

*Craig*

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

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In the Matter of Applications 11792, 12953 and 13265 by Calaveras County Water District, Application 12842 by North San Joaquin Water Conservation District, and Applications 13156 and 15201 by East Bay Municipal Utility District to Appropriate Water from Mokelumne River and/or from Tributaries of that Stream.

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Decision A 11792, 12842, 12953, 13156, 13265, 15201 D 858

Decided July 3, 1956

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Appearances at Hearing Held at Sacramento on October 18, 19, 20 and 21, November 29 and 30, and December 1, 2 and 5, 1955 and on January 16, 17, 18, 19, 20 and 26 and May 2, 1956:

For the Applicants

Calaveras County Water District	Martin McDonough, Attorney at Law
North San Joaquin Water Conservation District	Edward G. Chandler and Reuben P. Rott, Attorneys at Law
East Bay Municipal Utility District	Harold Raines, Attorney at Law

For the Protestants

Pacific Gas and Electric Company	Joseph E. Sheeks, Attorney at Law
California State Department of Fish and Game	Lucian B. Vandegrift, Deputy Attorney General
North San Joaquin Water Conservation District	Edward G. Chandler and Reuben P. Rott, Attorneys at Law
East Bay Municipal Utility District	Harold Raines, Attorney at Law
Woodbridge Irrigation District	Gilbert L. Jones, Attorney at Law

Calaveras Public Utility District	George A. Huberty, Attorney at Law
County of Calaveras	George A. Huberty, Attorney at Law
Calaveras County Water District	Martin McDonough, Attorney at Law
County of Amador	Martin McDonough, Attorney at Law
West Point Rod and Gun Club	} Arthur Devlin, Attorney at Law
Diablo Rod and Gun Club	
Associated Sportsmen of California District 3	
Associated Sportsmen of California	
Raymond A. Kissel	No appearance

For Interested Parties

Mokelumne River Irrigation District et al.	Tom H. Louttit, Attorney at Law
Woodbridge Water Users Association	Robert N. Blossom
State Water Resources Board	Robert Burton, Deputy Attorney General
Department of Finance	Emil J. Relat, Assistant Administrative Adviser

Examiners - Harvey O. Banks\*, Assistant State Engineer and L. C. Jopson\*\*, Principal Hydraulic Engineer, Division of Water Resources, Department of Public Works.

Assisting the Examiners - Gavin Craig, Senior Attorney, William R. Gianelli\*\*\*, Supervising Hydraulic Engineer, Kenneth L. Woodward, Senior Hydraulic Engineer, Division of Water Resources, Department of Public Works.

- \* State Engineer since January 2, 1956.
- \*\* Assistant State Engineer since January 16, 1956.
- \*\*\* Principal Hydraulic Engineer since April 11, 1956.

## DECISION

### Substance of the Applications

Application 11792 by Calaveras County Water District initiates appropriations from tributaries of Mokelumne River (as well as from sources foreign to Mokelumne River drainage which are excluded from present consideration), for irrigation, domestic, industrial, municipal, mining and recreational purposes as follows:

From Bear Creek, tributary via Middle Fork Mokelumne River, 10 cubic feet per second at a point within the SW $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 1 T6N, R13E; also 1,550 acre-feet per annum, at a point within the SW $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 29, T7N, R14E, for storage in Bear Reservoir (Section 29, T7N, R14E, flooded area 62 acres, capacity 1,550 acre-feet).

From North Fork of Middle Fork Mokelumne River, 1,300 acre-feet per annum at a point within the SE $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 34, T7N, R14E, for storage in Forest Reservoir (flooded area 33 acres, capacity 1,300 acre-feet).

From Middle Fork Mokelumne River, 50 cubic feet per second at a point within the SW $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 9, T6N, R14E; also 1,580 acre feet per annum at a point within the SW $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 9, T6N, R14E for storage in Middle Fork Reservoir (flooded area 43 acres, capacity 1,580 acre-feet) and 3,600 acre-feet per annum at a point within the SE $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 12, T6N, R13E, for storage in West Point Reservoir (flooded area 114 acres, capacity 3,600 acre-feet).

From South Fork Mokelumne River, 50 cubic feet per second either at a point within the SW $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 16, T6N, R13E or at a point within the NW $\frac{1}{4}$  SE $\frac{1}{4}$  of Section 1, T5N, R14E; also 17,000 acre-feet per annum at a point within the SE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 23, T6N, R13E for storage in Railroad Flat Reservoir (flooded area 270 acres, capacity 17,000 acre-feet).

The application contemplates direct diversions year-round and collection of stored waters between October 1 of each year and July 1 of the next. Township designations relate to Mount Diablo Base and Meridian. Use under the application is to be "within a gross area of 506,000 acres in Calaveras County Water District".

Application 12842 by North San Joaquin Water Conservation District initiates two year-round appropriations of 250 cubic feet per second each, from Mokelumne River, at points within Section 36, T3N, R6E and Section 11, T4N, R7E, MDB&M, respectively; also an appropriation of 50,000 acre-feet per annum from the same source at a point within Section 7, T4N, R9E, collected without limitation as to time and stored at the proposed Mehrten Reservoir. The water is sought for irrigation and incidental domestic use, also for municipal, recreational and industrial purposes, all within the boundaries of the applicant District.

Application 12953 by Calaveras County Water District initiates an appropriation of 3,700 acre-feet per annum, without limitation as to time of collection, from South Fork Mokelumne River, at a point within Section 33, T6N, R14E, MDB&M for irrigation and incidental domestic purposes. The water is to be stored at Ladette Reservoir (just above the described point of diversion) and used within the District boundaries.

Application 13156 by East Bay Municipal Utility District initiates appropriations from Mokelumne River at Camanche Dam (within Section 6, T4N, R9E), at Pardee Dam (within Section 26, T5N, R10E) and at Middle Bar Dam (within Section 16, T5N, R11E); also from South Fork Mokelumne River at Railroad Flat Dam (within Section 23, T6N, R13E). It is sought to appropriate 194 cubic feet per second directly from Mokelumne River, year-round, at either Camanche Dam or Pardee Dam or a portion of that amount at each of those points; also to appropriate 273,000 acre-feet per annum collected behind the designated dams on Mokelumne River and 80,000 acre-feet per annum collected at the Railroad Flat site on the South Fork, whenever water is available. The capacities of Camanche, Pardee, Middle Bar and Railroad Flat Reservoirs, according to the application, will be 212,000, 226,950, 46,500 and 80,000 acre-feet, respectively. The water sought under the application is to be utilized for municipal purposes within the boundaries of the applicant District, the application setting forth in that connection:

"This application is made for the purpose of serving the East Bay Municipal Water District, comprising the cities of Alameda, Albany, Berkeley, El Cerrito, Emeryville, Oakland, Piedmont, Richmond, San Leandro, San Pablo, and unincorporated territory in Alameda and Contra Costa Counties; adjacent incorporated and unincorporated areas located outside the District boundaries but which it is proposed to annex; and military installations of the United States, adjacent to the District or to its facilities, where service is required for national security."

As to right of access to the proposed points of diversion the application states:

"Applicant owns the land at Pardee Dam and at the proposed point of diversion at Middle Bar Dam site. No steps have been taken to secure right of access to the proposed points of diversion at Camanche and Railroad Flat Dam sites. Applicant has power of eminent domain."

Application 13265 by Calaveras County Water District initiates a year-round appropriation of 10 cubic feet per second from Blue Creek, a tributary of North Fork Mokelumne River, at a point within Section 25, T7N, R15E, MDB&M; also an appropriation of 2,850 acre-feet per annum, to be collected between October 1 and June 30 of each season and stored in Bear Reservoir (capacity 1,550 acre-feet) and Forest Reservoir (capacity 1,300 acre-feet), these reservoir sites being located respectively within Section 2 and 34 of T7N, R14E, MDB&M. The water is sought for municipal purposes in towns and communities within the applicant District's boundaries.

Application 15201 by East Bay Municipal Utility District initiates a year-round appropriation of 1,800 cubic feet per second from Mokelumne River at Middle Bar damsite; also appropriations of 273,000 acre-feet per annum from Mokelumne River and 80,000 acre-feet per annum from the south fork thereof, said amounts to be collected without limitations as to time and stored as follows: 212,000 acre-feet at the Camanche site, 17,000 acre-feet at Pardee Reservoir, 44,000 acre-feet at the Middle Bar site and 80,000 acre-feet at the Railroad Flat site. The water is sought for hydroelectric and incidental domestic purposes at and about power plants located at the Camanche, Pardee and Middle Bar sites where respectively 9,730, 25,200 and 29,860 theoretical horsepower are to be generated. The power output, according to

the application is to be distributed, sold and, in part, used privately. According to the application also, all water used for power generation will be returned directly to Mokelumne River.

### Protests

Pacific Gas and Electric Company and California State Department of Fish and Game each protested all of the applications; North San Joaquin Water District protested all of the applications except its own; East Bay Municipal Utility District and Woodbridge Irrigation District each protested Applications 11792, 12842, 12953 and 13265; Calaveras Public Utility District, County of Calaveras and Calaveras County Water District each protested Applications 13156 and 15201; and six other parties individually protested Application 13156. In substance the several protests are as follows:

Pacific Gas and Electric Company in protesting Applications 11792, 12953, and 13265, avers that applicant's proposed points of diversion are above its own, claims rights antedating the Water Commission Act, and rights based upon riparian ownership. In particular, it claims a right to divert 210 cubic feet per second from North Fork Mokelumne River at Tiger Creek Afterbay Dam. It asserts that the water diverted under its several rights is utilized for the generation of electrical energy sold to the public generally, and/or for irrigation, domestic, municipal, and mining purposes. It contends that any diminution of flows which it diverts would be against the public interest. In protesting Application 12842, the Company asserts that the proposed storage would flood certain of its lands and will prevent diversion and use of certain flows

to which it is entitled by virtue of riparian rights; it prays that permit be not granted unless and until agreement between protestant and applicant is reached in matters at issue. With respect to Applications 13156 and 15201, the Company asserts that the filling of proposed Middle Bar Reservoir to projected maximum water level would result in water entering its Electra Power Plant thereby impairing that plant's efficiency and safe operation; it asks that action upon said applications be stayed unless and until those applications are so amended as to protect it from the interference mentioned or unless and until assurance of protection from interference is secured through agreement.

California State Department of Fish and Game protests all six applications, contending that since the amounts of water to be diverted would exceed the minimum flows of the streams, the proposed diversions would result in the destruction of fish, including trout, salmon, and other species. The protest against Applications 11792, 12953 and 13265, contains a statement to the effect that the protest may be disregarded and dismissed if such permits as may be issued contain clauses providing for the by-passing of the natural flow of the particular stream or of a designated flow, whichever is less; the designated flows being as follows:

Application :	Stream	Location of proposed point of diversion :	Designated flow in second-feet
11792	Bear Creek	Sec. 1, T6N, R13E	1
11792	North Fork Middle Fork Mokelumne River	Sec. 34, T7N, R14E	1.5
11792	Middle Fork Mokelumne River	Sec. 9, T6N, R14E	6
11792	Middle Fork Mokelumne River	Sec. 12, T6N, R13E	8
11792	South Fork Mokelumne River	Sec. 16, T6N, R13E	5
11792	South Fork Mokelumne River	Sec. 1, T5N, R14E	4
11792	South Fork Mokelumne River	Sec. 23, T6N, R13E	5
12953	South Fork Mokelumne River	Sec. 33, T6N, R14E	4
13265	Blue Creek	Sec. 25, T7N, R15E	3



The protests against Applications 12842, 13156 and 15201 contain statements to the effect that the protestant's objection to the proposed diversion from South Fork Mokelumne River at a point within Section 23, T6N, R13E, may be satisfied if 4 cubic feet per second or the natural flow of the stream, whichever is less, are allowed to pass that point; but that conditions for the dismissal of those protests at the other designated points of diversion cannot be stated until detailed plans and operating schedules are made available.

North San Joaquin Water Conservation District protests Application 11792 on apprehension that the diversions proposed thereunder would seriously deplete the supply upon which the lands within its boundaries depend. It asserts that 47,000 of its 52,000 acres are irrigated from wells and that 3,000 acres are irrigated by direct, surface diversion; that both the wells and the surface conduits are fed by the Mokelumne River below the points at which diversion is proposed under Application 11792. The District protests Applications 12953, 13265, 13156 and 15201, alleging that diversions thereunder would deprive it of water to which it is entitled under its prior Application 12842.

East Bay Municipal Utility District protests that diversions proposed under Applications 11792, 12953, and 13265, would conflict with diversions under its own Applications 4228, 4768, 5002 and 5128, that its own Application 13156, being a municipality for municipal use has preferred priority over the applications protested, and is prior in time to one of those applications, that adequate sources of supply other than Mokelumne River are

available to the initiators of Applications 11792, 12953, and 13265, that the plan of diversion and use proposed in those applications would not result in Mokelumne River waters being put to maximum beneficial use and that the approval of those applications therefore is not in the public interest. The Utility District also protests Application 12842 for reasons similar to those advanced in protesting Applications 11792, 12953, and 13265, but sets forth also in connection with Application 12842 that the development plans of applicant and protestant are in conflict in that both propose to use substantially the same dam and reservoir sites; i. e., the Camanche and Mehrten sites. The Utility District states that its protests against Applications 11792, 12953 and 13265 (but not 12842) may be disregarded and dismissed if its prior rights are protected.

