OPINION AND ORDER

OF

THE DIVISION OF WATER RIGHTS

Decision No. 1462, 1477, 1478, 1479, 1480, 1481,
1482, 1938, 1964, 2099, 2408, 2409, 2410,
2554, 2535, 2997, 3248, 3469, 4228,
4229, 4737, 4768, D-100.

Decided - April 17, 1926.

BEFORE THE DIVISION OF WATER RIGHTS
DEPARTMENT OF PUBLIC WORKS
STATE OF CALIFORNIA

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In the Matter of Applications No. 1462, No. 1477, No. 1478, No. 1479, No. 1480, No. 1481, No. 1482 and No. 3469 by Mokelumne River Power and Water Company, later assigned to J. W. Preston, Jr., 1938, 1964, 2099, 2534, 2535 and 2997 by J. W. Preston, Jr., 2408, 2409, 2410, 3348 and 4737 by Stephen E. Kieffer, and 4228, 4229 and 4768 by East Bay Municipal Utility District to appropriate water from the Mokelumne and Calaveras Rivers and tributaries thereof and Willow Creek a tributary of Cosumnes River, for domestic, agricultural, power, flood control and saline control purposes.

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JOINT HEARING HELD BEFORE DIVISION OF WATER RIGHTS AND FEDERAL POWER COMMISSION SEPTEMBER 11, 1925 et seq.

EXAMINERS

Edward Hyatt, Jr., Chief of Division for Division of Water Rights, F. E. Bonner and E. W. Kramer for Federal Power Commission.

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OPINION AND ORDER OF THE DIVISION OF WATER RIGHTS

DECISION NO. 1462, 1477, 1478, 1479, 1480, 1481, 1482, 1938, 1964, 2099, 2408, 2409, 2410, 2534, 2535, 2997, 3348, 3469, 4228, 4229, 4737, 4768. D. 100

Decided: April 17, 1926.

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APPEARANCES

Applicants:

Charles W. Slack, Arthur Huston and Frank J. Solinsky for	J. W. Preston, Jr., and Mokelumne River Power and Water Company
J. F. Peck for	Stepehen E. Kieffer
T. P. Wittschen for	East Bay Utility District

Protestants:

Arthur H. Barendt for Sierra Nevada Water and Power Company.
D. Radsell for Ridge Land and Navigation Co., California Delta Farms, Inc., Delta Farms Recl. Dists., Nos. 2024, 2025, 2026, 2028, 2029, 2042 and 2044.

T. G. Negrich for 86 property owners in Townsite of Ione and 27 owners of farm land within Arroyo Seco Reservoir Site.
L. B. Sammis for Calaveras Water Users Association.
Dunne, Brobeck, Phleger and Harrison for Mercantile Trust Company of California.
Levinsky and Jones for Stockton and Mokelumne Canal Company.
Chickering and Gregory by Donald M. Gregory for Hunt Brothers Packing Company.
Nutter, Hancock and Rutherford and A. L. Cowell for Land Owners along the Mokelumne River or adjacent thereto.
A. L. Cowell for Woodbridge Irrigation District.
Neumiller and Ditz, by A. L. Cowell for W. C. Housken.
G. E. Lawrence for Lawrence Holding Company.
L. M. Hoefler for certain owners in Delta.
Thomas S. Louttit for Land Owners Riparian to Mokelumne River.
W. G. Snyder for Board of Supervisors of Amador County.
T. L. Smart and L. S. Westmore for Libby, McNeill and Libby.
E. S. McCutchen and J. M. Mannon for Staten Island Owners.
Avery C. White for Robert G. Williams.
Eugene J. Sullivan, Charles F. Craig and James N. Gillette for Sierra Blue Lakes Water and Power Company.
Stephen W. Downey for State Reclamation Board.
R. H. Cross for C. H. Kroll, G. H. Atkins and D. H. Atkins landowners in District 548.

O P I N I O N

SECTION 1. PROJECTS AND APPLICATIONS CONSIDERED IN HEARING.

During recent years the opportunity for development presented by the unused water of Mokelumne River annually wasting into the sea has attracted wide-spread interest. This interest has been manifested particularly in the number of applications filed with the Division of Water Rights proposing appropriations from that source for major irrigation, power and municipal water supply projects. Dry Creek on the north and Calaveras River on the south were frequently included in these applications as parts of the general scheme of development.

This interest led to the setting of a joint hearing on September 11, 1925, before the Division of Water Rights and the Federal Power Commission at which the various proponents and opponents of these major projects might present evidence in support of their respective contentions.

This hearing was upon a total of twenty-two separate applications which fall by reason of ownership into three distinct groups - those of J. W. Preston, Jr., those of Stephen E. Kieffer and those of East Bay Municipal Utility District. The J. W. Preston Jr., group of applications really subdivides itself again into two smaller groups - those originally filed by the Mokelumne River Water and Power Company proposing diversions from Mokelumne River proper, Middle and South Forks of Mokelumne River, North Fork of Calaveras River and Esperanza Creek, a tributary thereof, in connection with the so-called "South Mokelumne Project" and those filed by Mary I. Crocker and J. W. Preston, Jr., proposing diversions from Sutter Creek (a tributary of Dry Creek) and from North Fork of Mokelumne and Cole Creek, Beaver Creek and Bear River, tributaries thereof, in connection with the so-called Amador Project. For detailed information as to the purpose, amounts, season of diversion, point of diversion and place of use of the individual applications of the three interested parties reference is made to the tabulation and sketch map on pages 7 and 8 hereof. In a general way the projects of the three interested parties may be described as follows:

J. W. Preston Jr., South Mokelumne Project: So far as the present proceeding is concerned it may be considered that this project was originally conceived in September 1919 when Application No. 1462 was filed by the Mokelumne River Power and Water Company proposing an appropriation from Mokelumne River for the irrigation of the foothill area between Mokelumne River and Calaveras River westward from Valley Springs to the valley floor. The following month the project took on a more imposing aspect with the

filing of six additional applications (1477 to 1482 inclusive) proposing diversions for power purposes from Middle and South Forks of Mokelumne River and North Fork of Calaveras River and Esperanza Creek with storage in Middle Fork, South Fork and McCarty Reservoirs. It was proposed that the water should pass through three power houses enroute from the points of diversion to the place of agricultural use - one power house to be on Mokelumne River just above the diverting dam at the intake of the main canal leading to the irrigated area, a second power house to be on South Fork of Mokelumne River and a third power house to be on North Fork of Calaveras River. The project has since been amplified and extended by filing Application No. 3469 for irrigation purposes and by amendment of the original applications but remains essentially the same.

J. W. Preston, Jr., Amador Project: So far as the present proceeding is concerned this project was originally conceived in July 1920 when Application No. 1938 was filed by Mary Ives Crocker and J. W. Preston, Jr., proposing an appropriation from Sutter Creek for the irrigation of lands "in Ione and Jackson Valleys and below Jackson Valley on land adjoining Dry Creek". Storage in Volcano Reservoir was a feature of the application. The following month Application No. 1964 was filed proposing and appropriation from North Fork of Mokelumne with additional storage in Volcano Reservoir for use on the same lands described above "and in the vicinity of Galt". Four months later the scope of this project was enlarged by the filing of Applications 2099 and 2100 proposing additional diversions from North Fork of Mokelumne River with storage in Salt Springs Reservoir and including power development as a feature. The project has been amplified, amended and extended since that time by the filing of Applications 2534, 2548, 2535, 2996 and 2997, until in its present form use of the water for power

purposes is contemplated at Tiger Creek Power House and either the present Electra Power House of the Pacific Gas and Electric Company or another new power house nearby. The water will pass through these power houses enroute to the lands to be irrigated - lands on the valley floor from Galt south to Stockton having been substituted as the proposed place of use in place of those first named as stated above. Re-regulation of the river flow below the power houses is proposed at Mehrten Reservoir on Mokelumne River some half way between Lodi and Lancha Plana.

Stephen E. Kieffer Project: This project was initiated in June 1921 by the filing of Applications 2408, 2409 and 2410 which proposed appropriations from Willow Creek (a tributary of Cosummes River), Dry Creek and Mokelumne River for "agricultural purposes and to secure flood and saline control". Storage in Willow Creek and Arroyo Seco reservoirs was contemplated and the area to be served was described as "below the reservoirs south of the Cosummes River, East of Sacramento and San Joaquin delta and North of Mormon Slough". In April 1923 the scope of this project was increased by the filing of Application No. 3348 which proposed a municipal supply for "Cities in Sacramento and San Joaquin Valleys and bordering on San Francisco Bay" with storage in Lancha Plana Reservoir. Subsequently Application No. 4737 was filed proposing a by-product power plant located at the point where water from Mokelumne River would be discharged into the Arroyo Seco Reservoir by Lancha Plana Dam.

