeding year from North Fork Long Canyon, at a maximum rate of 830 cfs to be stored at Hell Hole Reservoir, (f) 705 cfs by direct diversion, year-round, from Middle Fork American River at Ralston Afterbay.

4. The amount of water to be appropriated under the permit issued pursuant to Application 18087 for irrigation and incidental domestic, recreation, municipal and industrial purposes shall be limited to the amount that can be beneficially used and shall not exceed, (a) 800 cfs by direct diversion from about November 1 of each year to about July 1 of the succeeding year from North Fork American River, (b) 10,000 af by storage from about November 1 of each year to about July 1 of the succeeding year from Middle Fork American River at French Meadows Reservoir, (c) 36,000 af by storage from about November 1 of each year to about July 1 of the succeeding year from Rubicon River at Hell Hole Reservoir, (d) 13,000 af by off-stream storage from about November 1 of each year to July 1 of the succeeding year from South Fork Long Canyon at a maximum rate of diversion of 830 cfs to be stored at Hell Hole

Reservoir, (e) 7,000 af by off-stream storage from about November 1 of each year to July 1 of the succeeding year from North Fork Long Canyon, at a maximum rate of diversion of 830 cfs, to be stored at Hell Hole Reservoir.

5. The maximum amount of water to be diverted to storage under all permits during any one season shall not exceed (a) 133,700 acre-feet at French Meadows Reservoir and (b) 208,400 acre-feet at Hell Hole Reservoir.

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

7. Actual construction work shall begin on or before September 1, 1963, and shall thereafter be prosecuted with reasonable diligence, and if not so commenced and prosecuted, these permits may be revoked.

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

9. Complete application of the water to the proposed uses shall be made on or before December 1, 2007.

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

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

12. These permits are subject to the prior rights of any county in which the water sought to be appropriated originates to the use of such water as may be necessary for the development of such county as provided for in Section 10505 of the Water Code.

13. To the extent that their provisions relate to matters within the jurisdiction of the State Water Rights Board, these permits are subject to stipulations and agreements between the permittee and the California Department of Fish and Game, dated July 20, 1962, San Juan Suburban Water District et al., dated May 21, 1962; Sacramento Municipal Utility District, dated May 21, 1962, and the City of Sacramento, dated May 21, 1962, which were filed for record at the hearing on Applications 18084, 18085, 18086, and 18087 as Placer County Water Agency's Exhibits 19, 20, 21, and 22, respectively.

14. These permits do not authorize collection of water to storage during the period outside of the collection seasons specified in Paragraphs 1, 2, 3, and 4 to offset evaporation or seepage losses or for any other purpose.

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

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

17. These permits are subject to compliance by permittee with Section 10504.5(a) of the Water Code.

18. Separate applications for the approval of plans and specifications for construction of the dams described in these approved water right applications shall be filed with and approved by the Department of Water Resources prior to commencement of construction of the dams.

Adopted as the decision and order of the State Water Rights Board at a meeting duly called and held at Sacramento, California, on this day of , 1962.

Kent Silverthorne, Chairman

Ralph J. McGill, Member

W. A. Alexander, Member