Woodbridge Irrigation District in protesting Applications 11792, 12953, and 13265, contends that any diversion from Mokelumne River watershed would interfere with the exercise of rights which it holds to divert at Woodbridge Dam for delivery for irrigation to lands within and without its boundaries. It claims to divert upwards of 400 cubic feet per second during the irrigation season of each year when such amount is available. The same District, in protesting Application 12842, claims to be supplied in part by East Bay Municipal Utility District, which releases certain stored waters for protestant's exclusive use; it contends that the construction of any dams or weirs as proposed in Application 12842, between Pardee Dam and Woodbridge Dam, would interfere with the exercise of its rights, both to natural flow and to releases from storage.

Calaveras Public Utility District in protesting Applications 13156 and 15201 alleges that the diversion proposed by the initiator thereof will leave insufficient water to supply requirements within protestant District. It bases its claim of a water right upon an agreement in 1940 with applicant and upon use by predecessor Mokelumne Light and Power Company. It claims to use 350 inches of water or more, diverting at a point within Section 16, T6N, R13E, MDB&M. It asserts with respect to Application 15201 that the place of use is not definitely stated and that it is not clear whether the amount of water sought thereunder includes the amount sought under Application 13156 or is in addition thereto.

County of Calaveras in protesting Applications 13156 and 15201 alleges insufficiency in the sources named, conflict between the applications protested and Application 11792 as to use of Railroad Flat Reservoir site; it contends that development under the applications protested would not best conserve the public interest because the water sought by applicant is needed in the area in which it originates and should not be exported. It claims rights under Applications 13244 to 13253, inclusive, and rights under Applications 5648 and 5649 (State Department of Finance). It states that its protests may be disregarded and dismissed if applicant gives adequate assurances that its rights to divert will be respected without hindrance by applicant's structures or operations.

Calaveras County Water District protests Applications 13156 and 15201 upon the same grounds and agrees that its protests may be disregarded and dismissed under the same terms as set forth in

the protests by County of Calaveras. It bases its claim of a right to use of the waters in question, however, upon its Application 11792, 12953, and 13265, as well as upon Application 5648 by State Department of Finance.

West Point Rod and Gun Club, Inc. asserts in protesting Application 13156:

"We presuppose that in line with the policy of the East Bay Municipal District at other already established reservoirs the waters impounded near Railroad Flat, together with the surrounding land will be closed to the public use for hunting and fishing purposes. We maintain that there is all too little such land and water available at present and to close this area will work a hardship upon us and will adversely affect our fish planting and conservation program."

The protest may be disregarded and dismissed, the protestant states, "if the waters to be impounded, together with the surrounding land be made available to public use for hunting and fishing." The protestant argues that since South Fork Mokelumne River is used for fishing, swimming, and boating above the proposed reservoir no harm would result from using the reservoir itself for the same purposes.

Diablo Rod and Gun Club, Inc. protests on apprehension that approval of Application 13156 will result in the closing of Pardee and Camanche Reservoirs to hunting and fishing. It states that its protest may be disregarded and dismissed if the areas mentioned remain open to the public "for hunting and fishing purposes as regulated by the California Department of Fish and Game."

Raymond A. Kissel protests that diversion as proposed under Application 13156 would leave insufficient water in Mokelumne River to irrigate his lands. He claims to divert at a point

within Section 6, T4N, R9E, MDB&M, under a riparian right, states that he irrigates 15 acres now, expects eventually to irrigate "as much as is practicable" of his 250-acre property. He states further that his protest may be disregarded and dismissed "if they wish to take the land and pay me the proper value thereof." County of Amador protests Application 13156, asserting that there is insufficient unappropriated water in the sources in question to supply the applicant, that protestant plans under Application 5647 to divert, below Electra, the same water that applicant proposes to regulate at Railroad Flat Dam, that the application will not best conserve the public interest because the water sought by the applicant is required in the area in which it originates, that the construction by applicant of expensive works which would become useless when prior though inchoate rights are exercised, is adverse to the public interest, that applicant's attempt to appropriate for uses that will not commence until 1988 nor be complete until 2100 is unreasonable and improper and that applicant's proposed works will prevent the flow of water from Pardee Reservoir from spilling into Jackson Creek, which flow is necessary to meet the requirements of the area which protestant represents. Protestant disclaims having used water in its own name but states that numerous individuals and agencies within the area have used water under valid rights and itself claims rights under Applications 5647 and 13034. Protestant states that its protest may be disregarded and dismissed if applicant gives adequate assurances that protestant's rights and claims will be respected, without hindrance by applicant.

Sam K. Cook, Sr. and Keith W. Sowl, respectively, Chairman and Vice Chairman, District No. 3, Associated Sportsmen of California, protest Application 13156, stating in part:

"As representatives of the organized sportsmen in Alameda and Contra Costa Counties we feel that the use of these waters will, if granted to the EBMUD, deny the right for use in hunting and fishing to the many thousands of people who have had the privileges in the past."

"This protest may be disregarded . . . if provisions are made . . . whereby the areas named (Camanche, Pardee, Middle Bar and Railroad Flat) will remain open to the public for hunting, fishing and such other recreational (uses) as are feasible."

The Associated Sportsmen of California registered the objection of that body to the granting of permits relating to Camanche, Pardee, Middle Bar and Railroad Flat Dams, by transmitting to the Division of Water Resources in lieu of protest, a resolution designated "Resolution ASC51", passed by Diablo Rod and Gun Club, approved by State Council, Associated Sportsmen of California, the resolution containing among others the following passage:

". . . RESOLVED that Diablo Rod and Gun Club is opposed to granting of permits . . . unless access to hunting and fishing is guaranteed by the provisions of the permits . . ."

#### Answers to Protests

The applicants' answers to the protests are to the following effect:

Calaveras County Water District answers Pacific Gas and Electric Company by stating that it will recognize and respect all prior rights, that its studies indicate existence of unappropriated water, that it is authorized to exercise the power of eminent domain and to make joint use of dams and reservoirs under Federal

Power Commission License (Project No. 2019) Subject to approval of the Commission, which approval it will seek if its applications to appropriate are approved. It answers State Department of Fish and Game by stating that it will so operate its works that water available for fish life in excess of domestic and irrigation needs will not be wastefully withheld; that it will cooperate in reaching an agreement as to the release of necessary water. It answers North San Joaquin Water Conservation District, East Bay Municipal Utility District, and Woodbridge Irrigation District by stating that it will recognize and respect all prior water rights, that studies indicate the existence of unappropriated water, that its proposed works will constitute an integrated and coordinated project to develop a supply commensurate with requirements of a designated area, including requirements for municipal and domestic purposes, thus bringing its project within the purview of Sections 106, 106.5, 1253, and 1460 of the Water Code, that none of the competing applications purport to be comprehensive but each of them deprives in some degree the municipalities and inhabitants of the watershed area of water needed for domestic use and irrigation.

North San Joaquin Water Conservation District answers Pacific Gas and Electric Company by alleging that a riparian right which is not exercised cannot bar approval of an application to appropriate and by stating that it will attempt to come to terms as to acquisition of lands within reservoir sites but that if such attempt fails, recourse will be had to condemnation. It answers State Department of Fish and Game by stating that when detailed plans and operating schedules have been fully prepared they will be

made available to protestant, but that it does not accept protestant's apparent interpretation of Section 525 of the State Fish and Game Code. It answers Woodbridge Irrigation District to the effect that it believes protestant's claims to be excessive and will be prepared so to show at time of hearing. It omits answering East Bay Municipal Utility District.

East Bay Municipal Utility District answers Pacific Gas and Electric Company by stating, as to the possible flooding of the latter's properties, that it possesses the power of eminent domain, and by stating further that unappropriated water exists in Mokelumne River and that the issuance of the permit sought to appropriate water would not deprive protestant of the riparian rights that it allegedly possesses, inasmuch as any permit issued to an applicant to appropriate water is subject to vested rights. It answers State Department of Fish and Game by stating that it is agreeable to the inclusion in such permits as may be issued of a provision that 4.0 cubic feet per second or the natural flow of the stream, whichever is least, shall at all times by-pass Camanche and Railroad Flat Dams. It answers North San Joaquin Water Conservation District by stating that Application 13156, being for municipal purposes, is entitled to priority over protestant's Application 12842. It answers Calaveras Public Utility District by alleging that unappropriated water exists in Mokelumne River in the amount sought and stating that Application 13156 has preferred priority as an application to appropriate for municipal purposes, and that protestant's claimed right based upon use by Mokelumne Light and Power Company is non-existent. It answers County of Calaveras and Calaveras County Water District



by stating that Mokelumne River is not the only source from which protestants may obtain an adequate supply, that Mokelumne River is the most practicable source of supply for the area that the applicant serves, that the issuance of permits to applicant will best conserve the public interest, that whereas protestants claim rights under Applications 5648, 5649, and 13253, inclusive, Application 13156 by its nature has priority over those applications. It answers West Point Rod and Gun Club, Diablo Rod and Gun Club, and Associated Sportsmen of California by stating that its policy relative to the use of its watershed and reservoir lands for fishing, hunting, and recreational purposes, is not germane to the instant proceedings, that waters passing through the reservoirs and over the lands in question are a part of the domestic supply of some 900,000 persons, and that applicant is legally responsible for protecting that supply from contamination. It answers Raymond A. Kissel by stating that the granting of a permit in approval of its application will not deprive protestant of any vested right that he may have, furthermore that it (the applicant) possesses the power of eminent domain. It answers County of Amador by stating that it bases its claim of right to waters of South Fork and other Mokelumne River tributaries upon Applications 5647 and 13034, that Application 13156 by its nature has priority over those applications, that protestant appears to have no plans to develop and is not in a position to develop the waters in question, that protestant's claims are vague and indefinite, that the denial of Application 13156 in favor of those claims will not be in the public interest whereas applicant's project is of the greatest public interest, and of immediate and continuing concern and importance to the State.

Hearing Held in Accordance with the Water Code

Applications 11792, 12842, 12953, 13156, 13265 and 15201 were completed in accordance with the Water Code and the Rules and Regulations of the Division of Water Resources and being protested were set for public hearing under the provisions of the California Administrative Code, Title 23, Waters, on Tuesday, October 18, 1955 at 10:00 o'clock a.m. in the Senate Hearing Chamber, Room 414 State Capitol Building, Sacramento, California. Of the hearing the applicants and the protestants were duly notified. The notice of hearing beyond announcing the time and place thereof advised the parties as follows:

"This hearing is for the purpose of receiving ... testimony and ... evidence ... and other representations relevant and material to the ... appropriation of unappropriated water of the Mokelumne River and tributaries ... and further to establish the conditions, if any, upon which the proposed appropriations will best develop, conserve, and utilize in the public interest the water sought ... The portion of Application 11792 involving the appropriation of the waters of the tributaries of Stanislaus and Calaveras Rivers will not be considered.

"In addition ... information and representations will be received relative to release of priority and/or partial assignment of Applications 5647 and 5648 from the Department of Finance to the above named applicants for use in connection with their respective Mokelumne River developments; including possible reservations of water for specific areas within the Counties of Origin."

The hearing extended through later sessions convened on October 19, 20 and 21, November 29 and 30 and December 1, 2 and 5, 1955; and on January 16, 17, 18, 19, 20 and 26 and May 2, 1956. It ended on the date last named.

Hearing Testimony

Sworn testimony was received from the following

witnesses:

Frank Davis, an engineer for Calaveras County Water District

Clinton Henning, consulting engineer

Louis Breuner, president of Board of Directors, East Bay Municipal Utility District

John W. McFarland, general manager of East Bay Municipal Utility District

John S. Longwell, consulting engineer

Francis B. Blanchard, manager of the water resources and planning division, East Bay Municipal Utility District

Robert C. Kennedy, Chief Engineer, East Bay Municipal Utility District

Glen T. O'Erien, representing Jackson Valley Water Users Association

F. H. Watson, Senior Agricultural Engineer, Lodi Section, East Bay Municipal Utility District

Grant W. Metzger, president of the Board of Directors of Calaveras Public Utility District

Vernon Campbell, President, Calaveras County Water District

Kenneth Welsh, Superintendent, Woodbridge Irrigation District

Niel Locke, President, Mokelumne River Irrigation District

Chester M. Locke, Secretary, Lockeford Protection District No. 1

Lawrence Putman, farmer

Verne W. Hoffman, farmer

Robert H. Simmons, farmer

Jack C. Fraser, Fisheries Management Supervisor, Region 2, Department of Fish and Game

John M. Haley, Principal Hydraulic Engineer, Division of Water Resources

Cole McClure Jr., Associate Engineering Geologist, Division of Water Resources

C. B. Bull, Chairman, Board of Supervisors, San Joaquin County

Lee W. Carter, Associate Hydraulic Engineer, Division of Water Resources

Unsworn, oral statements were also received from the following:

Thomas F. MacBride, Assistant District Attorney of Contra Costa County

Carl Froerer, City Manager, City of Alameda

R. C. Copeland, Chairman, Water Committee, Council of Richmond Industries

Frank King, Manager, San Leandro Chamber of Commerce

Kent Purcell, Chairman, Board of Supervisors, County of Alameda

Clifford Rishell, Mayor, City of Oakland

Norris Nash, President, Oakland Chamber of Commerce

Guilford W. Koch, Manager, Alameda County New Industries Committee

Fred Tatton, Secretary-Manager, Calaveras County Chamber of Commerce

John P. Gilchrist, representing Northern California Seafood Institute

Arthur C. Devlin, counsel for organized sportsmen's group

Howard Babcock, representing the Associated Sportsmen of California and the California Wildlife Federation

Sam Grosch, President, Sacramento Sierra Sportsmen's Council

Leo Dumlavy, President, True Sportsmen's Club

R. M. Blossom, Woodbridge Water Users Association

Jacob Strohm, Chairman, Board of Supervisors, County of Amador

## Exhibits

Exhibits were introduced at the hearing as follows:

### By the Examiners

1. "Report on Water Right Applications 11792, 12953, 13265... 12842... 13156 and 15201..." - Division of Water Resources, September, 1955.
2. Division records relating to the applications mentioned in the foregoing Exhibit.
3. State Water Resources Board Bulletin No. 1 - "Water Resources of California" - 1951.
4. State Water Resources Board Bulletin No. 2 (in two volumes) - "Water Utilization and Requirements of California" - June, 1955.
5. State Department of Public Works Bulletin No. 5 - "Flow in California Streams" - 1923.
6. State Department of Public Works, Division of Engineering and Irrigation Bulletin No. 12 - "Summary Report on the Water Resources of California and a Coordinated Plan for Their Development" - 1927.
7. State Water Resources Board Bulletin No. 11 - "San Joaquin County Investigation" - June, 1955.
8. State Department of Public Works, Division of Water Resources Bulletin No. 23 - "Report of Sacramento-San Joaquin Water Supervisor for the Period 1924-1928" - 1930.
9. State Department of Public Works, Division of Water Resources, Annual Reports of Sacramento-San Joaquin Water Supervision for the years 1929 to date.
10. State Department of Public Works, Division of Water Resources Bulletin No. 25 - "Report to Legislature of 1931 on State Water Plan" - 1930.
11. State Department of Public Works, Division of Water Resources Bulletin No. 29 - "San Joaquin River Basin" - 1931.
12. State Department of Public Works, Division of Water Resources Bulletin No. 51 - "Irrigation Requirements of California Crops" - 1945.
13. United States Geological Survey Water Supply Papers, Part II - Pacific Slope Basins in California.