East Bay Municipal Utility District Project: While this project was initiated by the filing of Applications 4226 and 4229 its original conception apparently dates back to the time when Application No. 3348 was filed by the predecessors in interest of Stephen E. Kieffer. It is essentially a project to deliver a municipal water supply to the cities on the

east side of San Francisco Bay by diversions from the Mokelumne River. The diversion and storage for municipal purposes would be made at Lancha Plana Dam on Mokelumne River some twenty-five miles east of Lodi. The service of the agricultural area in the vicinity of Stockton and Lodi with water for irrigation with storage in Arroyo Seco Reservoir and a by-product power plant at the base of Lancha Plana Dam under Application No. 4768 are incidental to the main feature of a municipal supply for the district.

These applications, with the exception of Nos. 2100, 2548, 2936, and 4768 were completed in accordance with the Water Commission Act and the Rules and Regulations of the Division of Water Rights, were advertised, were protested, and in due course came on for hearing before the Division of Water Rights on September 11, 1925. Applications Nos. 2100, 2548 and 2936, as will be explained later, had already been heard and acted upon while Application No. 4768 was not filed until the day of the hearing and was therefore included for hearing by stipulation of all interested parties present prior to completion and advertisement and without legal notice.

PROJECTS AND APPLICATIONS CONSIDERED IN HEARING SEPTEMBER 11,1925

No.	Date	Purpose	Source	Amount	Season of Diversion	Point of Diversion	Point of Return	Remarks
			[illegible] PRESTON JR. - SOUTH MOKELUMNE PROJECT					
1462	9-23-19	Agric.	Mokelumne R.	300 c.f.s.	Mar.1-Oct.31	Sec.27 T6N R13E		
1477	10-11-19	Power	S.Fk.Mokelumne R.	250 c.f.s. 15,500 a.f.	Jan.1-Dec.31 Jan.1-Dec.31	Sec.1 T6N R14E	Sec.31 T6N R13E	
1478	10-11-19	Power	[illegible].Fk.Calaveras	150 c.f.s. 3,000 a.f.	Jan.1-Dec.31 Oct.1-June 30	Sec.28 T6N R13E	Sec.31 T6N R13E	
1479	10-11-19	Power	M.Fk.Mokelumne	250 c.f.s. 20,000 a.f.	Jan.1-Dec.31 Oct.1-June 30	Sec.19 T6N R13E	Sec.31 T6N R13E	
1480	10-11-19	Power	Esperanza Creek	100 c.f.s.	Jan.1-Dec.31	Sec.8 T6N R13E	Sec.27 T6N R13E	
1481	10-11-19	Power	N.Fk.Calaveras	250 c.f.s.	Jan.1-Dec.31	Sec.31 T6N R13E	Sec.27 T6N R13E	
1482	10-11-19	Power	S.Fk.Mokelumne	300 c.f.s.	Jan.1-Dec.31	Sec.15 T6N R13E	Sec.27 T6N R13E	
3469	5-7-23	Agric.	S.F.Mokelumne N.Fk.Calaveras M.Fk.Mokelumne	57,000 a.f. 3,000 a.f. 20,000 a.f.	Oct.1-June 30 Oct.1-June 30 Oct.1-June 30	Sec.1 T6N R14E Sec.3[illegible] T6N R13E Sec.19 T6N R13E		
			[illegible] PRESTON JR. - AMADOR PROJECT					
1930	7-28-20	Agric.	Sutter Creek	100 c.f.s. 50,000 a.f.	May 1-Sept.30 Nov.1-July 31	Sec.33 T7N R12E		
1964	8-12-20	Agric.	N.Fk.Mokelumne	500 c.f.s. 150,000 a.f.	Apr.1-Sept.30 Jan.1-Dec.31	Sec.34 T7N R13E		
2099	11-30-20	Agric.	N.Fk.Mokelumne	50,000 a.f.	Jan.1-Dec.31	Sec.33 T8N R15E		
2534	9-3-21	Power	N.Fk.Mokelumne N.Fk.Mokelumne Sutter Creek Sutter Creek	750 c.f.s. 125,000 a.f. 25 c.f.s. 50,000 a.f.	Jan.1-Dec.31 Jan.1-Dec.31 Jan.1-Dec.31 Jan.1-Dec.31	Sec.24 T7N R13E Sec.24 T7N R13E Sec.23 T7N R13E Sec.23 T7N R13E	Sec.23 T7N R12E Sec.27 T7N R12E Sec.23 T7N R12E Sec.23 T7N R12E	
2536	9-3-21	Agric.	N.Fk.Mokelumne	225 c.f.s. 25,000 a.f.	Apr.1-Sept.30 Jan.1-Dec.31	Sec.24 T7N R13E		
2999	9-21-22	Agric.	N.Fk.Mokelumne	225 c.f.s.	Apr.1-Sept.30	Sec.6 T6N R9E		
			[illegible]					
2408	5-7-21	Agric. S.SF.Central	Willow Creek	50 c.f.s. 15,000 a.f.	Oct.1-May 1 Oct.1-May 1	Sec.34 T7N R9E		
2409	5-7-21	Agric. S.SF.Central	Mokelumne R.	11,000 c.f.s. 800,000 a.f.	Jan.1-Dec.31 Oct.1-July 1	Sec.36 T5N R10E		
2410	5-7-21	Agric. S.SF.Central	Dry Creek	500 c.f.s. 200,000 a.f.	Oct.1-July 1 Oct.1-July 1	Sec.30 T6N R9E		
3348	4-11-23	Munic.	Mokelumne R.	1,000 c.f.s. 200,000 a.f.	Jan.1-Dec.31 Oct.1-July 1	Sec.33 T5N R10E		
4737	5-14-25	Power	Mokelumne R.	200 c.f.s.	Jan.1-Dec.31	Sec.33 T5N R10E	Amador Camp Res.	
			EAST BAY MUNICIPAL UTILITY DISTRICT					
4228	9-22-24	Munic.	Mokelumne R.	310 c.f.s. 217,000 a.f.	Jan.1-Dec.31 Jan.1-Dec.31	Sec.24 T5N R10E		
4229	9-22-24	Agric.	Mokelumne R.	500,000 a.f.	Oct.1-July 1	Sec.26 T5N R10E		
4758	9-11-25	Power	Mokelumne R.	325 c.f.s. 219,000 a.f.	Jan.1-Dec.31 Jan.1-July 31	Sec.25 T5N R10E	Sec.25 T5N R10E	
			APPLICATIONS OF [illegible] PRESTON JR. [illegible] PROJECT ON WHICH PERMITS HAVE BEEN GRANTED					
2100	11-30-20	Power	N.Fk.Mokelumne R.	350 c.f.s. 60,000 a.f.	Jan.1-Dec.31 Dec.1-July 15	Sec.33 T8N R15E	Sec.24 T7N R13E	Permit [illegible] Issued 8-27-25
2548	9-14-21	Power	Cole Creek Bear River Beaver Creek	30 c.f.s. 305 c.f.s. 95 c.f.s.	Jan.1-Dec.31 Jan.1-Dec.31 Jan.1-Dec.31	Sec.5 T7N R16E Sec.9 T9N R16E Sec.9 T7N R15E	Sec.24 T7N R13E Sec.24 T7N R13E Sec.24 T7N R13E	Permit [illegible] Issued 8-27-25
2996	9-21-22	Power	S.Fk.Mokelumne R.	225 c.f.s.	Jan.1-Dec.31	Sec.24 T7N R13E	Sec.32 T6N R12E	Permit [illegible] Issued 8-27-25

SECTION II. PHYSICAL CHARACTERISTICS OF WATERSHEDS OF MOKELUMNE RIVER, CALAVERAS RIVER, DRY CREEK AND WILLOW CREEK.

The Mokelumne River rises near the crest of the Sierra Nevada Mountains and flows in a general southwesterly direction to its junction with the San Joaquin River at a point about twenty miles above the mouth of the latter and some twenty-five miles northwest of the City of Stockton. At New Hope Landing the river divides into two branches which again unite some ten miles to the southwest and about four miles above the confluence with San Joaquin River, thus forming Staten Island. The river is tidal over its navigable length which is about thirty-five miles including the two forks which form Staten Island.

The drainage area above the main agricultural area of the valley is approximately 632 square miles. Records of the Water Resources Branch of the United States Geological Survey extending over a period from January 1905 to September 30, 1925, indicate the mean annual discharge to be 825,280 acre feet, varying from a minimum seasonal run-off of 182,000 acre feet in 1923-24 to a maximum seasonal runoff of 1,870,000 acre feet in 1906-07.