14. United States Geological Survey Water Supply Paper 619 - "Geology and Water Resources of the Mokelumne Area, California" - 1930.
15. United States Geological Survey Water Supply Paper 780 - "Geology and Ground Water Hydrology of the Mokelumne Area, California" - 1938.
16. State Department of Public Works, Division of Water Resources - "Report on Applications Made and Filed by the State Department of Finance to Appropriate Waters...." - August, 1939.
17. State Department of Public Works, Division of Water Resources - "Supplemental Report on Applications Made and Filed by the Department of Finance to Appropriate Waters...." - August, 1941.
18. State Department of Public Works, Division of Water Resources Report - Water Right Applications by State Department of Finance, Assignments Thereof, Reservations for Counties of Origin, and Other Related Matters" - February, 1955.
19. State Department of Public Works, Division of Water Resources, Water Quality Investigation Report No. 7 - "Quality of Ground Water in the Stockton Area...." - March, 1955.
20. State Department of Public Works, Division of Water Resources, Water Quality Investigation - "Report to Central Valley Regional Water Pollution Control Board - Flows, Quality and Waste Assimilation Capacity of the Mokelumne River Near Thornton" - December, 1951.
21. United States Department of Commerce, Bureau of Census publication designated Volume III, Part 3 Census of Agriculture, 1950 - Irrigation of Agricultural Lands (in) California".
22. United States Bureau of Reclamation Report - "Folsom South Unit, Central Valley Project, California" - February, 1955.
23. United States Geological Survey topographic maps as applicable.
24. State Department of Public Works, Division of Water Resources, Water Quality Investigations - "First Progress Report ... on Reclamation of Water From Sewage or Industrial Waste" - December, 1952.
25. State Department of Public Works, Division of Water Resources, Water Quality Investigations" - Second Progress Report ... on Reclamation of Water From Sewage or Industrial Waste" - June, 1954.
26. East Bay Municipal Utility District reports on Pardee Reservoir operation for the period March, 1929 to September, 1947.

27. Map - "Lines of Equal Ground Water Elevation, Spring 1928" (Mokelumne River Area) - Division of Water Resources.

28. Map - "Lines of Equal Ground Water Elevation, Fall 1943" (Mokelumne River Area) - Division of Water Resources.

29. Map - "Lines of Equal Ground Water Elevation, Fall 1952" (Mokelumne River Area) - Division of Water Resources.

30. Block Diagram - "Ground Water Geology of the Mokelumne River Area" - Division of Water Resources.

31. Crop Maps - "Lands Served by Pumping from Mokelumne River Between Thornton Bridge and Pardee Dam, 1953-1955",

32. State Department of Public Works, Division of Water Resources Bulletin No. 56 - "Survey of Mountainous Areas" - December, 1955.

By the North San Joaquin Water Conservation District

1. Map of the Mokelumne River Area showing the Districts' boundaries and the general development within the area.

2. Hydrograph - Operation of District's project under "Condition B".

2A. Tabulation - Evaluation of project on basis of "Condition B".

3. Hydrograph - Operation of District's project under "Condition A".

3A. Tabulation - Evaluation of project on basis of "Condition A".

4. Yield Study of Mokelumne River - No. 54-325-15 of East Bay Municipal Utility District. (Same as Exhibit No. 58 of East Bay Municipal Utility District).

5. Tabulation - Past and Estimated Future Population and Water Supply Requirements of City of Lodi.

6. Document - Reply to questions propounded by the examiners requesting further information and data regarding the District's project.

7. Document - Decision in the City of Lodi vs. East Bay Municipal Utility District, et al., 1938.

8. Document and 5 maps relating to past and present underground water elevations, movement, replenishment and service areas.

9. Document and 5 maps relating to changes in underground water surface elevations in the Mokelumne Area.

10. United States Bureau of Reclamation - "Report on the Feasibility and Estimated costs of the southwest Contra Costa County Water District System" - November 1953.

10A. Letter of transmittal of Exhibit 10 to Speaker of House of Representatives - March 24, 1954.

10B. Letter of transmittal of Exhibit 10 to Clair Engle - December 2, 1955.

11. Brochure - Water is Plentiful for Business and Industry in the Alameda and Contra Costa County Areas Served by East Bay Municipal Utility District.

12. Brochure - East Bay Municipal Water System Data.

13. Brochure - Protect Your Water Supply - East Bay Municipal Utility District.

14. Memorandum - Factors for Consideration in Development of Maximum Beneficial Use of Mokelumne River.

By the Calaveras County Water District

1. Yield Study of Middle Fork Mokelumne River at West Point.

2. Yield Study of South Fork Mokelumne near Railroad Flat.

3. Statement and Bulletin - Beef Production on Irrigated Pasture.

4. Document - Reply to Questions propounded by the examiners requesting further information.

By the East Bay Municipal District

1. Map - East Bay Municipal Utility District Service Areas and Major Facilities.

2. Bar Graph - Forecast of Water Consumption, 1950 to ultimate.

3. Map and Tabulation - Present and Future Estimated Population, 1950 to ultimate.

4. Tabulation - Water Consumption by classes, Fiscal Year 1954-55.

5. Tabulation - U. S. Military Installation Water Consumption, Fiscal Year 1954-55.



6. Curve - Maximum Population Projection in San Francisco Bay Region.
7. Curve - Past and Projected Municipal Population for Present and Ultimate East Bay Municipal Utility District Service Areas, 1900 to Ultimate.
8. Curve - Past and Projected Gross Municipal Water Consumption for Present and Authorized Ultimate East Bay Municipal Utility District Areas.
9. Graph and Tabulation - Water Consumption, 1945-1965.
10. Tabulation - Past and Present Population in the Subsections of East Bay Region.
11. General Map - Ultimate Mokelumne River Project.
12. Map in 13 sheets - Topographic maps of the Camanche Reservoir Area.
13. Photograph - Aerial View of Mokelumne River with the proposed Camanche Project superimposed.
14. Map in 7 sheets - Topographic maps of the Middle Bar Reservoir Area.
15. Photograph - Aerial view of Mokelumne River with proposed Middle Bar Project superimposed.
16. Artist's Sketch - Middle Bar Dam, Spillway and Power Plant.
17. Photograph "C" - Aerial view with Right Abutment of Middle Bar Dam and Spillway superimposed.
18. Map in 5 sheets - Topography and Proposed Structures at the Railroad Flat Reservoir Area.
19. Photograph - Aerial View of South Fork Mokelumne River with Proposed Railroad Flat Dam Superimposed.
20. Map in 8 sheets - Topography of Pardee Dam and Reservoir Area.
21. Photograph - View of Existing Pardee South Spillway and Bridge.
22. Photograph - Sketch of Proposed Crest Gates and Appurtenances for Pardee South Spillway.

23. Tabulation - Historical Draft on the Mokelumne River 1926-1954.

24. General Map - Present Water Development Works on the Mokelumne River.

25. Tabulation - "Amador Canal, Channel Losses Between Gaging Stations at Pine Grove Road and Alpine Road".

26. Tabulation - Amador County Census of Population, 1860-1950.

27. Tabulation - Calaveras Public Utility District Canal Losses Between Stations No. 2 and No. 4.

28. Tabulation - Calaveras County Census of Population, 1860-1950.

29. Tabulation - Pardee Reservoir, Record of Operation Seasonal Years Ending September 30 for the Period 1928 to 1955.

30. Tabulation - Summary of crops, areas irrigated and yearly diversion from the Mokelumne River between Pardee Dam and Tidewater for period 1926-1954.

31. Tabulation - Acreage Irrigated by Direct Diversions From the Mokelumne River and Segregation of Riparian and Non-riparian Land between Pardee Dam and Tidewater.

32. Tabulation - Mokelumne River Comparison of Diversion by River Pumps and Acreage Irrigated, 1948-1954.

33. Tabulation - Duty of Water for Areas Irrigated by River Pumps to be Used to Estimate Duty of Water After 1939.

34. Tabulation - Mokelumne River Percolation to Overlying Lands between Lancha Plana and Woodbridge, 1926-1954.

35. Tabulations - Transpiration and Evaporation, Mokelumne River Lancha Plana to Woodbridge.

36. Tabulation - True Natural Flow of Mokelumne River near Clements 1904-1955.

37. Tabulation - Woodbridge Irrigation District Irrigation Efficiency 1939 to 1951, Inclusive.

38. Tabulation - Seasonal Surface Outflow from Woodbridge Irrigation District, 1939-1952.

39. Tabulation - Woodbridge Canal Wastage 1930-1935.

40. Map showing Woodbridge Irrigation District wasteways.
41. Thirteen Photographs - Woodbridge Irrigation District Wasteways and Wastage.
42. Tabulation - Woodbridge Irrigation District Wastage Observations, 1955.
43. Tabulation - Amador Canal Estimated Ultimate Diversions.
44. Judgment and Decree - City of Lodi vs. East Bay Municipal Utility District - March 17, 1938.
45. Judgment and Decree - East Bay Municipal Utility District vs. Pacific Gas and Electric Company - July 25, 1940.
46. Tabulation - Maximum allowable diversions by Calaveras Public Utility District to Mokelumne Hill Ditch and/or Calaveras Public Utility District Reservoir.
47. Agreement - Calaveras Public Utility District agreement with East Bay Municipal Utility District - May 8, 1940.
48. Tabulation - Amounts of water appurtenant to claims of individual appropriators and water use by individual appropriators, Pardee Dam to Tidewater.
49. Agreement East Bay Municipal Utility District and Woodbridge Irrigation District - January 5, 1938.
50. Tabulation - Woodbridge Irrigation District Total Seasonal Diversions Having Priority Over East Bay Municipal Utility District Application 4228.
51. Tabulation - Woodbridge Irrigation District Schedule of Diversions Having Priority Over Application 4228 as per Agreement with East Bay Municipal Utility District.
52. Tabulation - Derivation of Hypothetical Gross Water Requirement of 80,000 Acre-Feet per Year for Lands Served by Woodbridge Canal.
53. Tabulation - Woodbridge Irrigation District Schedule of Diversions Under New Claims for a Beneficial Water Requirement of 80,000 acre-feet per year, Under All Claims.
54. Tabulation - Acreage of Riparian Lands Between Pardee Dam and Tidewater.
55. Document - Prospective Use of Water by Riparian Owners.

56. Tabulation - Ultimate Water Use by Riparian Owners, Pardee Dam to Tidewater.
57. Tabulation - Mean monthly losses in evaporation, transpiration and percolation from Mokelumne River channel, Lancha Plana to Woodbridge.
58. Tabulation - Summary of Operation Study 54-325-15, Period 1923-1951, Ultimate Mokelumne River Project.
59. Tabulation - Summary of Operation Study 55-325-26, Period 1924-1954, Ultimate Mokelumne River Project.
60. Tabulation - Summary of Operation Study 55-325-27, Period 1923-1955, Ultimate Mokelumne River Project.
61. Tabulation - Summary of Operation Study 55-325-28, Period 1923-1951, Ultimate Mokelumne River Project.
62. Colored Graph - Hydrograph of Mokelumne River as Regulated by Ultimate Mokelumne River Project, 1924-1954.
63. Colored Graph - Demand and Available Water to Woodbridge Canal from Study 55-325-28.
64. Tabulation - Mokelumne River near Clements, True Natural Flow by Seasonal Years 1849 to 1953-54.
65. Colored Graph - True Natural Flow Mokelumne River near Clements 1849-50 to 1953-54.
66. Graph - Mokelumne River Percolation vs. Gaged Flow.
67. Graph - Mokelumne River Percolation vs. Ground Water Elevation.
68. Graph - Mokelumne River - Percolation Losses Lancha Plana to Woodbridge as a Function of Discharge and Ground Water Elevation.
69. Report in Two Parts - Application and terms and conditions of the preliminary permit from the Federal Power Commission.
70. Tabulation - Natural Runoff San Pablo Creek, San Leandro Creek, Lafayette Creek, and Pinole Creek.
71. Chart - Local Terminal Storage Operation at Ultimate for 15 mgd Safe Yield.