Floods seldom occur in the Mokelumne River as a direct result of melting snow but are caused by heavy rains during the winter months which are liable to cause the area of low country below the mouth of the Cosumnes River to become flooded, and during the floods of 1904, 1907 and 1909, a large area was flooded in the vicinity of Bensons Ferry and Lodi. In the 1907 flood many thousands of acres were flooded as a result of the Mokelumne River overflowing its banks above Lodi and Woodbridge. The flood of 1907 was augmented by water from Sacramento River admitted through a break in the levees near Courtland. While the Mokelumne River was at high stage during the 1909 flood there was only one small break in its levees which resulted in the flooding of approximately 1000 acres of land.

The maximum flood stage of the Mokelumne River occurred in 1911 but little damage was done at that time as all of the levees had been strengntened.

Relative to the run-off of the other streams from which it is proposed to divert it may be said that the area of the watershed of the North Fork of the Calaveras River and Esperanza Creek above the proposed points of diversion is approximately twenty-one square miles. The mean elevation of this area is approximately 3000 feet. We have no records of run-off but for present purposes this may be estimated at 18,000 acre feet per annum which is less than 6% of the mean seasonal run-off of the Calaveras River above the main agricultural area of the valley.

The area contributing to the point of diversion proposed by Mr. Kieffer on Willow Creek is approximately fifty square miles and has a mean elevation of about 600 feet. We have no records of run-off for this area but for present purposes this may be estimated at about 16,000 acre feet per annum. Although Willow Creek is a tributary of the Cosummes River the junction of the two rivers is only about four miles above the junction of the Cosummes River and the Mokelumne River and is well down within the valley floor.

The area of the Dry Creek Watershed above the proposed Arroyo Seco Dam is approximately 290 square miles and the average elevation is about 1500 feet. Dry Creek enters Mokelumne River well down upon the valley floor at a point some two miles above the junction of Cosummes and Mokelumne Rivers. There are no recorded measurements of run-off but for present purposes this may be estimated at 95,000 acre feet per annum.

These streams pour almost directly into the Sacramento-San Joaquin delta - a great area of some 423,000 acres of which 220,231 acres

were irrigated in 1924. (See pp 182 - 183, Bulletin 4, Division of Water Rights 1924). The water so discharged by them is there joined by the waters from the whole Sacramento-San Joaquin drainage system making up a total of 30,000,000 to 35,000,000 acre feet which passes on annually into San Francisco Bay and thence on into Pacific Ocean by way of Golden Gate. These delta channels form a network of waterways through which the water flows sometimes one way and sometimes another, depending upon the respective stages of the various main tributaries - Sacramento, San Joaquin and Mokelumne Rivers - and the influence of tides. It is difficult if not impossible to estimate the influence of a diversion at any one point in these delta channels upon the available water supply at other points or the influence of a diversion from one of the tributary streams upon the available water supply at any particular point in the delta. The fact is that the delta channels form a vast reservoir through which the drainage from Sacramento and San Joaquin Rivers pours to form a barrier in the upper end of San Francisco Bay, Suisun Bay and the lower delta against the salt water which would otherwise enter through Golden Gate and San Francisco Bay.

Toward the end of the irrigation season in an average year or earlier in subnormal seasons the flow of fresh water through the delta channels may be so reduced as to permit the infiltration of salt water in the channels near Suisun Bay.

SECTION III. PRESENT DEVELOPMENT DEPENDENT UPON MOKELUMNE RIVER, NORTH FORK OF CALAVERAS RIVER, ESPERANZA, WILLOW AND DRY CREEKS.

The 1920 census report of the United States Department of Commerce Bureau of the Census reported 38,848 acres irrigated in the Mokelumne River drainage basin, 13,323 acres irrigated in the Calaveras River drainage basin, and 3,259 acres irrigated in the Cosumnes River basin. The acreage irrigated within the Dry Creek basin is included with that in the Mokelumne basin of which it is a part.

The evidence presented at the hearing would indicate that the largest present user of water from Mokelumne River is the Stockton Mokelumne Canal Company which is a public utility and which claimed to have served at various times a total of 30,000 acres. It appears the maximum area ever served in any one year is not in excess of 10,000 acres and that since 1919 the maximum area served in any one year is approximately 8544 acres and the minimum 4445 acres. There appears to have been no tendency in recent years toward an increase in the irrigated area under this system.

The East Bay Municipal Utility District made a rather careful survey and investigation of the area which might reasonably claim riparian rights on Mokelumne River above Dry Creek and determined this to be 17,176.5 acres of which only 3781 acres had up to the present time been irrigated.

The District also presented testimony to the effect that in addition to the riparian lands under irrigation along the Mokelumne River and the lands served by the Stockton Mokelumne Canal Company there were some 2000 acres of non-riparian land served by individual irrigation systems diverting directly from the river.

The present area diverting an irrigation supply directly from the Mokelumne River is therefore perhaps between 14,000 and 15,000 acres. In addition to this there is at present an area of some 40,000 acres in the vicinity of Lodi dependent either wholly or in part upon underground water drawn from wells. This supply is undoubtedly derived in part from Bear Creek on the south and to a certain extent possibly from Dry Creek and Cosumnes River on the north. The total present irrigated area contiguous to the Mokelumne River above the delta was estimated by engineers of both the Utility District and J. W. Preston at approximately 50,000 acres.

In addition to applications for power and mining purposes which take little or nothing permanently from the stream, the Division of Water Rights has pending applications and permits to serve some 3,000 acres from Mokelumne River above the Sacramento-San Joaquin besides those applications under consideration in the present proceedings.

A considerable use of the water of the North Fork of the Mokelumne for the generation of hydro-electric power is made by the Pacific Gas and Electric Company at the Electra power plant. The company is not a protestant to the applications under study. Also permits have been issued J. W. Preston, Jr., on his Applications 2100, 2648, and 2996 for a major power project at and above Electra. The construction of one new power house to be located near the mouth of Tiger Creek and either the enlargement of the existing Electra Power House of Pacific Gas and Electric Company or the construction of a new power house nearby is contemplated under the permits which allow construction and operation of a reservoir of 60,000 acre feet capacity at Salt Springs and the use of 350 second feet at the Tiger Creek Power House and 225 second feet additional at or near Electra Power House subject of course to existing rights.

In addition to permits for the use of water, a license allowing easement on United States lands involved in this development has been obtained from the Federal Power Commission. The project is understood to be under contract of sale to the Pacific Gas and Electric Company, and it is expected that actual construction will begin at an early date.

Under both the existing development of the Pacific Gas and Electric Company and that under permit to Mr. Preston the water after its use for power will be returned to the river at the Electra plant.

There are various other rights and claims to water in existence on the upper Mokelumne and its forks; these are mostly small and of no consequence in this proceeding. A limited use from the Middle and South Forks has been made by the Mokelumne River Water and Power Company. Extensive claims for all forks have been advanced by the Sierra Blue Lakes Water and Power Company, which claims are treated in a later section.

No showing was made concerning present use of water directly from Willow Creek or Cosumnes River and there were no definite figures submitted concerning present total irrigated acreage on Dry Creek. Construction of Arroyo Seco Reservoir would flood some land in the Jackson and Ione Valleys now irrigated and there are known to be some private irrigation systems operating both below and above the reservoir which derive a water supply from Dry Creek and its tributaries. The total so irrigated, however, is relatively very small compared to the water crop of the watershed and the runoff occurs at such times and in such manner as to make only a very small portion available for use by present development.

No definite showing was made concerning the toa

No definite showing was made concerning the total present irrigated acreage dependent on Calaveras River. Hunt Brothers alone made any showing on this point and they have a present irrigated acreage of 334 acres.

The owners of some 66,000 acres of irrigated land within the Sacramento-San Joaquin delta presented a very strenuous opposition to any diversion out of the watershed for municipal purposes. As has been shown heretofore this is only a part of the total area of some 280,000 acres now irrigated from the delta channels all of which may or may not be affected by additional diversions from the delta channels or the tributary streams depending upon the amount and time of such additional diversions.

SECTION IV. GENERAL POSITION OF PROTESTANT GROUPS.

As will be noted from the general descriptions of the projects under consideration as heretofore given, they overlap and interfere one with another. The J. W. Preston, Jr., South Mokelumne project would take water out of the Mokelumne River for agricultural use above the diversion points of the Kieffer and East Bay Municipal Utility District projects. The East Bay Municipal Utility District and the Kieffer projects each propose a municipal supply for the East San Francisco Bay region and valley and coast towns enroute and would develop storage at the Lancha Plana and Arroyo Seco dam sites. All three projects include the development of an irrigation supply for the agricultural area upon the valley floor roughly west to the Sacramento San Joaquin delta, north to Cosumnes River and south to Calaveras River or Mormon Slough. If any one of the three major projects is approved the other two must be modified, if indeed they are able to proceed at all. As might readily be expected therefore the various projects are inter-protested.