72. Tabulation - Estimate of Safe Yield Ground Water Supply Within Ultimate Service Area of the East Bay Municipal Utility District.

73. Report - Cost and Return Statement for Beef Production - Watson.

74. Tabulations - Pardee Reservoir operation studies for the period 1947-48 to November 1955.

75. Tabulation - Diversions from the Mokelumne River 1926-27 to 1937-38 between the Gaging Stations at Lancha Plana and at Woodbridge.

76. Tabulations - Measurements of wastage from Woodbridge Canal, April through November 1955.

77. United States Geological Survey Quadrangles "Lodi" and "Woodbridge" showing wastage measuring stations.

78. Document - Reply to examiners' request for further information as to District's project.

79. Tabulation - Mokelumne River Percolation and Transpiration Losses, Lancha Plana to Woodbridge, 1927-28 to 1937-38.

80. Document - Correspondence and tabulation relating to accuracy of United States Geological Survey stream flow records

81. Letter dated May 2, 1956 outlining suggestions of East Bay Municipal Utility District as to a settlement of water rights along Mokelumne River.

By Calaveras Public Utility District

1. Report on Operations and Management of Calaveras Public Utility District for Two-year Period Ended June 30, 1951.

2. Copy of deed transferring water rights from Mokelumne River Power and Water Company to Calaveras Public Utility District.

By Woodbridge Irrigation District

1. Tabulation - Flows in Woodbridge Canal, June 1 to June 20, 1955.

2. Map of Woodbridge Irrigation District showing areas served or serviceable.

3. Tabulation - Areas Irrigated by Woodbridge Irrigation District, 1928-55.

4. Tabulation - Lands irrigated and irrigable, in 1954, within areas served or serviceable from Woodbridge Irrigation District Canals.

5. Map filed with water right Application 5807 showing lands within Woodbridge Irrigation District (entered in evidence by reference).

6. Map filed with water right Application 10240 showing lands served by Woodbridge Irrigation District (entered in evidence by reference).

7. Tabulation - Rates per acre for water inside and outside of Woodbridge Irrigation District.

8. Document - Contract application form for water for users inside Woodbridge Irrigation District.

9. Document - Contract application form for water for users outside of Woodbridge Irrigation District.

10. Chart - Bar graph showing acreage irrigated by Woodbridge Irrigation District System.

11. Hydrograph - Flows and depletions of Mokelumne River at Woodbridge.

12. Hydrograph - Comparison for years 1923 through 1931 of different proposals of operation of Mokelumne River.

13. Hydrograph - Operation of the ultimate Mokelumne River Project during the critical dry period 1923 to 1932.

14. Hydrograph - Comparison of years 1923 through 1954 of water available under proposed operation of East Bay Municipal Utility District.

15. Memorandum - Water Rights and Requirements of Lands Supplied by Woodbridge Irrigation District and Other Surface Diversions from Mokelumne River, Pardee Dam to Tidewater - March 31, 1956.

By Mokelumne River Irrigation District

1. Map - Orientation of Historical Mokelumne River channels.

2. Map of Mokelumne River in two parts, showing lands claiming riparian status.

3. Tabulation - Agricultural Crop Production Study by Pacific Gas and Electric Company, 1953.
4. Memorandum - Duty of water on home place of Niel Locke.
5. Memorandum - Duty of water on Larry Putman lands.
6. Memorandum - Present area irrigated and duty of water on lands of Vern Hoffman.
7. Memorandum - Duty of water on E. R. Thomas property.
8. Tabulation - Estimated Diversion Requirement for Mokelumne River Irrigation District under Full Development.
9. Letter from San Joaquin County Engineer's office describing flood damage to roads, bridges, etc.
10. Letter from Northern San Joaquin County Mosquito Abatement District describing flood damage to the Mokelumne River bottom lands during the 1950 and 1955 floods.
11. Statement from Assistant Director of Civil Defense, San Joaquin County, stating cost of equipment and materials utilized in fighting Mokelumne River floods in 1955.
12. Letter dated January 24, 1956 from Corps of Engineers outlining the past and anticipated future studies of flood control on the Mokelumne River.
13. Road map of San Joaquin County delineating roads damaged by the 1955 Mokelumne River flood.
14. Report on Mokelumne River Flood Control for Reclamation District No. 348 - March 17, 1956.

By State Department of Fish and Game

1. Report on Water Right Applications Affecting Fisheries Resources of the Mokelumne River Basin - November, 1955.
2. Graph showing number of anglers in relation to population 1930-1953.
3. Report of Department of Fish and Game Upon Negotiations and Suggestions for Settlement or Disposition of Matters at Issue.

By State Water Resources Board

1. San Jose quadrangle showing general location of the Mokelumne River area.
2. Map showing works proposed in the Mokelumne River area under The California Water Plan.
3. Corrections to Bulletin No. 11, included in Examiners' Exhibit No. 7.
4. Document - Resolution No. 256 Relative to the Applications at Issue.
5. Document - Excerpt from Minutes of Regular Meeting of the State Water Resources Board on October 7, 1955.
6. Map - Possible Plans for Water Development, Mountainous Service Areas Adjacent to Mokelumne River.
7. Tabulation - Distribution of Safe Seasonal Yield Under Conditions of Full Development in Mountainous Areas.
8. Memorandum - Possible Plan of Water Development, Mountainous Service Areas.

Comments in Lieu of Briefs

Pursuant to suggestion by the examiner and concurrence by the parties at the final hearing session (on May 2, 1956), written comments in lieu of briefs were prepared and submitted to the Division, said comments bearing titles as follows:

"Closing Statement by Calaveras County Water District" - received May 18, 1956.

"Memorandum on behalf of North San Joaquin Water Conservation District" - received May 18, 1956.

"Comments of East Bay Municipal Utility District re. Applications 13156 and 15201" - received May 21, 1956.

"Comments and Position of the Department of Fish and Game in Respect to the various Proposals Suggested by the Applicants and Protestants" - received May 18, 1956.



"Memorandum of Woodbridge Irrigation District" -  
received May 18, 1956.

"Memorandum Summary of Points Urged by Mokelumne River  
Irrigation District and Various Mokelumne River Landowners" -  
received May 21, 1956.

## DISCUSSION

### Description of Area

The Mokelumne River watershed embraces an area of 630 square miles above the stream gaging station at Clements. In general, the watershed is characterized by steep rugged terrain in the higher elevations gradually flattening to rolling hills at the lower elevations. The upper reach of Mokelumne River is composed of several branches, the principal ones being the North, South, and Middle Forks, each of which has its snow-fed source in the high elevations of the Sierra-Nevada.

North Fork Mokelumne River, which is considered the continuation of the main stream, rises in Alpine County in Stanislaus National Forest at an altitude of about 8600 feet above sea level. It flows northwestward about 14 miles, thence southwestward about 38 miles to a junction with the South and Middle Forks at an elevation of about 1500 feet. Its principal tributaries are Bear River and Blue Creek.

Middle Fork Mokelumne River rises in Calaveras County in the northeastern part of T6N, R16E, MDB&M, at an altitude of about 7000 feet above sea level. It flows westerly about 26 miles to the North Fork Mokelumne River, with which it unites to form Mokelumne River. Middle Fork Mokelumne River has a total fall of about 5800 feet and its principal tributaries are North Fork of Middle Fork and South Fork Mokelumne River.

South Fork Mokelumne River rises in Calaveras County in the northcentral part of T6N, R16E, MDB&M, at an altitude of about 7200 feet above sea level. It flows southwesterly about

11 miles, thence northwesterly about 13 miles to Middle Fork Mokelumne River. South Fork has a total fall of about 6000 feet and its principal tributary is Licking Fork Mokelumne River.

The lower part of Mokelumne River Basin is a rolling hilly region, and has large areas of cultivated land. Farther upstream the slopes increase, and the River flows in a broad, shallow canyon becoming more precipitous as it continues upstream. Above the forks are many small lakes and valleys surrounded by peaks. Altitudes range from 200 feet in the foothills to 10,000 feet at the crest of the divide.

The upper portions of Mokelumne River watershed are in a zone of moderate to heavy precipitation. Mean seasonal precipitation ranges from about 16 inches in the Valley to about 50 inches or more on the higher elevations, the latter occurring primarily as snow. According to the State Water Resources Board Bulletin No. 11, "San Joaquin County Investigation," 1954, the mean seasonal natural runoff from Mokelumne River Basin is estimated to average approximately 700 acre-feet per square mile.

The middle and higher elevations of the watershed support a heavy growth of timber. All of the upper part of the Basin, comprising about 400 square miles, is included in national forests. The lower reaches are covered with grass, brush, and scattered oaks.

The climate of the basin is characterized by dry summers with high daytime temperatures and warm nights. More than 80 per cent of the seasonal precipitation falls during the five-month period of November to March and the winter temperatures range from moderate at the low elevations to sub-zero temperatures in the higher elevations.

## Present Water Supply Development and Use on Stream

North Fork Mokelumne River has been extensively developed by Pacific Gas and Electric Company for the generation of electrical energy. In the upper reaches of the North Fork, water is impounded in Twin Lakes, Upper and Lower Blue Lakes, Meadow Lake, Bear River, and Salt Springs Reservoirs. The aggregate storage capacity of these reservoirs is about 165,000 acre-feet, of which Salt Springs Reservoir has a capacity of about 140,000 acre-feet. Water is conveyed from Salt Springs Reservoir through the Salt Springs, Tiger Creek, and West Point Power Plants all located on the North Fork, and through Electra Power Plant located on the main stem of Mokelumne River. These power plants have a combined installed capacity of about 185,000 kilowatts, and utilize a combined gross static head of over 3,000 feet. The conveyance of water between the Salt Springs and Tiger Creek Power Plants is by means of a concrete bench flume. Water from Bear River and from several small tributaries of North Fork Mokelumne River is intercepted by the flume enroute. Water is conveyed through tunnels between the Tiger Creek and West Point Power Plants, and thence to the Electra Power Plant. The Amador Canal diverts water for domestic and irrigation uses in Amador County from Tabeaud Reservoir which acts as the forebay to the Electra Power Plant.

Pacific Gas and Electric Company has recently completed the Lower Bear River Reservoir on Bear River for hydroelectric power purposes. This reservoir has a storage capacity of 50,000 acre-feet. Except for the diversions into the Amador Canal, all water utilized by Pacific Gas and Electric Company in the

foregoing system is returned to Mokelumne River. According to State Water Resources Board Bulletin No. 11, diversions through Amador Canal during the 27 year period of 1925-52 have averaged about 8,000 acre-feet per annum.

The only significant development of water of the Mokelumne River for use in Calaveras County is that of the Calaveras Public Utility District. This District was organized in 1934, and furnishes water chiefly to domestic and industrial users in and near the towns of Mokelumne Hill and San Andreas. The water rights claimed by the District consist of old mining rights initiated prior to the Water Commission Act, and subsequently acquired by the District. The Calaveras Public Utility District presently operates under an agreement with East Bay Municipal Utility District, the terms of which specify that a continuous flow of water in the amount of 500 miner's inches or 12.5 cubic feet per second, may be diverted, or a total of about 9,000 acre-feet per season, and that the maximum rate of diversion may be 600 miner's inches, or 15 cubic feet per second.

Diversion by Calaveras Public Utility District is made at a small dam at the head of Mokelumne Hill Ditch located on South Fork Mokelumne River about two miles above its junction with the Middle Fork. Bulletin No. 11 of the State Water Resources Board reports that diversions through Mokelumne Hill Ditch during the 23-year period of 1929-52 have averaged about 6,000 acre-feet per annum.

The water that is available at the headgate of Mokelumne Hill Ditch is the natural flow of South Fork Mokelumne River, augmented by diversions from its Middle Fork. Supply from

Middle Fork Mokelumne River is diverted from that stream about  $1\frac{1}{2}$  miles below Schaad Reservoir, of 1,700 acre-feet storage capacity, constructed by Calaveras Public Utility District in 1940. The diverted water is conveyed through Middle Fork Ditch to Licking Fork, a distance of about two miles. It is then released to Licking Fork, a tributary of South Fork, near Railroad Flat at a point about four miles above the headgate of Mokelumne Hill Ditch.

The town of West Point in Calaveras County obtains its water supply through a small canal which conveys water diverted from Bear and Forest Creeks, which are tributaries of Middle Fork Mokelumne River.

Mokelumne River is the principal source of water supply for the metropolitan area along the east shore of San Francisco Bay served by East Bay Municipal Utility District. Pardee Dam and Reservoir, constructed by the District in 1929, has a storage capacity of 210,000 acre-feet and constitutes the largest existing development for conservation of water on Mokelumne River. In addition to municipal use within the District, water is used for power purposes. Recorded seasonal diversions from Pardee Reservoir to the East San Francisco Bay area according to Bulletin No. 11 have varied from 16,590 acre-feet in season 1928-29 to 127,700 acre-feet in season 1948-49.

The principal diversion of water in San Joaquin County from Mokelumne River is made by Woodbridge Irrigation District at the Woodbridge Dam in Section 34, T4N, R6E, MDB&M under Application 5807, Permit 3890 and old rights of Woodbridge Irrigation District and Application 10240, Permit 6931 of

Woodbridge Water Users Association. The canal system from Woodbridge Dam extends south to the Calaveras River. Lands of Woodbridge Irrigation District total 14,200 acres while those of Woodbridge Water Users Association, capable of service through this system, total about 21,200 acres.

Diversions from Mokelumne River between the confluence of Cosumnes River and State Highway 88 bridge near Clements have been observed for several years by the Division of Water Resources and records of the diversions are contained in the Sacramento-San Joaquin Water Supervision reports. In 1954, these diversions aggregated 153,431 acre-feet.

The measured and estimated seasonal diversions of water for consumptive uses from the Mokelumne River from 1948-49 through 1951-52, by water years, were determined by Division of Water Resources in connection with the San Joaquin County Investigation as follows:

SEASONAL DIVERSIONS OF WATER FOR  
CONSUMPTIVE USES FROM THE MOKELUMNE RIVER

1948-49 Through 1951-52

Diversion by	Quantity in acre-feet			
	1948-49	1949-50	1950-51	1951-52
East Bay Municipal Utility District	128,000	114,000	93,800	102,800
Woodbridge Irrigation District	132,200	147,700	118,000	124,900
Riparian and appropriative divertors below Pardee Reservoir*	14,600	14,600	14,600	14,600
Releases from Pardee Reservoir for ground water storage, and channel losses*	24,300	24,300	24,300	24,300
Pacific Gas and Electric Co., Amador Canal	6,400	7,000	6,200	5,600
Calaveras Public Utility District, Mokelumne Hill Ditch	<u>5,200</u>	<u>5,700</u>	<u>5,800</u>	<u>6,300</u>
TOTALS	309,700	312,300	261,700	277,500

\* Estimates obtained from East Bay Municipal Utility District.



## Water Available

That unappropriated water sometimes exists in Mokelumne River in considerable amounts is indicated by the record of flows passing "Mokelumne River at Woodbridge", a United States Geological Survey gaging station located downstream from the intake of Woodbridge Irrigation District, the lowermost protestant. Flows passing "Mokelumne River at Woodbridge" during the water-year 1952-53, the most recent water-year for which records are published in U.S.G.S. water supply papers totaled 357,100 acre-feet which is 71.3% of the average runoff that has occurred during the 24 water-years following the commencement of diversions through the East Bay Municipal Utility District aqueduct. Monthly mean flows passing "Mokelumne River at Woodbridge", in cubic feet per second, during the 10 most recent years of published record, according to the Water Supply Papers, have been as per Table I attached hereto. These flows averaged 486,000 acre-feet per annum with a maximum of 1,091,000 acre-feet during the year 1937-38 and a minimum of 97,200 acre-feet during the year 1930-31.

The existence of the flows in Table I does not mean that those flows are subject in their entirety to appropriation. They support fish life in the 19-odd mile reach below the point of measurement, they supply a number of users who, according to the 1953 report of Sacramento-San Joaquin Water Supervision diverted in that year an aggregate of 6,016 acre-feet, they contribute toward a supply of water to the delta users to a minor degree, they assist in the repulsion of salinity during the late summer and fall months and they may be required in very substantial part

TABLE 1  
MONTHLY MEAN MOKELUMNE RIVER FLOWS PASSING WOODBRIDGE  
In Cubic Feet Per Second

Water year	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Average	Index*
1943-44	374	505	608	501	550	481	349	227	197	76.8	53.6	146	338	48.8
44-45	165	531	570	533	1932	604	695	1774	1589	176	133	114	725	104.7
45-46	272	462	1671	1545	646	536	901	1435	651	27.6	31.5	123	694	100.3
46-47	213	355	531	535	491	109	149	24.3	13.1	21.4	56.3	138	218	31.5
47-48	120	176	266	183	45.0	85.0	689	1308	2190	99.0	28.3	82.3	438	63.3
48-49	204	322	386	172	158	599	833	473	649	66.0	39.8	114	335	48.4
49-50	214	357	440	197	639	474	1172	1738	1582	99.3	27.5	108	585	84.6
50-51	208	2529	4283	1672	1964	1577	790	1347	388	22.5	23.7	190	1247	180.0
51-52	319	496	916	1596	1330	1545	2862	3990	2958	728	133	237	1424	206.0
52-53	341	528	580	889	587	374	216	501	1389	233	687	216	493	71.3
Average	243	626	1025	782	834	638	866	1282	1161	155	121	147		

\* Water-year average / average over 24 most recent water-years of published record.

if not in full at times to satisfy rights under filings antedating the applications currently at issue when and as such rights are more fully exercised. The existence of the flows recorded, however, means that substantial wastage exists currently, a major portion of which may be considered subject to appropriation except during the late summer and fall months.

In view of the fact that there never has been a complete determination of all the water rights on the Mokelumne River and its tributaries, the exact amount of water required for present rights is not known. For this reason, the precise amount of water available to supply the subject applications is not able to be determined. There is however adequate surplus water available in the opinion of this Division to supply any of the three applicants under their proposed projects. There is not, however, adequate surplus water available for the use proposed by all three applicants to warrant approval of all the applications. Furthermore, each applicant proposes the construction of at least one reservoir at or near the site of the reservoirs proposed by the other applicants which would make it impossible to approve all applications.

Applications Filed by Department of Finance under  
Part 2, Division 6, of the Water Code as Amended

In accordance with the provisions of Part 2, Division 6, of the Water Code, as amended, the State Department of Finance has made and filed certain applications, pursuant to provisions of statutes now codified in Sections 10500-10506 of the Water Code, and the rules and regulations of the Division of Water Resources of the State Department of Public Works, to appropriate

unappropriated waters of the State which are or may be required in the development and completion of the whole or any part of a general or coordinated plan looking toward the development, utilization or conservation of the water resources of the State. Among the applications filed by the Department of Finance are Applications 5647 and 5648 which propose in part appropriation from the Mokelumne River and certain of its tributaries. A summary of these two applications is included in Table 2.

In addition to authorizing the filing of applications by the Department of Finance, Section 10500 of the Water Code states:

... "Applications filed pursuant to this part shall have priority, as of the date of filing, over any application made and filed subsequent thereto. Until October 1, 1959, or such later date as may be prescribed by further legislative enactment, the statutory requirements of said Part 2 of Division 2 relating to diligence shall not apply to applications filed under this part, except as otherwise provided in Section 10504." (emphasis added)

It is the view of this Division that applications filed by the State Department of Finance under Part 2, Division 6 of the Water Code are similar to any other application filed under Part 2, Division 2 except that the limitations regarding diligence are not applicable until the applications are assigned and that they are prior to all subsequent applications filed including those for municipal purposes by a municipality.

Sections 10504 and 10505 of the Water Code state as follows:

"10504. The Department of Finance may release from priority or assign any portion of any appropriation filed by it under this part when the release or assignment is for the purpose of development not in conflict with such general or coordinated plan. The assignee of any such application, whether heretofore or hereafter assigned, is subject to all the requirements of diligence as provided in Part 2 of Division 2

TABLE 2

## APPLICATIONS FILED BY DEPARTMENT OF FINANCE

Appl. No.	Date Filed	Source	Amount of Application:		Point of Diversion:			Purpose	Place of Use
			Direct Diversion	Storage in Feet	MDB&M	Sect.	Twp.		
5647	7-30-27	Dry Creek	50	5,000	7	7N	11E	Irrigation and domestic use	100,000 acres within T4N to 7N inclusive, R9E to 13E, inclusive
		Sutter Creek	50	5,000	22	7N	12E		
		North Fork of Mokelumne River	400	100,000	13	7N	14E		
		Mokelumne River	600		32	6N	12E		
*5648	7-30-27	Forest Creek	25		34	7N	14E	Irrigation and domestic use	310,000 acres within T1S, R10E to 12E, inclusive, and T1N to 6N, inclusive, R9E to 15E, inclusive
		Middle Fork of Mokelumne River		40,000	12	6N	13E		
		Middle Fork of Mokelumne River	140		8	6N	13E		
		South Fork of Mokelumne River		40,000	23	6N	13E		
		South Fork of Mokelumne River	25		2	5N	14E		
		South Fork of Mokelumne River	230		16	6N	13E		
		Mokelumne River	300		18	5N	11E		
		Calaveras River	800	100,000	31	4N	11E		
		Highland Creek		65,000	9	6N	18E		
		North Fork of Stanislaus River		30,000	23	6N	16E		
		Middle Fork of Stanislaus River		60,000	14	4N	17E		
Stanislaus River	600		11	1N	13E				
North Fork of Stanislaus River	975		2	4N	15E				

\* Partially assigned to the Oakdale and South San Joaquin Irrigation Districts insofar as Application 5648 covers diversion from the Middle Fork of Stanislaus River.

of this code. 'Assignee' as used herein includes, but is not limited to, state agencies, commissions and departments, and the United States of America or any of its departments or agencies.  
(Amended by Stats. 1951, Ch. 445.)

"10505. No priority under this part shall be released nor assignment made of any appropriation that will, in the judgment of the Department of Finance, deprive the county in which the appropriated water originates of any such water necessary for the development of the county."

Pending Requests for Assignment or Release of Priority of Applications 5647 and 5648. On May 19, 1952, East Bay Municipal Utility District requested an assignment of Applications 5647 and 5648 to the extent of 194 cubic feet per second. It was further requested that, should it be determined such an assignment could not be made, Applications 5647 and 5648 be "released" to the District to the amount of 194 cubic feet per second; or in such combination of assignment and release as circumstances may warrant,

On June 8, 1953, Calaveras County Water District, submitted a copy of a resolution of the District to the Director of Finance requesting an assignment of all rights acquired by the Department of Finance under Application 5648 in and to the waters of Mokelumne River.

On March 31, 1955, North San Joaquin Water Conservation District requested an assignment or release from priority of Applications 5647 and 5648.

Applications 5647 and 5648 initiated appropriations aggregating some 1,720 cubic feet per second plus 180,000 acre-feet per annum from Mokelumne River drainage, for irrigation and domestic use within Townships 1 to 7 North, Ranges 9 to 15 East, MDB&M. The purpose in filing Applications 5647 and 5648 by an

agency of the State, by legislative direction, plainly was to ensure the availability of an ample water supply for certain designated areas. Those designated areas include the lands Calaveras County Water District seeks to serve but they include none of the lands within either North San Joaquin Water Conservation District or East Bay Municipal Utility District. An assignment or release of Applications 5647 or 5648 or either of them for the benefit of lands outside of the places of use described therein would defeat the purpose for which those applications were filed and is therefore unwarranted. Since, however, development under Applications 5647 and/or 5648 may be long deferred, the existence of these applications need not bar approval of applications to appropriate such waters of Mokelumne River and tributaries as are temporarily in excess of requirements under those or other prior rights.

It appears from Applications 11792, 12953 and 13265 and from the hearing testimony in connection therewith, that immediate or early large scale development is not contemplated and that Calaveras County Water District's main concern in filing those applications was to initiate appropriations that would ensure the availability of water at such indefinite time in the future as it might be required. Furthermore, according to the testimony of Calaveras District's own engineer during the latter sessions of the hearing it is doubtful whether that District will require the amounts of water from the Mokelumne River watershed as indicated by its Applications 11792, 12953 and 13265. Much depends on the ability of that District to secure water from other sources. At any rate the District is in no position to

receive assignment of any or all of the Department of Finance applications covering the Mokelumne River at this time. At such time as it is in a position to actively proceed with construction assignment of a portion of Applications 5647 and 5648 will be in order.

Without regard to the equities involved, we believe the law to be unmistakably clear that any disposition of these applications is prohibited for a project which is in conflict with the general purposes of the state filings. Such is the case with both the projects of East Bay Municipal Utility District and North San Joaquin Water Conservation District.

Recent studies by the staff of the State Water Resources Board indicate The California Water Plan may have a substantially different plan of development of the waters of the Mokelumne River than that proposed under Department of Finance Applications 5647 and 5648. However, until the Board and Legislature formally approve such plans the Division cannot accord them controlling consideration.

#### Flood Control Considerations

During the latter stages of the water right hearing representations were made by the lower Mokelumne interests for adequate flood control space in any reservoir to be constructed on the Mokelumne River. Repeated reference was made to the disastrous effect of the floods of December 1950 and December 1955 in the areas below Pardee Dam. Information was supplied to the Division by these lower Mokelumne interests urging a 100,000 acre-foot reservation on the Mokelumne River stream system for flood control purposes.



The Division is in complete accord that flood control on the Mokelumne River is highly desirable. It must be pointed out, however, that reservation for flood control purposes in any reservoir reduces the resultant yield for other purposes and accordingly those desiring such protection must be expected to contribute to the cost of a multi-purpose project which is operated for flood control purposes. In this regard the local interests desiring such protection must arrange for financial assistance probably in the nature of Federal contribution therefor. The Division will be pleased to support efforts on the part of local downstream agencies to obtain flood control contributions from the Federal Government or other sources. The United States has contributed generously to multi-purpose projects in California where flood control is required, and it is reasonable to assume it will continue to do so where conditions warrant.

The position of this Division with respect to flood control is clearly stated in Water Right Decision 100, which was rendered on April 17, 1926, on Application 4228 and others, as follows:

"The jurisdiction of the Division is limited by law to matters pertinent to the beneficial use of water, flood control, reclamation work and other related matters not being within the scope of the Water Commission Act. It is, therefore, deemed inappropriate and without jurisdiction of the Division to impose conditions relative to flood control".

The Division did, however, insert the following permit term in Permit 2459 issued in connection with East Bay Municipal Utility District Application 4228:

"Permittee agrees to negotiate with the proper State agencies regarding modification of the plan of operation of Lancha Plana project to the end that the

project may conform as near as practicable to the coordinated general plan of flood control and other water development as may be formulated by the State."