The various projects are also protested in part or in their entirety on the ground that they would interfere with existing rights or are contrary to the public interest. Briefly these grounds of objection may be stated as follows:

(1) Appropriation from San Joaquin Valley streams for municipal use in coast towns will reduce an already deficient irrigation water supply and thereby reduce by just so much the ultimate agricultural development in San Joaquin Valley.

(2) Stream regulation by storage will reduce the flood peaks thereby decreasing stream-bed percolation to ground water and depleting the water supply available for irrigation by pumping from wells.

(3) Stream regulation by storage will reduce the winter flood discharge and increase stream diversions thereby encouraging the impregnation with salt water of the fresh water irrigation supply in the Sacramento-San Joaquin delta channels.

(4) The proposed diversions would reduce directly the surface water flow in the stream channels below thereby interfering directly with use of water by present claimants of right.

(5) Construction and operation of the Arroyo Seco Reservoir would flood farming lands in the Jackson and Ione Valleys to the great and irreparable injury of those communities.

The applications of J. W. Preston, Jr., were protested by the following:

Stockton Mokelumne Canal Company
Mercantile Trust Co. of San Francisco
R. G. Williams, et al.
Staten Island Land Co.
East Bay Municipal Utility District
C. H. Kroll and C.H. and D.H. Atkins
Sierra Nevada Water and Power Co.
Sierra Blue Lakes Water & Power Co.
Stephen E. Kieffer
William C. Housken, et al.
Libby, McNeil and Libby.
Hunt Brothers Packing Company
Delta Land Company
Rohnert Seed Company

The applications of Stephen E. Kieffer were protested by the following:

Stockton Mokelumne Canal Co.
Jennie Clements, et al
Mercantile Trust Co. of San Francisco
L. J. and E. M. Locke
Angelo Costa
Staten Island Land Company
Tip Anderson
Thomas B. Parker
C.H. Kroll and C.H. and D. H. Atkins
Sierra Blue Lakes Water and Power Co.
F. L. Naylor, Jr., W. P. Woolsey & W. J. Mortimer
Amador County
Wm. C. Housken, et al.
James Cook, et al.
Mossdale Farm, Inc.
Jasper Johnson, et al.
M. H. Locke and Co.
Henry Ingles
J. W. Preston, Jr.
Mokelumne River Power & Water Co.
C. R. Montgomery
C. V. Parker
Charles A. Kelley, et al.
J. L. Bruml
Rindge Land & Navigation Co.
California Delta Farms, Inc.
Delta Farms Recl. Dist. 2024,etc.
L. F. Stabell
C. F. Smith
P. E. Megerle and Mrs. L. A. Plasse
Libby, McNeil and Libby
F. C. Allen
Verne Hoffman
J. J. Schmidt, et al.
Delta Land Co.
Rohnert Seed Company

The applications of East Bay Municipal Utility District were protested by the following:

Stockton Mokelumne Canal Co.
Mercantile Trust Co. of San Francisco
Staten Island Land Co.
C. H. Kroll and G. H. Atkins
Sierra Blue Lakes Water and Power Co.
J. W. Preston, Jr.
Mokelumne River Power and Water Co.
Woodbridge Irrigation District.
C. A. Kelley, et al.
Rindge Land and Navigation Co.

Stephen E. Kieffer
F. L. Naylor, Jr., W. P. Woolsey & W. J. Mortimer
Amador County
William Housken, et al.
James Cook et al (4229 only)
Jasper Johnson, et al (4229 only)
Preston School of Industry (4229 only)

The California Delta Farms, Inc.
Delta Farms Recl. Dists. No. 2024 etc.
J. W. Linde et al.
Libby, McNeil and Libby
Geo. W. Holman, et al.
Rohnert Seed Co.
Delta Land Co.

There has been an insistant demand that if the applications to appropriate on the lower Mokelumne and Dry Creek are to be approved - and particularly if the applications proposing a municipal supply to the East Bay District are to be approved - the permittee or permittees should be required to contribute something in a substantial way toward the irrigation development of the adjacent valley areas, toward relief of the flood menace from Mokelumne River and Dry Creek, and toward salinity control in the delta. The demand has been made that if permit is issued upon the municipal application of the district or of Mr. Kieffer that the permittee shall not only construct Lancha Plana Dam and make it available as a diversion dam to Arroyo Seco Reservoir free of charge to whoever develops that site but shall also contribute something toward the construction of Arroyo Seco Reservoir itself; shall also provide flood control outlets and added capacity in Lancha Plana Reservoir sufficient to relieve the flood menace below, and shall provide a definite summer flow of water in the Mokelumne River for saline control.

SECTION V. FUNCTIONS AND POWERS OF DIVISION OF WATER RIGHTS IN CONSIDERING APPLICATIONS TO APPROPRIATE.

The desire on the part of the protestants generally that permits if issued to any of the applicants contain conditions which would inure to protestants' benefit has been so great that an explanation of the statutory authority and duty of the Division in this connection will be in point.

The Division of Water Rights, formerly known as the State Water Commission, is an administrative State office operating under the provisions of the Water Commission Act (Chapter 586, Stats. 1913). The Act has been many times amended since its adoption and it is this statute in its present form as amended by the 1925 Legislature that governs the Division of Water Rights in its consideration of these applications. The purpose of the Water Commission Act was to provide enabling legislation for the regulation and administration of the privilege of appropriation of water. The legal principle of appropriation of water and the privilege of so making use of State resources were not initiated by the Water Commission Act, having been in existence since early mining days in California. This principle has not however been clearly expressed in the statutes and therewas no adequate method of regulation or administration.

The Water Commission Act provided a code for the administration of the appropriation principle of water right law. The Act is a statute of considerable length and complexity and sets forth in detail the jurisdiction and duties of the Division of Water Rights. The initiation of rights to water by appropriation is provided for as well as the adjudication of existing appropriative rights, the distribution of water to those holding rights hereto and various other items. However, in this connection only the first, that of the supervision of the initiation of appropriative rights is of interest.

The sections of the Water Commission Act of greatest importance in connection with the consideration by the Division of applications to appropriate water are as follows: Section 1d providing certain prerequisites to the issuance of a permit; Section 11 defining unappropriated water; Section 15, a declaration of policy; Sections 16, 17, 18, 19 and 20 setting forth the procedure to be followed by the Division in connection with applications, permits and licenses for the use of water; Section 20 providing under certain conditions a preferred priority for municipalities.

Section 1d of the Act provides several prerequisites to the issuance of a permit among which are the following:

> "****the application must be accompanied by such maps, drawings, and other data as may be required by the state water commission; the intended use must be beneficial; there must be unappropriated water available to supply the applicant; **"

After the applicant has properly prepared and submitted an application it is by Section 1d necessary for the Division to ascertain that there is unappropriated water available for applicant's use, otherwise the application must be rejected.

Section 11 of the Act clearly defines unappropriated water in the legal sense and this interpretation is closely followed by the Division in determining this point. The riparian right question is covered in Section 11 by the declaration that waters which have not been used or which are not reasonably needed for useful and beneficial purposes upon riparian lands are subject to appropriation, and that ten years non-use upon riparian land is conclusive presumption that water is not needed.

Since in a given case the determination as to whether unappropriated water does or does not exist may involve a number of complex physical

and legal items such as precipitation, stream flow, climatic conditions, prior rights, extent of non-use by prior rights, etc., the operation of this prerequisite requires some explanation.

The Division in passing upon an application to appropriate water is not empowered to definitely fix or ascertain prior and vested rights to water from the source in question. However, it is obvious that in order to arrive at a conclusion as to whether or not unappropriated water is available it is necessary to have at least a general idea of the total extent of prior rights. Such a general idea having been gained by means of investigation and hearing an application may be approved so far as this clause in Section 1d is concerned if it appears that unappropriated water is available to supply the applicant in sufficient amount or for a sufficient time to justify his expenditure and allow him to make beneficial use of said water, while if on the other hand the water appears to be totally appropriated, or if it appears that unappropriated water would exist only at rare intervals and at times when the applicant would be unable to make beneficial use of it, the application must be rejected.

Section 15 of the Water Commission Act is as follows:

> "The state water commission shall allow, under the provisions of this act, the appropriation for beneficial purposes of unappropriated water under such terms and conditions as in the judgment of the commission will best develop, conserve and utilize in the public interest the water sought to be appropriated. It is hereby declared to be the established policy of this state that the use of water for domestic purposes is the highest use of water and that the next highest use is for irrigation. In acting upon applications to appropriate water the commission shall be guided by the above declaration of policy. The commission shall reject an application when in its judgment the proposed appropriation would not best conserve the public interest. (Amended 1917 and 1921)".

and Section 15 thereof and the constitution and codes of the State.

The provisions of Sections 16, 17, 18, 19 and 20 relate mainly to the procedure to be followed by the Division on applications, permits, and licenses. Such procedure is clearly set forth in detail and comment thereon is unnecessary. However, the final paragraph of Section 20 confers a special priority upon certain applications by municipalities and due to the filing by the East Bay Municipal District this section becomes of great importance. The wording of the clause providing for the preferred priority is such as to admit of more than one interpretation and the briefs submitted by counsel for the various parties to the hearing argue these interpretations at length. On account of the importance of this question and the space devoted to it thus far in the proceeding it has been deemed worth while to devote a separate section of this opinion to a thorough analysis of this part of the statute, which conspectus will be found in the next section. The conclusions, however, will be stated at this point, they being first, that the East Bay Municipal District is a municipality within the meaning of this portion of Section 20 of the Act and second, that the reserved priority on the application of the District for municipal purposes extends to all municipal uses of water within the boundaries of the District including industrial uses.

It has been the policy and precedent of the Division in issuing a permit to set relatively early dates for the starting and completion of the construction work incident to beneficial use being made of water, this being upon the assumption that the project is in such shape that the permittee is economically and financially able to proceed at once with such work. Permits are not granted in cases where it is clear that construction and beneficial use cannot result within a reasonable period, as this would be useless and

furthermore might lead to speculation in water rights. While a permit might conceiveably be of considerable aid in arranging preliminary financing, interesting users of water or water power, still public welfare demands that speculation in so basic a natural resource as water be curbed in every way possible. By withholding permits until it can be shown that there is a reasonable probability of early construction and by allowing only short times for such purpose, the Division has made this principle effective.

SECTION VI. THE EAST BAY MUNICIPAL UTILITY DISTRICT IS A MUNICIPALITY WITHIN THE MEANING OF SECTION 20 OF THE WATER COMMISSION ACT. THE APPLICATION OF THE SAID DISTRICT FOR WATER FOR MUNICIPAL USE WITHIN ITS BOUNDARIES IS ENTITLED TO A PREFERRED PRIORITY IN ACCORDANCE WITH SECTION 20.

That portion of Section 20 of the Water Commission Act which is involved provides as follows:

> "The application for a permit by municipalities for the use of water for said municipalities or the inhabitants thereof for domestic purposes shall be considered first in right, irrespective of whether they are first in time; provided however, that such application for a permit or the granting thereafter of permission to any municipality to appropriate waters, shall not authorize the appropriation of any water for other than municipal purposes;"

It is earnestly contended by counsel for protestants that the East Bay Municipal Utility District is not a municipality within the meaning of that term as used in this section of the Water Commission Act and that hence said district is not entitled to a preferred priority for any of its said applications. Inasmuch as protestants are prior in time they insist that they are prior in right and that their applications take precedence over those of the East Bay District.

It is undoubtedly true that the term "municipality" has been variously defined by the courts in many decisions. Said term is also variously defined in the dictionaries but neither the cases nor the dictionaries serve to enlighten us much as to the meaning intended by the legislature, when it used this term in Section 20 of the Water Commission Act. The cases and the dictionaries, however, are convincing in that they define the term not only as of narrow import and synonymous with an incorporated town or city but also as of an inclusive meaning and referable to other populous communities or quasi

towns or cities. In its broader meaning this term is applicable to such a district as the East Bay Municipal Utility District.

The cases have frequently held the term "municipality" as synonymous with the term "municipal corporation" and in Kenshaw v. Foster, 176 Cal. 507 held the latter term as inclusive of a municipal water district organized under statutory law. In the opinion referred to the court was dealing with an attempt to organize a water district comprising three incorporated cities, an irrigation district and unincorporated territory. Of the statute in question the court said:

> "The purpose is beneficent. By the law and under its sanctions the people of one or more municipalities, with the adjacent territory, may unite for the joint benefit of all, forming a municipal corporation through which they may accomplish that which it would be impossible for any one of the constitutent municipal or suburban units to perform."

Section 19 of Article XI, provides in part as follows:

> "Any municipal corporation may establish and operate public works for supplying its inhabitants with light, water, power, heat, transportation, telephone service or other means of communication."

Relative to the above quoted provision the court said:

> "This argument, like the other objection discussed herein, is based in part upon the supposed exclusive authority conferred by Section 19 of Article XI. upon cities. But, as we have seen, that article applies not merely to cities and towns, but to all municipal corporations, and power to acquire and sell water may be given to municipalities larger in territory and including within themselves cities and towns or similar corporations. This is done in the statute before us not in opposition to Section 12, but by general provisions which vest in the corporate authorities of the district the power to assess and collect special taxes for the purposes contemplated. The corporate authority of such a district is the board of directors, and to that board is delegated the taxing power not in relation to matters of a purely local character in the included city or cities, but having reference to the affairs of the larger municipality embracing within it the others of lesser areas."

In Re Orosi Public Utility District, 69 Cal. Dec. 447 is a recent case wherein a district organized under a statute enacted in 1921 was held a valid and constitutional district and not violative of the due process of law clauses of our state and federal constitutions. The East Bay Municipal Utility District herein before the Division of Water Rights was organized under a statute enacted at the same session of the legislature as that under which the Orosi District was created. The two statutes are practically identical in the powers conferred but the statute authorizing the Orosi District authorizes the inclusion of unincorporated territory only whereas that authorizing the East Bay District authorizes the inclusion of territory partly incorporated and partly unincorporated or of territory entirely incorporated but does not authorize the inclusion of unincorporated territory only. It happens that the East Bay District is entirely comprised of incorporated territory. Such being the situation, this decision of the supreme court that a district comprised of unincorporated territory is nevertheless imposing a tax for municipal purposes when organized under a statute similar to that authorizing the East Bay District, is entitled to great weight. While the court did not directly state that the Orosi District was a municipal corporation it did in effect hold that said district was of that nature and in our opinion virtually held that said district was a municipal corporation or a municipality within the broad and inclusive meaning of those terms. The court recognized the distinction to be made and the problem before it as follows:

> "There is an obvious distinction to be drawn between an act providing for the formation of an assessment district ..... and an act providing for the formation of a quasi-municipal corporation or a municipality.
>
> "..... In view of the distinction, pointed out by this court (supra), between the acts providing for the formation, on the one hand, of public or quasi-public corporations, in the nature of taxing districts, and of municipal corporations, on the other, and in view

> of the contention of the respondent, the problem which confronts us lies in determining whether or not the act under which the respondent district was created provides for the organization of a district which is in its nature a public corporation, the inhabitants and property owners of which are subject to taxation for municipal purposes without any hearing as to the benefits to be derived from the creation and conduct of such a corporation, or is an assessment district created for the primary purpose of assessing upon private lands the benefits to be derived thereby from the public improvements for which purpose the district is formed."

Continuing with this distinction in mind between municipal corporations on the one hand and taxing districts on the other, the court referred to districts formed for the purpose of draining, irrigating, reclaiming or otherwise directly benefiting the lands affected thereby and said:

> "Districts of the nature just discussed are not municipal corporations in the contemplation of the constitution."

The court next denied the violation of Article XI, Section 6 of the Constitution that "corporations for municipal purposes shall not be created by special laws" not upon the ground that the Orosi district was not such a corporation but upon the ground that said constitutional provision "does not imply that the legislature must, by any general law, provide a plan in which shall be prescribed the mode under which all municipal corporations must be organized and the powers they can exercise." And further said the court: "With this power of the legislature understood, the nature of the districts contemplated by the act under which the Orosi Public Utility District was created is more clearly discerned."

Though the court several times referred to the Orosi District as quasi municipal in character it seems to us apparent that the court was thinking of a city as the only organization truly municipal in character and that such was the thought of the court in using the term quasi-municipal is evidenced wherein after stating its conviction that the legislative intent

was to create public corporations of a quasi-municipal character, with power to carry on the particular functions committed to them it quoted with approval from another case as follows:

> "A city or purely municipal corporation is perhaps the highest type of corporation created for municipal purposes, because it is a miniature government, having legislative, executive and judicial powers, but there is another class of corporation, such as counties, school districts, road districts, etc., which, though varying in application and peculiar features, are but so many agencies or instrumentalities of the state to promote the convenience of the public at large, and are, in the broadest use of the terms, for municipal purposes."

And continuing its exposition relative to the nature of such a district as the Orosi the court further made manifest its meaning that such a district is a municipality or municipal corporation "in the broadest use of the terms" by immediately following the above quotation with the following statement:

> "It is not necessary, therefore, that a district like the Orosi Public Utility District shall exercise all the powers of local self government which usually pertain to municipal corporations."