Although the State of California has not as yet adopted a coordinated plan for flood control, there has in the past years been close cooperation between the East Bay Municipal Utility District and this Division with respect to operation of Pardee reservoir (Lancha Plana) in anticipation of the spring runoff. The East Bay District has cooperated financially for many years with the program of this Division with respect to snow surveys and to the best of our knowledge operates Pardee in anticipation of spring runoff. Snow surveys are made by this Division on about the first of each month from February through May of each year. On February 10, March 10, April 10, and on May 10, estimates of runoff from the various watersheds, including Mokelumne River, are published in a bulletin of this Division in order that those parties having reservoirs on the affected streams may operate their reservoirs with maximum efficiency.

The floods of 1950 and 1955 having occurred principally during the early winter months and being attributable principally to rainfall rather than snow melt, could not be anticipated in advance; however, several floods of this type, i.e. December 1937, were completely controlled by Mokelumne River reservoirs. In view of the limited jurisdiction of this Division as indicated, it is considered that we cannot properly insist on operation of a water conservation project for flood control purposes where there have been no flood control contributions for the project. It should be pointed out, however, that any conservation project will afford a certain degree of flood control protection.

## Other Sources of Water

Studies of the U. S. Bureau of Reclamation, the Division of Water Resources and the State Water Resources Board are sufficiently advanced to indicate with a degree of certainty that from the physical and engineering standpoints, there are no obstacles to prevent water from other sources being made available within the next few years to areas within the Mokelumne River Basin or to the East Bay Municipal Utility District.

### Folsom South Canal

A report on the feasibility of water supply development entitled "Folsom South Unit" dated April 1956, recently released by the U. S. Bureau of Reclamation outlines general plans for serving about 200,000 acres of land in Sacramento County and for future extensions to include about 300,000 acres in San Joaquin County from a main canal which would carry water from the American River at Folsom Dam southerly to a point 63 miles southeast of Stockton. Although activity in obtaining contracts for the repayment of the works to provide water to San Joaquin County has not progressed to the extent that it has in Sacramento County, the basic studies have been made and detailed studies are in progress. These studies indicate that the location of the Main Canal of the Folsom South Unit would be located such that practically all of the North San Joaquin Water Conservation District could be served from this source at less cost than by developing supplies from the Mokelumne River.

Although no specific studies have been released proposing that water from this source be transferred to the

East Bay Region, from an engineering standpoint this could be accomplished. It would, however, involve additional pumping plants and possibly additional works for water purification to accomplish the water service proposed under the Mokelumne River Project of the East Bay Municipal Utility District.

Calaveras County Water District could not be served from Folsom South Canal without costly pumping plants and distribution systems and this canal is therefore not considered a feasible source of supply for this District.

### Feather River Project

Large quantities of water developed by the Feather River Project will be transferred by the natural stream channels of the Feather and Sacramento Rivers to the Sacramento-San Joaquin Delta. The Delta is a common point of diversion for several distribution canals for both the Feather River Project and the Central Valley Project.

With the advent of Feather River Project water into the Delta, demands for water in Alameda, San Benito and Santa Clara Counties and diversions to areas adjacent to the Delta can be satisfied in addition to present and future commitments for water in other areas of the State for many years hence.

Water from this source could be made available to the North San Joaquin Water Conservation District by pumping from the Delta channels into the canals of Woodbridge Irrigation District.

In the preliminary studies for the construction of a conduit to serve portions of Alameda County, it was not anticipated to serve areas within the present boundaries of the

East Bay Municipal Utility District. However, there would be a slight overlapping of the future proposed annexations of the East Bay Municipal Utility District with the areas proposed to be served with Feather River Project water. Although studies have not been made, it appears engineeringly feasible to serve the southern portion of the East Bay Municipal Utility District with Feather River water from the Alameda, San Benito and Santa Clara Counties Conduit.

Because of the high elevation of lands within the Calaveras County Water District, it would not be economically feasible to serve any Feather River Project water to that area.

### The California Water Plan

Bulletin No. 3 of the State Water Resources Board entitled "Report on The California Water Plan" has not been approved by either the above-mentioned board or the State Legislature but it has been published in preliminary form under date of May 1956.

The Plan is designed to include or supplement, rather than supersede, existing water resource development works. As such the Feather River Project and the Folsom South Canal are included as developments proposed in The California Water Plan.

Bulletin No. 3 describes two principal categories of water resource developments; (1) local works to meet present and future needs within the respective areas, and (2) export-import facilities to transport surplus waters from the north areas to areas of deficiency elsewhere in the State. This second category of works is collectively termed "The California Aqueduct System".

Under The California Water Plan, Calaveras County Water District would obtain supplemental water from North Fork of Stanislaus River and from North Fork Calaveras River to supplement supplies from the Mokelumne River. All of these works would be classified as local works to meet present and future needs within the area.

North San Joaquin Water Conservation District adopted the Mehrten or Camanche Project as a source of supply. This plan, together with plans already discussed for obtaining water from Folsom South Canal or from the Sacramento-San Joaquin Delta are possible sources of supply considered for serving the area in the vicinity of Lodi under The California Water Plan.

Specific plans were not outlined in Bulletin No. 3 for supplementing the present supply of Mokelumne River water for use in the East Bay Municipal Utility District service area. There are three points along the present East Bay Municipal Utility District's Mokelumne River Aqueduct line at which the supply could be supplemented by water other than from Mokelumne River. These are (1) Sacramento-San Joaquin Delta and (2) at a crossing of the California Aqueduct line in the vicinity of Pittsburg, and (3) Folsom south canal. The Delta Diversion has briefly been mentioned previously in connection with the Feather River Project. The California Water Plan also envisions a conduit extending along the west side of the Sacramento Valley to the vicinity of Antioch which would supply supplemental water to areas in Contra Costa, Solano, Marin and lower Napa Counties. This conduit crosses the present Mokelumne River Aqueduct of

East Bay Municipal Utility District and is therefore a possible source of water to the District.

Brief mention is made in connection with the Eel River Division of the California Aqueduct of a tunnel that would discharge water for export to the Russian River Basin and to lands on the north shore of San Francisco Bay. The extent of availability of this water to the East Bay Municipal Utility District service areas was not discussed.

### Water Requirements

During the hearing proceedings the applicants presented evidence to justify the amount of water sought under their respective applications. A summary of this evidence is as follows:

#### Calaveras County Water District

The principal use of water within the Calaveras County Water District is for irrigation with incidental uses for domestic, municipal, industrial, mining and recreational uses.

According to Mr. Frank Davis, Engineer for Calaveras County Water District, approximately 42,300 acre-feet per annum is the estimated ultimate irrigation water requirement for the West Point/<sup>and</sup>Mokelumne service areas. These areas would be served from the Mokelumne River. It is anticipated that the remaining portion of the District would be served from the Calaveras and Stanislaus Rivers. The requirement for ultimate municipal purposes within the West Point and Mokelumne service areas would be in the order of magnitude of 1,500 acre-feet annually.

The only sizable diversions from the Mokelumne River into Calaveras County are the present diversions through the Mokelumne Hill Ditch which aggregate about 6,500 acre-feet per season.

North San Joaquin Water Conservation District

According to North San Joaquin Water Conservation District Exhibit No. 6, the present and estimated ultimate consumptive use requirements of the District are as follows:

Land Use	Present		Ultimate	
	Acres	: Total consumptive use of applied water, acre-feet	Acres	: Total consumptive use of applied water, acre-feet
Irrigated areas	41,736	76,177	44,542	88,459
Urban areas	<u>2,111</u>	<u>9,017</u>	<u>5,000</u>	<u>26,000</u>
TOTAL	43,847	85,194	49,542	114,459

Of the present total of 41,736 acres of irrigated land, 39,286 acres were irrigated by pumping from wells and the remaining 2,450 acres were irrigated by diversions from the Mokelumne River through Woodbridge Canal or by individual diverters.

The estimated present safe ground water yield occurring within the District is 49,862 acre-feet and according to the estimates of the North San Joaquin Water Conservation District the indicated present deficiency of safe ground water yield is 31,047 acre-feet per season under mean conditions.



## East Bay Municipal Utility District

The forecast of water consumption within the ultimate service area of the East Bay Municipal Utilities District is estimated to be 349 million gallons per day or 391,000 acre-feet per annum.

The potential safe yield of local sources is estimated at 24 million gallons per day, including 9 million gallons per day from ground water and 15 million gallons per day from surface supplies. The remaining 325 million gallons per day is the amount applied for, to be imported from the Mokelumne River.

As explained in East Bay Municipal Utility District Exhibit No. 78, answer to question 20, under full development, it is anticipated that the draft from the Mokelumne River will be relatively constant, as the consumptive demand variations will be largely taken up by the terminal storage reservoirs.

The use within the District in 1955 was in the order of 125 million gallons per day and is expected to increase to approximately 194 million gallons per day by 1965.

### Reservations for Fish Life

Considerable testimony was presented at the hearings relative to the requirements for fish life in the Mokelumne River and tributaries. In addition, numerous parties submitted statements and testified in furtherance of the position advanced by the Department of Fish and Game. These parties represented not only various sportsmen groups but also the salmon industries. Under date of November 1955, the Department of Fish and Game

prepared a report on water right applications affecting fishery resources of Mokelumne River Basin, which report was submitted during the course of the hearing as Fish and Game Exhibit No. 1. This is the first time the Department of Fish and Game has prepared such a thorough analysis and it deserves commendation for its comprehensive study of the problem. The report emphasizes that the analyses are based on incomplete information and it requests a deferment of action on the subject water right applications until a comprehensive plan can be developed by the Department of Fish and Game.

In general the problem of releasing water for fish life in the proposed upper Mokelumne reservoirs does not present a serious problem. These releases have more or less been agreed upon by the applicants and the Department of Fish and Game and this decision will include conditions in connection therewith.

The problem of insuring adequate releases past any enlarged Pardee Dam or any reservoir downstream therefrom is indeed a complex one. In addition, the construction of Camanche or Mehrten reservoirs would inundate a major portion of the existing salmon spawning grounds. The Department of Fish and Game has proposed releases of water for maintenance of salmon and steelhead runs in the lower Mokelumne River as follows:

I. Without Camanche or Mehrten Reservoirs.

SCHEDULE A - Based on run of 30,000 adult salmon

1. From Pardee to Woodbridge-

October 15 to October 31	- 225 cfs	( 7,385 a.f.)
November 1 to December 31	- 325 cfs	(39,313 a.f.)
January 1 to May 30	- 150 cfs	(44,617 a.f.)
June 1 to October 14	- 25 cfs	( 6,742 a.f.)
		<hr/>
		98,258 acre-feet

2. Woodbridge to Mouth

October 15 to October 31	- 150 cfs	( 5,057 a.f.)
November 1 to December 31	- 200 cfs	(24,192 a.f.)
January 1 to May 30	- 100 cfs	(29,745 a.f.)
June 1 to October 14	- 25 cfs	( 6,742 a.f.)
	Total	<u>65,737 acre-feet</u>

SCHEDULE B - Based on run of 15,000 adult salmon (Minimum flows required for maintenance of runs.)

1. Pardee to Woodbridge-

October 15 to October 31	- 100 cfs	( 3,371 a.f.)
November 1 to December 31	- 200 cfs	(24,193 a.f.)
January 1 to May 30	- 100 cfs	(29,745 a.f.)
June 1 to October 14	- 25 cfs	( 6,742 a.f.)
	Total	<u>64,051 acre-feet</u>

2. Woodbridge to Mouth-

October 15 to October 31	- 100 cfs	( 3,371 a.f.)
November 1 to December 31	- 150 cfs	(18,145 a.f.)
January 1 to May 30	- 70 cfs	(20,822 a.f.)
June 1 to October 14	- 25 cfs	( 6,742 a.f.)
	Total	<u>49,080 acre-feet</u>

II. With Camanche or Mehrten Reservoirs

SCHEDULE C -

1. Fifty cfs water supply for a fish hatchery based on a run of 30,000 adult spawners. (At 40% females with average egg production of 6,000 per female = 72,000,000 eggs. Estimated construction cost \$1,000,000)

2. Flow requirements for migrating fish (river flow releases).

a. Camanche or Mehrten to Woodbridge-

October 15 to December 31	- 150 cfs	( 5,057 a.f.)
January 1 to May 30	- 75 to 100 cfs	(29,745 a.f. max.)
June 1 to October 14	- 25 cfs	( 6,742 a.f.)
		<u>41,544 acre-feet</u>

b. Woodbridge to Mouth-

October 15 to December 31	- 150 cfs	( 5,057 a.f.)
January 1 to May 30	- 75 to 100 cfs	(29,745 a.f. max.)
June 1 to October 14	- 25 cfs	( 6,742 a.f.)
		<u>41,544 acre-feet</u>

SCHEDULE D-

1. Thirty cfs water supply for a fish hatchery based on a run of 15,000 adult spawners. (At 40% females with average egg production of 6,000 per female - 36,000,000 egg capacity. Estimated construction cost \$850,000.00)
2. Flow requirements for migrating fish (river flow releases).

a. Camanche or Mehrten to Woodbridge-

October 15 to December 31	- 150 cfs	( 5,057 a.f.)
January 1 to May 30	- 75 to	
	100 cfs*	(29,745 a.f.)
June 1 to October 14	- 25 cfs	( 6,742 a.f.)
	Total	41,544 acre-feet

a. Woodbridge to Mouth-

October 15 to December 31	- 150 cfs	( 5,057 a.f.)
January 1 to May 30	- 75 to	
	100 cfs*	(29,745 a.f.)
June 1 to October 14	- 25 cfs	( 6,742 a.f.)
	Total	41,544 acre-feet

\* - Adjustable for periods of downstream migration of fingerlings released from the hatchery.

From the foregoing tabulation it is noted that the amounts of water to be released aggregate from 41,544 to 98,258 acre-feet per annum in the reach of the Mokelumne River from Pardee to Woodbridge and from 41,544 to 65,737 acre-feet per annum in the reach between Woodbridge to the mouth of Mokelumne River.