It is therefore our conclusion that the opinion rendered in the Orosi case is as a whole very convincing that a municipality or municipal corporation is not necessarily a city and that this opinion of the supreme court is of unusual force in the instant case because it is applied to a district so analogous to the East Bay District in general design and scope of power. While other authorities in point might be multiplied in support of the conclusion that the term "municipality" may be inclusive of such districts as the East Bay Municipal Utility District we see no object in extending this opinion further upon said point.

The next inquiry is logically whether or not the use of "municipality" in Section 20 of the water commission act is with the intent that it shall have its narrow application as referable only to "a city or purely municipal cor-

poration" or as referable to municipal corporations in general as intended in the constitutional provision hereinabove quoted.

It may be said that if any intent is discernible from the language used in this section it is not such as argued for by counsel for protestants, to wit, that previous enumerations in this section indicate an intent ex industria to exclude other organizations than a city. The enumerations referred to relate to the privilege of purchase from an applicant by the enumerated organizations and is relative to terms and conditions entirely separable from those involved in this case. Furthermore had the strict application of the word municipal been intended it would have been as easy to have used the word city. Nor do we attribute any significance in so far as the use of the word municipality in this section is concerned to the use of "municipal" as synonymous with "city" in Section 16 of the Act wherein it is provided what applications shall contain and is stated, "if for municipal water supply, it shall give, besides the general requirements specified above, the present population to be served, and, as near as may be, the future requirements of the city." If an application involves a water supply for a city that supply is municipal and it is provided that the population be given and future requirements estimated. The legislature could hardly have been expected to have provided everything which would be appropriate for inclusion in applications by specific statements in this section but undoubtedly overlooked some things appropriate and which have been since required from time to time by rule and regulation. To say that this single provision has the effect of indicating the legislative intent to limit "municipality" wherever used in the Act to a city is going entirely too far in our opinion. Undoubtedly the legislature was thinking of a city when it inserted this provision in

Section 16 but when it repeatedly used municipality rather than city in reference to the especial status to be accorded applications by municipalities despite the fact that in reference to other subjects within Section 20 it used city, it seems that the language of the Act indicates an intention that the legislature meant more than a city otherwise it would have used city and not have consistently employed municipality in respect to the especial status conferred upon applications by municipalities.

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 favortism for a city over like organizations of people that was intended but a favortism 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 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.

For the foregoing reasons we are of the opinion that the provisions of Section 20 which are under consideration authorize a district such as the East Bay District to apply for water and obtain a preferred priority, in other words that said district is a municipality within the meaning of that term as used in said section.

It is next urged by protestants that if a municipality, the East Bay District, is nevertheless not entitled to a priority for other than domestic use for its inhabitants and that domestic use includes only private household purposes. Counsel cite many authorities defining domestic use but under the view we take of these provisions it is unnecessary to dwell upon these definitions of domestic use.

The portion of Section 20 relative to a preferred priority for an application by a municipality has already been quoted. Under the construction we place upon these provisions the preference is accorded to either applications by municipalities for the use of water for said municipalities or to applications by municipalities for the inhabitants for domestic purposes and the "provided, however" clause is annexed for the purpose of restricting the preference in case an application is filed for a municipality which application does not specifically limit its purpose to supplying the inhabitants for domestic purposes. If it were not for this proviso a municipality might apply for purposes non municipal in character or might apply for water for said municipality without specifying the precise use or uses to be made and might claim that the terminology "for the use of water for said municipalities" was broad and inclusive enough to cover any use, municipal or non-municipal, directly or indirectly beneficial to the municipality, actually by the muni-

cipality itself or by the vendee of the municipality.

We are fully aware of the criticism which may be directed against the above opinion as to the meaning of said provision, but no interpretation has been suggested which is not subject to serious objection, we have been unable to devise an interpretation which is not subject to serious criticism, and we believe that the interpretation above adopted is the most natural, logical, reasonable, practicable, and least objectionable of any offered or possible interpretation.

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.

It is reasonable and logical to believe that the legislature intended to confer a preference of priority which would be sufficient and adequate to effectuate its purpose. If that purpose was, as it seems natural and reasonable to suppose, to give a preference of opportunity to a municipal or urban population to supply its necessities, then to carry out that purpose it is necessary to include all uses which are essential to the maintenance, development and prosperity of an urban community. Drinking water without water for fire protection or without water for purposes of sanitation or without water for industrial use would be of little value to such a community. The preservation of life itself is more directly enabled by a strictly domestic supply but urban life is rendered extremely unsafe and hazardous without water for fire protection or sanitation and is rendered unprofitable

without water for industrial enterprises.

The use of the term "for municipal purposes" in the proviso is in our opinion strong evidence as to the intention of the legislature to confer a preference for general municipal purposes. It seems to us to have been the intent to authorize a preferred priority for any and all uses customarily associated with or appropriate to a municipal or an urban community, such as for fire protection, sewer flushing, park irrigation and other public and governmental uses and for industrial purposes in factories and other private uses properly identified with and thought of with reference to a modern urban community. While domestic use is characteristic of an urban community it is also prevalent wherever there is human habitation and perhaps it was this very thought which induced the legislature to annex the phrase "or the inhabitants thereof for domestic use" and to separately and specifically enumerate that use to make it certain beyond peradventure of a doubt that this most important of all uses should be included within the preference accorded.

While it may be contended that the above interpretation does violence to a cardinal principle of statutory construction, to wit, that every phrase and clause must be given effect and meaning if possible, it is our opinion that the above interpretation does not render "or the inhabitants thereof for domestic purposes" mere surplusage except as the other language may be defined by careful analysis. In other words the presence of the language referred to is explainable and its presence may be reasonably accounted for and does not hold the legislature up to ridicule.

By recourse to the journals of the legislature it will be found that the bill which became the Water Commission Act originated in the assembly and as it was passed by that body Section 20 thereof ended with the following provision.

> "The application for a permit by municipalities for the use of water for said municipalities or the inhabitants thereof for domestic purposes shall be considered first in right, irrespective of whether they are first in time."

Then in the senate this section of the bill was amended by the addition of the following language:

> "provided, that no municipality shall take water for the purpose of selling or otherwise disposing of the same for irrigation purposes."

Then the senate judiciary committee struck out the above amendment and in lieu thereof added the "provided, however" clause hereinabove discussed and the other provises which now comprise the balance of Section 20.

It therefore appears that the legislature intending to confer a preference upon municipalities for municipal purposes enacted the first portion of the language involved and not being satisfied with the general language "for the use of water for said municipalities" and desiring to make it absolutely certain that domestic use for the inhabitants would be held included, it added the specific statement "or the inhabitants thereof for domestic purposes" making no fine legal analysis of the language,or, if so, being better satisfied to specifically mention domestic use which would not be exclusively municipal as other uses but which was specifically in mind because of its imperative necessity for human life and on account of its

having been always recognized under the riparian doctrine as of a superior status. That having been done, the bill next came within the scrutiny of the senate committees and then it was realized that "for said municipalities" might be broad enough to include an appropriation by the municipality for irrigation use or sale for irrigation use and the first amendment quoted above was added, whereupon the senate committee made the amendment general so as to exclude from the preference all non-municipal uses and so as to safeguard what was the real underlying purpose of this preferred priority provision, to wit, to encourage and favor municipal development by municipal or public control of water needed for application and use and directly contributing to municipal prosperity by its actual consumption for purposes municipal in character.

While it would have been better to have completely revised the sentence which was added to by the senate committees and to have used no proviso but to have simply stated that applications by municipalities for municipal uses public or private shall be first in right, yet it is well known that legislative acts are frequently a growth and a product of many minds and that the exigencies of legislation result in inartistic enactments. In the instant case the intent is, however, in our opinion, discernible though the expression of it is laboring and cumbersome.

It would extend this opinion to an undue length to consider and analyze other suggested and possible interpretations but suffice it to say that they are in our opinion violative of cardinal principles of statutory construction and if it to said that the interpretation adopted does violence to principles of statutory construction we reply that other interpretations

do materially greater violence to said doctrines of law.

One other argument against the construction adopted is advanced as supportable from the provisions of the Water Commission Act itself and we will therefore notice it. Section 15 of the Act affords the basis for this contention and the portion held up to notice is:

> "It is hereby declared to be the established policy of this state that the use of water for domestic purposes is the highest use of water and that the next highest use is for irrigation. In acting upon applications to appropriate water the commission shall be guided by the above declaration of policy."