There is no question that the releases proposed by the Department of Fish and Game for the maintenance of stream flow would be highly desirable if it were possible to maintain such flows. The amount of releases proposed by the Department of Fish and Game appear highly infeasible for several reasons. First and foremost, these quantities are not now available during a considerable portion of most years, taking into account

existing water rights on the stream. Woodbridge diversion dam has historically intercepted practically all flow in the Mokelumne River during the late summer and fall months for use within the Woodbridge area. As pointed out by East Bay, the quantities of water requested for fish life would be adequate to supply a population of approximately 300,000 people. In addition, the storage required to firm up the approximately 40,000 to 100,000 acre-feet per annum would be many times these amounts. While this Division has long recognized the maintenance of fish life as a beneficial use, we do not believe that this use should take precedence over such higher uses as municipal, domestic, and irrigation purposes. We believe the water code is crystal clear in this regard. In addition, the Attorney General in an opinion involving releases past Friant Dam has indicated such to be the case.

It is the opinion of this Division that the time has come for a more realistic approach to the problem of insuring adequate minimum flows for fish life. As the water supplies of the State are developed more fully it becomes apparent that adequate water supplies for fish life must be obtained in some other manner than attempting to require applicants to by-pass certain flows which may be available only for a portion of the time. Reasonably firm water supplies for fish life can be obtained in one of two ways. First, reservoirs can be constructed on streams for the sole purpose of maintaining minimum flows for fish life. Secondly, multi-purpose projects should be constructed with a financial contribution specifically for maintaining minimum flows. This matter should receive immediate

attention of all interests concerned with the problem.

This Division questions the suggested solutions of both the Department of Fish and Game and the East Bay Municipal Utility District with respect to the problem of maintaining flows on the lower Mokelumne River. It is our belief that the Department of Fish and Game is attempting to secure optimum conditions on the Mokelumne River stream system rather than a consideration of what waters are subject to appropriation and which of these waters should be released for the preservation of fish life. The East Bay Municipal Utility District, on the other hand, has not offered any satisfactory counter proposal to that offered by the Department of Fish and Game. Any permits issued to the East Bay District or the North San Joaquin Water Conservation District will contain conditions to insure cooperation between these entities and the Department of Fish and Game in connection with downstream releases for fish life. Irrespective of any permit terms, the East Bay District should operate its entire project for the enhancement of the fishing habitat along the Mokelumne River insofar as practical so long as such operation does not interfere with use of water for municipal purposes.

A corollary problem is the matter of allowing public access to mountain reservoirs. This is not a matter over which the Division has any jurisdiction although it is our belief that wherever possible public access should be accorded. In this way where public districts remove lands from the local tax roll the

local interests have an opportunity to regain certain of their financial losses due to recreational interests using the reservoir facilities. It is our understanding that the East Bay District is currently studying the matter with a view toward granting certain public access to its existing and proposed mountain reservoirs.

Municipal Priorities Under Sections 1460 and 1461 of The Water Code.

Sections 1460-1461 of the Water Code provide:

1460. The application for a permit by a municipality for the use of water for the municipality or the inhabitants thereof for domestic purposes shall be considered first in right, irrespective of whether it is first in time.

1461. The application for, or the granting of, a permit to any municipality to appropriate water does not authorize the appropriation of any water for other than municipal purposes.

East Bay contends its Application 13156 is entitled to the priority in right accorded by the foregoing provisions. North San Joaquin asserts a similar preference insofar as its Application 12842 contemplates "municipal use" within the City of Lodi. The application specifies use for "irrigation and incidental, domestic, municipal, recreational and industrial purposes" within the district.

Similarly, Application 11792 of Calaveras County Water District includes use for "irrigation, domestic, industrial, mining and recreational purposes" within the district. Its Application 12953 is for irrigation and domestic purposes and

Application 13265 is for municipal purposes within towns and municipalities within the district.

3 Sections 1460-1461 are based upon Section 20 of the Water Commission Act of 1913 (Stats. 1913, Chapter 586) and the provisions are practically identical with those of the original enactment. In order to invoke the benefit of these sections it is clear that the following is prerequisite:

1. The applicant must be a "municipality".
2. The proposed use of water must be "for the municipality or the inhabitants thereof for domestic purposes."
3. The proposed use must be for "municipal purposes."
  - A. The applicant must be a municipality.

An examination of judicial decisions in California readily discloses that the term "municipality" has no precise and invariable meaning. It has been held that both a municipal water district and a public utility district are municipal corporations within the meaning of Article 11, Section 19, of the California Constitution, authorizing any municipal corporation to establish and operate public works for specified purposes (Henshaw v. Foster, (1917), 176 Cal, 507, 169 Pac. 82; In re Orosi Public Utility District (1925), 196 Cal. 43, 235 Pac. 1004). The Orosi case held that districts formed for the purpose of draining, irrigating, reclaiming, or otherwise directly benefitting the lands affected thereby are not municipal corporations in the contemplation of the Constitution, and distinguished such districts from quasi-municipal corporations such as districts



formed under the Municipal Water District Act of 1911, the County Water District Act of 1913 and the Public Utility District Act of 1921, on the ground that the former are State agencies created for some local improvement and are authorized to exact assessments or taxes "to be spread on the property within the district in proportion to the peculiar advantages accruing to each parcel from the improvement," whereas the latter "pay their way, first, out of charges from services supplied, and second, out of taxation by general assessment in the same manner as municipal corporations proper." The Orosi case was approved in Morrison v. Smith Bros. (1930), 211 Cal. 36, 293 Pac. 53, holding that so far as tort liability is concerned such districts as municipal utility districts are to be governed by rules applicable to municipal corporations.

On the other hand, recent decisions of the Supreme Court have established beyond doubt that irrigation districts and agencies organized under the California Water District Act of 1913 are municipal corporations within the meaning of Section 1 of Article 13 of the California Constitution which declares that property belonging to a county, city and county, or municipal corporation shall be exempt from taxation except such property located outside the county, city and county, or municipal corporation owning the same as was subject to taxation at the time of acquisition of the same by said county, city and county, or municipal corporation (Rock Creek Water District v. Calaveras County (1946), 29 Cal. 2d 7, 172 P 2d 863; Mariposa County v.

Merced Irrigation District (1948), 32 Cal. 2d 467, 196 P 2d 920; Turlock Irrigation District v. Tuolumne County (1954), 124 Cal. App. 2d 611, 269 P 2d 129; Waterford Irrigation District v. Stanislaus County (1951), 102 Cal. App. 2d 839, 228 P 2d 341; Imperial Irrigation District v. Riverside County, 96 Cal. App. 2d 402, 215 P 2d 518; cf. Metropolitan Water District v. Riverside County (1943), 21 Cal. 2d 640, 134 P 2d 249; Clements v. T. R. Bechtel Co. (1954), 43 Cal. 2d 227, 273 P 2d 5).

The determinative criterion is stated in the Rock Creek Water District case, supra as follows:

"It is fundamental that the <sup>o</sup>bjective sought to be achieved by the statute as well as the evil to be prevented is of prime consideration in its interpretation."

The court declares that the provisions of Section 1 of Article 13 of the Constitution were <sup>d</sup>esigned to prevent burdensome loss of revenue to counties by reason of the previous exemption of taxation of such property. The opinion states:

"The evil to be remedied is as clearly present whether the agency be an irrigation district or water district as is here involved or a city -- a municipal corporation in the strict sense.

\* \* \*

Whether irrigation or water districts such as we have here are municipal corporations in connection with tort liability and other questions is not important. Perceiving the subject of clause 2 the use of the term in question must embrace a water district."

The Rock Creek case was approved in Maripose County v. Merced Irrigation District (1938), 32 Cal. 2d 467, 196 P.2d 920.

In Yolo v. Modesto Irrigation District (1932), 216 Cal. 274, 13 P. 2d 908, it was held that when an irrigation district engages in the business of manufacturing, distributing and selling electric power, it steps beyond the character of purely a state agency and assumes the role of a quasi-municipal corporation liable for the torts of its agents when acting in proprietary capacity. (cf. Muses v. Housing Authority (1948) 83 Cal. App. 2d 489, 189 P. 2d 305.)

Thus we see that whether a particular type of organization is to be considered a municipality within the meaning of a statute is dependent upon not only the powers and functions of the agency but also upon the object of the statute and purposes sought to be achieved. The legislative history and purpose of Section 20 of the Water Commission Act (now Water Code Sections 1460-1461) are set forth in Decision No. 100 in the matter of Application 4228 et al. It is there stated as follows:

"Proceeding to an examination of the act as to what was the probable intent of the legislature or reason behind these provisions of Section 20 as to a preferred priority and otherwise as to special considerations applying to applications by municipalities for municipal purposes it seems that a meaning broad enough to include the furnishing of a public necessity such as water by quasi cities was intended, that it was not a favoritism for a city over like organizations of people that was intended but a favoritism based upon the urgency and necessity of people for water for municipal purposes. The more reasonable intent appears to be one consistent with the intent which was behind the amendment to Section 19 of Article XI of the constitution in 1911 and stated in the reasons therefor which were sent out by the secretary of

state as 'to encourage the furnishing of these public necessities by municipal corporations themselves.' The design appears to be to favor municipal service to users thru the medium of public corporations of a municipal character.

"\* \* \*

"Historically, there was at the time of the passage of this act a widespread public sentiment favoring and encouraging the development and supply of public necessities thru the medium of public or municipal ownership. The supreme court recognized the existence of this sentiment and referred to it in In re Orosi Public Utility District 69 Cal. Dec. 447, at page 455". (Pages 31 and 33.)

This statement indicates that the objective of the statute may be as well achieved through the medium of an appropriation of water by one type of public agency as by another, providing the major use in each instance is for municipal or domestic purposes by the agency or its inhabitants.

B. An Application of a Municipality for Municipal or Domestic Use is Entitled to Priority in Right. It was concluded in Decision No. 100, previously referred to, pages 32 through 38, that the provisions of Section 20 of the Water Commission Act, which are now in Water Code Section 1460, should be construed to confer priority in right upon applications by municipalities for use of water within said municipalities for all beneficial uses customarily associated with urban areas including, but not limited to, use of water for the inhabitants thereof for domestic purposes. This construction appears reasonable and proper.

A narrow interpretation of the statute would restrict the grant of priority in right to applications by municipalities

for use of water for domestic purposes. In addition to the reasons given in said decision for the conclusion reached therein, is the circumstance that such narrow construction renders a portion of the statute unintelligible and meaningless. Except possibly to a minute degree a municipality cannot itself use water for strictly "domestic" purposes, i.e., for those natural uses "arising out of the necessities of life . . . , such as household use, drinking, watering domestic animals" etc. (Wiel, Water Rights in the Western States (1911), 3d Ed. p. 795; cf. Cowell v. Armstrong (1930) 210 Cal. 218, 290 P. 1036). Therefore, if it were intended to give priority in right only for domestic use it would have been sufficient to provide for such priority of an application by a municipality for use of water by the inhabitants thereof for domestic purposes. The inclusion of applications by municipalities for use of water for the municipality in the preferred class definitely indicates that use for general municipal purposes was contemplated. As is pointed out in decision No. 100, this conclusion is confirmed by the proviso in Section 20 (now contained in Water Code Section 1461) that the granting of a permit to a municipality to appropriate water does not authorize the appropriation for other than municipal purposes.

Municipal use includes all of those purposes for which water is customarily used by a municipality and supplied to its inhabitants - consumption by humans and domestic animals, sanitation, watering gardens, lawns and family fruit trees,

maintaining parks and recreational facilities, cleaning streets, settling dust, flushing sewers, fire fighting, industrial and commercial use, etc. (See 23 Cal. Adm. Code, Sec. 664.) Since the foregoing list includes many purposes which do not fall within the traditional meaning of "domestic use", it is believed that restriction of the municipal priority to applications for domestic use would ignore the intent and purpose of the statute and that the Code section may be construed in accordance with that which is believed to be its true purpose without doing violence to the language used. Nor is there any apparent basis for refusing to recognize industrial uses as a proper municipal use within the purview of Section 1460. The arguments of protestants to application 13156 on this point are not persuasive.

An interpretation is to be avoided which would lead to absurd results and which would render the statute meaningless (Clements v. T. R. Bechtel Co., 43 Cal. 2d 227, 273 P 2d 5). A municipality necessarily appropriates water and uses it for all beneficial purposes to which water is customarily put within an urban area. To require a municipality to initiate separate appropriations of water to be used for industrial or strictly domestic purposes, would require segregation of such water from the balance of the municipal supply and supervision and control of its subsequent use to guard against its application to any other purpose, either by the municipality or by its inhabitants. Such practice would be to impose an impracticable and absurd

condition upon the acquisition of a priority by reason of the nature of use - a burden which it would be unreasonable to assume was contemplated by the Legislature.

Applying the foregoing discussion to the applications under consideration, it is apparent that Application 13156 of East Bay is entitled to the benefit of Water Code Section 1460 as against the pending applications of Calaveras County Water District and North San Joaquin Water Conservation District.

Application 13265 of Calaveras County Water District is later in time and therefore subsequent in right to Application 13156, but is otherwise also entitled to municipal preference as against the other applications. Those other applications, although they include municipal and/or domestic use, also seek to initiate rights to appropriate water for irrigation and other non-municipal uses and therefore do not qualify for the priority in right which, under the terms of Section 1460, applies only to applications by municipalities for municipal and domestic use of water.

#### Temporary Use of Surplus Waters

It is clear from the testimony presented by the East Bay Municipal Utility District that it will be several years before the water which it seeks under Application 13156 will be put to full beneficial use. Further, it has indicated that the Camanche portion of its project will not be constructed until

1978. Such being the case it is the opinion of this Division that, if possible, permits for temporary appropriation of surplus should be granted to those who may proceed with construction and apply the water to beneficial use in the interim.

In connection with the foregoing, Sections 1462 and 1463 of the Water Code contemplate the temporary use of surplus waters of a municipality and state as follows:

"1462. Where permission to appropriate is granted to any municipality for any quantity of water in excess of the existing municipal needs therefor, the department may, pending the application to beneficial use of the entire appropriation permitted, issue permits for the temporary appropriation of the excess of the permitted appropriation over and above the quantity being applied to beneficial use from time to time by the municipality."

"1463. When the municipality desires to use the additional water granted in its application it may do so upon making just compensation for the facilities for taking, conveying, and storing the additional water rendered valueless for said purpose to the person who constructed the facilities. The compensation, if not agreed upon, may be determined in the manner provided by law for determining the value of property taken by eminent domain proceedings."

The North San Joaquin Water Conservation District proposes under Application 12842, construction of a dam at the Mehrten site which is located a short distance below the Camanche site of East Bay Municipal Utility District. It is logical to assume that these two districts could cooperate in the construction of a dam at one of these locations which could be used by the North San Joaquin District on an interim basis and still



be available to the East Bay District at some indefinite date in the future when it was required for municipal purposes. The evidence presented at the hearing indicates that for its ultimate requirements North San Joaquin District can obtain a cheaper and more dependable supply from other sources.

In addition to there being temporary surplus available from the East Bay District's Camanche reservoir it is anticipated that there may be temporary surpluses from the Railroad Flat, Middle Bar, or increased Pardee Reservoirs which might be available for downstream interim use. These waters will be available from East Bay Municipal Utility District under Section 1464 of the Water Code or under some agreement between that district and those parties desiring to make such use.

Although North San Joaquin Water Conservation District may temporarily use surplus waters of East Bay over the interim period and ultimately obtain water for its requirements from other sources, such is not the case for certain uses proposed by the Calaveras County Water District. The Calaveras District must rely permanently on certain waters from the Mokelumne River and as has been previously indicated we are of the opinion they are assured these waters under the State Department of Finance applications. We recognize one of the State filings proposes development at the Railroad Flat site also contemplated by the East Bay District. In view thereof we believe that in East Bay's development of the site consideration must be given to the Calaveras requirements. Such would be accomplished, however, by

a cooperative venture rather than under Sections 1462 and 1463 of the Water Code.

It is our further opinion that other foothill areas adjacent to the Mokelumne River watershed have the same protection as Calaveras County Water District in that the State Department of Finance applications contemplate service to these areas. Included in this category are certain lands within Amador County.

It may well be that some of these areas will be able to receive water on an interim basis from the East Bay Municipal Utility District pending full use by that District. Such waters should be made available by East Bay even to the detriment of use of water by it for power purposes.

#### Miscellaneous Considerations

Reservoir Operations. Throughout the hearing considerable testimony was presented by the Woodbridge Irrigation District and Woodbridge Water Users Association supporting their contention that the East Bay District has been operating the existing Pardee Reservoir for power purposes to the detriment of downstream irrigation interests. They also expressed concern with respect to a similar operation of any new reservoir which the East Bay District might construct.

The fears of the Woodbridge interests in this regard appear to be well founded. Examination of the stream flow records at Lancha Plana indicate that the East Bay District has

reduced its week-end and holiday releases from Pardee to a minimum so as to conform to its power demands. This extreme fluctuation has been due no doubt to the terms of the contract between East Bay Municipal Utility District and the Pacific Gas and Electric Company which do not require large water releases for power demands during the weekend and holiday periods.

In recent years there have been many months when the minimum daily flows passed Lancha Plana have been only slightly in excess of one-third of the monthly mean flows passed this station. During the 1955 irrigation seasons negotiations between the East Bay District and the Woodbridge Irrigation interests have resulted in a more uniform release of water to meet downstream obligations. It is the opinion of this Division that such uniform releases should be continued irrespective of possible interference with uses for power purposes.

## SUMMARY AND CONCLUSIONS

1. The principal users of Mokelumne River water at present for consumptive purposes are the East Bay Municipal Utility District and Woodbridge Irrigation District.

2. Unappropriated water is available in the Mokelumne River and its tributaries for the projects proposed by some, but not all, of the applicants for consumptive uses during the period December 1 of each year to July 1 of the succeeding year.

3. Department of Finance Applications 5647 and 5648 are prior in time and right to all other applications which are the subject of this decision, including Application 13156 of the East Bay Municipal Utility District for municipal purposes.

4. The projects of East Bay Municipal Utility District and North San Joaquin Water Conservation District are in conflict with the general purposes for which Department of Finance Applications 5647 and 5648 were filed in that the primary purpose of said applications was to insure an adequate water supply for certain mountain and foothill areas which areas include the lands within Calaveras County Water District but none of the lands within the North San Joaquin or East Bay Districts. Any disposition of said Department of Finance applications to East Bay Municipal Utility District or North San Joaquin Water Conservation District is therefore prohibited by Section 10504 of the Water Code. In view thereof, among the applicants, assignment or release of priority under Department of Finance applications can be made only to Calaveras County Water District and should be made to said District at such time as it is able to proceed thereunder. The

evidence submitted by Calaveras indicates that this District is not in a position to proceed with its project in the near future.

5. Flood control on the Mokelumne River is vitally needed for the protection of the lower Mokelumne River watershed and local interests in that area should be afforded an opportunity<sup>to</sup> secure such protection.

6. Additional sources of water will be available to North San Joaquin Water Conservation District and East Bay Municipal Utility District from the Folsom South Canal, the Feather River Project, and other sources, some of which may be less expensive to develop than the projects on the Mokelumne River. Additional sources of water will also be available to the Calaveras County Water District for a portion of its service area.

7. Calaveras County Water District proposes to furnish water for irrigation and municipal uses within the West Point and Mokelumne service areas from Mokelumne River and its tributaries. The State Water Resources Board estimates that the ultimate water requirements for these areas which should be satisfied from Mokelumne River amount to about 15,000 acre-feet per annum; the remainder of the water required for these areas to be derived from the Calaveras and Stanislaus Rivers. From the record, as a whole, it appears that not more than a yield of 20,000 acre-feet per annum need be allocated from Mokelumne River and its tributaries to Calaveras District to serve these areas.

8. North San Joaquin Water Conservation District estimates its present deficiency of safe ground water yield is 31,000 acre-feet per season under long-time mean climatic conditions.

9. East Bay Municipal Utility District estimates its ultimate water requirements to be 391,000 acre-feet per annum of which approximately 364,000 acre-feet per annum must be imported.

10. Maintenance and enhancement of fish life in Mokelumne River is an important consideration in planning and administering the development and utilization of the waters thereof.

11. Releases of water for fish life past the proposed upper Mokelumne River reservoirs do not present a serious problem and have tentatively been agreed upon by the applicants and the Department of Fish and Game.

12. Considering prior rights and without regard to the pending applications, there is insufficient unappropriated water remaining in the Mokelumne River under present conditions at certain times of the year to provide the releases specified by the Department of Fish and Game as necessary to maintain a suitable habitat for fish life in the lower reaches of Mokelumne River.

13. The pending applications except Application 15201 are for domestic, municipal and irrigation uses which under the State Water Code, have preference over other uses. Storage of water appropriated under these applications and subsequent release of water from storage for fish and wildlife cannot be required. By-pass of unappropriated water to maintain fish life could only be required in these proceedings to the extent that it would not substantially interfere with diversion for higher uses.

14. Reasonable firm water supplies for months of minimum flows for fish life can only be obtained by constructing

reservoirs for those specific purposes or by financially participating in multi-purpose projects.

15. The matter of allowing public access to mountain reservoirs is not a matter over which this Division has any jurisdiction, although it is our belief that wherever possible public access should be accorded.

16. Under Sections 1460 and 1461 of the Water Code, Application 13156 of the East Bay Municipal Utility District is prior in right to the applications of Calaveras County Water District and the North San Joaquin Water Conservation District pending in these proceedings. This conclusion is based upon the finding that East Bay District is a municipality, the proposed use by it is for the municipality and the proposed use is for municipal purposes.

17. There will be no unappropriated water remaining available for North San Joaquin Water Conservation District after full satisfaction of the rights of Calaveras County Water District under Department of Finance Applications 5647 and 5648 and the rights of East Bay Municipal Utility District under Application 13156.

18. A temporary permit should be issued to the North San Joaquin Water Conservation District under Sections 1462 and 1463 of the Water Code, which contemplate the temporary use of surplus water appropriated by a municipality.

19. The use of water for power purposes by East Bay Municipal Utility District must not be allowed to interfere with higher uses of water such as for municipal, domestic and irrigation purposes.

20. Applications 13156 and 15201 of the East Bay Municipal Utility District should be approved subject to conditions which will provide:

- (a) That local interests or the Federal Government be afforded an opportunity to participate in the construction of Camanche Dam and reservoir for flood control purposes,
- (b) a further opportunity for the Department of Fish and Game and the East Bay District to make studies and enter into an agreement relative to reasonable releases past the enlarged Pardee and Camanche Dams for fish life,
- (c) an opportunity for local interests to put the water to beneficial use on an interim basis,
- (d) that use of water for power purposes shall not interfere with use of water for higher uses.

21. Application 11792 insofar as it pertains to the Mokelumne River watershed and Applications 12953 and 13265 should be denied for the reasons hereinbefore set forth with the intent that Calaveras County Water District will be afforded an opportunity to develop such water as it may require up to a limit of a yield of 20,000 acre feet per year under Department of Finance Applications 5647 and 5648 for service in the West Point and Mokelumne service areas.



ORDER

Applications 11792, 12842, 12953, 13156, 13265 and 15201 having been filed with the Division of Water Resources as heretofore stated, protests having been filed, a public hearing having been held and the State Engineer now being fully informed in the premises:

IT IS HEREBY ORDERED that Application 11792 insofar as it pertains to diversion of water from the Mokelumne River watershed (the only portions of this application considered in this decision) and Applications 12953 and 13265 be denied without prejudice to the right of Calaveras County Water District to receive partial assignment of Department of Finance Applications 5647 and 5648.

IT IS FURTHER ORDERED that Application 12842 be approved under the provisions of Section 1462 of the Water Code for temporary appropriation of surplus water insofar as this application relates to direct diversion and storage between December 1 of each year and July 1 of the succeeding year subject to the usual terms and conditions and the following special terms and conditions to wit:

(1) This permit is issued in accordance with the provisions of Section 1462 of the Water Code for the temporary appropriation of the excess of the permitted appropriation over and above the quantity applied to beneficial use from time to time by the East Bay Municipal Utility District under its Application 13156 and permit issued thereon provided that the project of the North

San Joaquin Water Conservation District shall be so constructed that it may be feasibly integrated at a later date with the project of East Bay Municipal Utility District under Application 13156 as may be determined by the State Water Rights Board.

(2) Construction of any reservoir under this permit shall not commence until the local interests have had an opportunity to financially participate in the construction of the dam and reservoir for flood control purposes or to secure Federal participation therein; provided that such participation for flood control purposes shall be determined on or before December 1, 1960.

(3) No diversion shall be made under this permit until an agreement has been reached between the permittee and the State Department of Fish and Game with respect to flows to be by-passed for fish life; or failing to reach such agreement, until a further order is entered by this Division or its successor with respect to said flows.

IT IS FURTHER ORDERED that Application 13156 be approved insofar as it relates to direct diversion and storage between December 1 of each year and July 1 of the succeeding year subject to the usual terms and conditions and the following special terms and conditions to wit:

(1) Construction of Camanche Dam and Reservoir under this permit shall not commence until the local interests have had an opportunity to financially participate in the construction of said dam and reservoir for flood control

purposes or to secure Federal participation therein; provided that such participation for flood control purposes shall be determined on or before December 1, 1960.

(2) No diversion shall be made under this permit at the Camanche or Pardee Dam sites until an agreement has been reached between the permittee and the State Department of Fish and Game with respect to flows to be by-passed for fish life; or failing to reach such agreement, until a further order is entered by the Division or its successor with respect to said flows.

(3) During the months March through October, inclusive, whenever the mean monthly flows released downstream from enlarged Pardee Reservoir or Camanche Reservoir are less than 400 cubic feet per second, mean daily flows shall not be less than 75% of the average monthly rate of flow released past the lower of said dams, except in event of emergency.

(4) Permittee shall at all times by-pass a minimum of 54.0 cubic feet per second, or the natural flow of the stream whenever it is less than 54.0 cubic feet per second, at Railroad Flat Dam, to maintain fish life.

IT IS FURTHER ORDERED that Application 15201 be approved insofar as it relates to direct diversion, for the entire year and insofar as it relates to storage between December 1 of each year and July 1 of the succeeding year, subject to the usual terms and conditions and the special terms and conditions set forth under Application 13156 and, in addition, a further special term and condition as follows:

(5) No diversion or use of water shall be made under this permit which will in any way interfere with diversion or use of water for higher uses whether such higher uses are made under either prior or subsequent rights.

IT IS FURTHER ORDERED that Applications 12842 and 13156, insofar as these applications relate to direct diversion and storage between July 1 and December 1 of each year, be and they are hereby denied and also that Application 15201, insofar as it relates to storage between July 1 and December 1 of each year, be and it is hereby denied.

WITNESS my hand and the seal of the Department of Public Works of the State of California this 3rd day of July, 1956.

/s/ Harvey O. Banks

Harvey O. Banks  
State Engineer