Said language is general whereas the language of Section 20 is specific. A specific provision is deemed applicable even though it serves to modify or limit a general provision and merely because it departs from a general provision and forms an exception therefrom it does not conflict therewith and does not render the general provision nugatory. This specific provision is however of no force if the general provision takes precedence and the cardinal principle of statutory construction that all portions of an act are to be given effect is violated if general provisions are allowed to destroy specific provisions. Nor do we attach any consequence to the amendments of 1917 and 1921 in so far as the argument is that the above provision was inserted into the act at a later date and therefore takes precedence and indeed operates as a repeal of Section 20 if it be interpreted as conferring a priority upon municipal use by a municipality. Suffice it to say that repeals by implication are not favored in law.

A discussion as to the wisdom of the legislature in conferring this right of preferred priority is not attempted or deemed appropriate, it is merely

our opinion that the legislature has established a preferred priority in favor of applications by municipalities for municipal purposes and that this office is obligated to obey said mandate of the legislature and does so without expression of opinion relative to the wisdom or desirability of said enactment.

VII. THERE IS UNAPPROPRIATED WATER AVAILABLE IN THE MOKELUMNE RIVER AND THE OTHER SOURCES UNDER CONSIDERATION.

The availability of unappropriated water is an important question in the consideration of these applications as this item is more or less involved in practically all of the protests. This section will be devoted to a general analysis without reference to applicants, of the situation from this standpoint on the Mokelumne River and the other streams on which applications have been made.

There are five groups of protestants whose objections, or whose use of water raise the question of unappropriated water on the Mokelumne River. These groups taking them in order from the headwaters of the stream to its mouth are as follows:

(a) The Sierra Blue Lakes Water and Power Company
(b) The users of water by surface diversion from the Mokelumne River above the Delta for agricultural and domestic purposes.
(c) The users from the underground waters of the Mokelumne Basin.
(d) The Delta area as a user of water from the Mokelumne River for agricultural and domestic purposes.
(e) The Delta area as a user of water from the Mokelumne River for salinity control.

The Sierra Blue Lakes Water and Power Company and the Sierra Nevada Water and Power Company claim water rights by appropriation on the Mokelumne River initiated prior to the Water Commission Act.

In the brief filed by these companies it is claimed that their rights are valid and existing and of such magnitude as to embrace all of the available waters of the source, leaving none unappropriated and subject to application to beneficial use by the applicants. If such be the case then all of these applications to appropriate must be rejected. We will therefore consider these claims with a view not of adjudicating water rights, if any, but with a view of forming an opinion relative to whether or not they are sufficiently sup-

ported to justify an opinion as to their validity and extent which in turn will require rejection upon the basis of no unappropriated water. Such we conceive is the duty imposed upon this Division by law relative to the question as to whether there is or is not unappropriated water available. Tested in accordance with this understanding of the law, the alleged claims as evidenced by the record are in our opinion too indefinite, conflicting, ambiguous, incomplete and unintelligible to afford any reasonable basis or support in favor of the sweeping assertion of the brief that said companies are entitled to 3000 second feet of water or even to afford a basis for an opinion that said claims are valid to any extent whatsoever other than possibly an amount of 15 second feet or less.

We will first discuss the claims of right to appropriate from the North Fork of the Mokelumne River.

A right is claimed to storage in Blue Lakes but for what amount, for what purpose, or upon what basis does not appear. For this hazy and indefinite assertion of right a priority anterior to 1875 is asserted but no use of water and not even any construction work is alleged.

It also appears that rights are claimed as of 1904 and 1908 by virtue of notices of appropriation to appropriate 250 and 300 second feet respectively. It does not appear whether the latter notice was filed as a substitute for or in addition to the former notice. It does not appear definitely from what point the water is to be diverted but apparently the diversion point contemplated was in the vicinity of the junction of Blue Creek and the North Fork of the Mokelumne River. As to the consummation of this project it appears that the plan was to use an old dam constructed in 1864, that sometime about 1864 one-eighth or a one-sixteenth of a mile of ditch was built, that since 1904 a one-sixteenth of a mile of ditch has been built, that trees have been cleared off of part of a 16 mile right of way for a ditch. No beneficial use of water is asserted or claimed.

As to the claims of right to appropriate from the Middle and South Forks of the Mokelumne River, it appears that two notices were posted on August 18, 1902, two notices on October 20, 1902, two notices on December 2, 1908, and one notice on January 28, 1909. The companies protestant predicate their claims upon these notices.

By notice of August 18, 1902, a right to divert 10,000 miner's inches under four inch pressure for mining, irrigation, power and manufacturing uses is claimed. This notice it is claimed was recorded August 28, 1902, and provided for diversion from the South Fork of the Mokelumne River in Section 23, Township 6 N., Range 13 E., M.D.M. It appears that no construction work or application to beneficial use has been made.

By notice of August 18, 1902, a right to divert 10,000 miner's inches under four inch pressure for mining, irrigation, power and manufacturing uses is claimed. This notice it is claimed was recorded August 28, 1902, and provided for diversion from the Middle Fork of the Mokelumne River in Section 12, Township 6 N., Range 13 E., M.D.M. As to construction work it is claimed that a portion of a canal was built, when built or how much built is not alleged but one inference from the transcript is that less than 200 feet has been constructed while another inference is that several hundred feet have been built. It is also claimed that water was run through this completed or partially completed section of canal for the first time within thirty days prior to the date of hearing upon these applications, the water running back into the stream. It appears that no beneficial use has been made.

By notice of October 20, 1902, also recorded on that date a right to appropriate identical in amount and source with that claimed by notice

of August 18, 1902, from the Middle Mokelumne is asserted. Whether this notice was intended to substitute for or be in addition to said former filing it does not appear. Nothing further appears relative to this filing.

By notice recorded October 20, 1902, and presumably posted on that date a right is claimed to appropriate 10,000 miner's inches under four inch pressure for sale for mining, irrigation, and power purposes to be diverted from the South Mokelumne in Section 33, Township 6 N., Range 13 E., M.D.M. No construction work or application to beneficial use is asserted.

By notice posted December 2, 1908, and recorded December 7, 1908, a right to appropriate 30,000 miner's inches under four inch pressure for power and domestic use to be diverted from the South Mokelumne within Section 23, Township 6 N., Range 13 E., M.D.M. is alleged. Whether this filing was intended to replace or to be in addition to the former filing from this same source and point on August 18, 1902, does not appear. No construction work or actual application to beneficial use is alleged.

By notice posted December 2, 1908, and recorded December 7, 1908, a right is claimed to divert 20,000 miner's inches under four inch pressure for power, electric and domestic purposes from the Middle Mokelumne. The location of the diversion point is not alleged but presumably is the same as that specified in the prior filings of August 18, 1902, and October 20, 1902. Whether this filing was intended to substitute for or be in addition to the prior filings referred to does not appear. No construction work or application to beneficial use is asserted.

By notice posted on January 28, 1909, and recorded on January 29, 1909, a right is claimed to appropriate 2000 miner's inches under four inch pressure for power, mining, irrigation and domestic use to be diverted from the South Mokelumne within Section 2, Township 5 N, Range 14 E., M.D.M. As

to construction work it appears that there was a ditch diverting out of the stream at the point of diversion when this notice was posted, it appears that said ditch is of a capacity of 15 second feet but it does not appear as to what was the capacity as of the date of posting or as to whether the ditch w. nlarged since said posting, nor does it appear as to how much of the capa .ty has been diverted or applied to beneficial use although it does seem that some water has been diverted through this ditch and beneficially used.

These claims have been set up as completely as the record admits of and their recitation is deemed sufficient to illustrate their absolute inadequacy as a basis for any reasonable conclusion or opinion in support of the contention advanced that the protestants advancing them are entitled to 3000 cubic feet per second and therefore own and control so much water that there is no unappropriated balance. To allow such assertions of right the weight contended for would be to deny all opportunity to develop the water resources of this state.

These protestants are not only legally protected inasmuch as all permits are expressly issued and are in law subject to vested rights but are by virtue of physical circumstance in a position near the head waters of this stream system which enables them to take what they claim and leave it to applicants as permittees to challenge, disprove and prevent their claimed rights of use.

As to the arguments advanced in the brief filed by these protestants it is pointed out that said brief is based upon a misconception of the effect of a permit to appropriate water. A permit to appropriate does not constitute an adjudication of a prior vested right nor operate

to confiscate, destroy or take from possession or right of possession and use the waters and rights to waters which may inhere in others whether protestants or not. Whatever may be the rights of these protestants they will not in contemplation of law in any wise be infringed by the issuance of permits to these applicants. We find it unnecessary to pass upon the legal propositions advanced by counsel.

The use of water by surface diversion from the Mokelumne River for agricultural purposes above tidelands was discussed in Section III of this opinion, the conclusion being that an area of between 14,000 and 15,000 acres of land secures an irrigation supply in this manner. There are also riparian lands bordering the Mokelumne River not at present irrigated. The only figures available in this connection, those submitted by the East Bay Municipal Utility District, show 17,176 acres riparian to the Mokelumne above Dry Creek of which 3781 acres have been irrigated. Rights to some extent may exist in favor of the remaining 13,395 acres of unirrigated riparian lands, however, it is probable that such rights have been mainly lost under the provisions of Section 11 of the Water Commission Act.

Adding to the present irrigated area of about 15,000 acres an allowance for riparian lands whose rights are still in existence--such figure should probably be very small and in any case not over the total of 13,395--and multiplying this total acreage by a gross yearly duty for this area of 2 to 3 acre feet as testified to in the hearing, an approximation of the extent to which the waters of the Mokelumne are at present appropriated so far as this area is concerned is obtained. This figure using the maximum duty of 3 acre feet would range from a minimum of 45,000 acre feet per year if it be assumed that

all unused riparian rights have been lost to a maximum of 84,185 acre feet if it be assumed that none have been lost.

The average flow of the Mokelumne River at the U. S. Government measuring station near Clements has been 825,260 acre feet per annum. In the minimum season of 1923-1924 the discharge was 182,000 acre feet.

From a comparison of these figures it is apparent that the bulk of the yearly flow of the Mokelumne River, even in the lowest year of record has been unappropriated so far as the interests under consideration are involved.

The users from the underground waters of the Mokelumne Basin irrigate about 40,000 acres by pumping therefrom. The underground supply is largely dependent upon percolation from the Mokelumne River and other water courses and from seepage from the Mokelumne Canal. There has been a gradual lowering of the water plane in the agricultural area for the last twenty years and testimony was presented to show that during the last ten years the ground water level has fallen on an average of thirteen to eighteen feet. The rights of the users of water by this method are as truly prior and vested as are the rights of those who divert from a stream on the surface and such right owners are entitled to the same degree of protection against subsequent appropriators. Just what portion of the water pumped from the underground basin is furnished from the Mokelumne River is not closely known, but certainly some of it is furnished from the Calaveras River, Bear Creek and Dry Creek.

While the users of water from an underground basin may be entitled to such replenishment of the basin as would occur under natural conditions this is the extent of their right. They cannot require that in addition to such replenishment the water levels be artificially raised or that the natural regimen of the waters of the stream be not interfered with.

While the amount of percolation from the Mokelumne River into the surrounding gravels which is pumped out for use is an important item still it is ap-

parent that it is only a comparatively small percentage of the available water supply of the Mokelumne River, and when combined with that used directly from the river for irrigation the amount is relatively still small.

In this connection it is incumbent upon permittees who have received a permit to divert unappropriated water to secure such supply in a manner which will not be to the detriment of the owners of prior rights to water from the same source. While so far as interests already discussed are concerned there is normally without question a large amount of unappropriated water in the Mokelumne River, this does not mean that any applicant receiving a permit for any portion of this can divert the same without arranging for full protection for the prior rights and in the case of users from this underground basin the water level in which is receding, this means in effect that the natural percolation must not be diminished.

Use for Irrigation in the Delta. As heretofore pointed out the owners of some 66,000 acres of land in the Delta area are record protestants against upstream diversion and use for other than power purposes, however, this area is only a part of the 260,000 acres of irrigated land which receives its water supply from the common supply--such supply being furnished by all the rivers tributary thereto including the Sacramento, San Joaquin and Mokelumne.

The waters of the Mokelumne River are not unappropriated insofar as rights to them for the irrigation of land in this Delta area may exist. It is concluded however, that such present rights are very limited in extent for the following reasons. The average irrigation season is approximately the period April 1st to October 1st, during which time normally about 68% of the runoff of the Mokelumne River occurs, the remaining 32% coming in the non-irrigating months. During the irrigation months of April, May and June 61% of the total flow is discharged, leaving only 7% for the balance of the irrigating season,

the months of July, August and September. Records of stream flow clearly show that normally in April, May and June there has been an excess of water available to the Delta for its irrigation needs from the other rivers also supplying the channels, therefore the water of the Mokelumne is not normally needed at this time for this purpose.

During the remaining irrigation months when only 7% of the total runoff occurs, the flow has been in past years largely or entirely diverted by the irrigators above whose uses have been heretofore discussed. In an average year the Stockton and Mokelumne Canal diverts all the water of the river at its point of intake after about July 15th or as soon as the flow at that point falls to the capacity of its diversion. This condition has existed many years without legal objection so far as is known on the part of the Delta. From an examination of available records it appears that at any time in the past during the irrigation season when water from the Mokelumne River proper (other than leakage through the Stockton Canal dam, return flow, etc.) has been available for this area, there was also sufficient water present for its irrigation needs from other sources, this conclusion not being limited to average or normal years.

The riparian right situation insofar as this area is concerned even if we concede that riparian rights inhere in lands bordering upon tidewater and that the lands of the Delta are mainly riparian, cannot be said to materially enter into this question of whether or not there is unappropriated water available to applicants. If during all but three months of the year, an abundance of water will remain for the lower irrigators irrespective of these proposed appropriations and if during said months the Delta has for many years received no appreciable supply from the Mokelumne over and above return waters from upper irrigators it is entirely unreasonable to deny these proposed appropriations upon the basis that Delta irrigation will be interfered with.

Control of the Salinity problem however is another matter. During the last few years of the present dry cycle which has been in progress since 1916, salinity has become a distinct menace in the lower islands. As the fresh water supply entering the channels diminishes in the late summer, salt water creeps up into the Delta itself. This has occurred to such an extent that it has been necessary to cease irrigating in some of the more exposed tracts. The gravity of this situation is not to be minimized and warrants the immediate and earnest consideration of all concerned--landowners, public officials and general public in devising and adopting an equitable and economic plan for its solution. The effect upon this salinity condition of a diversion from a tributary stream such as the Mokelumne would depend on several factors. Since the pollution is at a maximum in the late summer and fall any subtraction from the inflow at this time would increase the effect. On the other hand, storage of water in the winter and its later release down the channel after having been used to generate electrical power, would be a material benefit. As irrigation use in the watershed has a certain return flow, it would not be as harmful as diversion from the watershed such as proposed by the East Bay District. The very large winter and spring flow passing through the channels to the Pacific Ocean has the effect each year of pushing the salt water back out of Suisun Bay, through Carquinez Straits and of freshening San Pablo Bay, and it is therefore the contention of the Delta that even a winter diversion of the waters of tributary streams is detrimental. Since the advance made by the salt water into the channels during the irrigating period depends among other things on its position at the beginning of that period, and since the retreat depends on the quantity of water flowing out, this contention is at least theoretically correct. Whether or not a given diversion would be of practical effect would depend on all surrounding conditions, such as the amount, time and location of such diversion and on whether

or not all or any part of it were later returned to the stream.

The East Bay Municipal Utility District points out in its reply brief that in a normal year the contribution of the Mokelumne River is about 1/42 of the total of the waters of the Sacramento and San Joaquin drainage basins and the amount that the District proposes to divert is approximately 1/168 of such total. In a dry year this relation would of course be changed and the diversion would be relatively more important.

Returning to the question of unappropriated water if it were held that the waters of the Sacramento and San Joaquin basins had been appropriated to the extent necessary to prevent the incursion of saline waters into the Delta area, upstream diversion during the period when the salinity condition obtains would be prohibited and diversion to storage or otherwise during the season when the condition does not obtain would be permitted only on the basis that some compensation in the way of later return of some portion of the water so stored be made. Since it would be possible by releasing during the period of stress a small percentage of the waters earlier stored to fully overcome the increase in salinity which would otherwise have resulted from such earlier diversion and storage, and since both these effects should be susceptible of at least approximate engineering analysis it would be possible for each applicant for the storage of waters tributary to these channels to release at the proper time an amount of water sufficient to overcome any effect which his earlier diversion to storage might have had on the salinity condition in the Delta.

However, it has not been held that water has been appropriated for the purpose of restraining the incursion of salt water or that this is an incident of a riparian right, on the contrary, a right to saline protection has been definitely denied to the Town of Antioch as an appropriator. There-

fore it is believed that the Division has no choice but to declare the waters of the Mokelumne River and other streams under consideration unappropriated insofar as the control of the salinity question is concerned.

We are not unmindful of the contention that the case of Antioch v. Williams, 188 Cal. 451 is inapplicable to the claims of a riparian owner to salinity protection as a part and parcel of his riparian right and to the contention that a riparian right inheres in tidewater lands and that the Delta protestants are riparian owners and not mere appropriators. However, the supreme court treated the Antioch case as one of "unprecedented conditions" requiring original treatment and under the reasoning of that opinion we feel that the supreme court has very clearly indicated that saline control is a new and unprecedented condition in the law of waters and that the established canons of law are inconclusive and must yield to the exigencies of the time and place involved. Those exigencies were deemed inconsistent with a demand for saline protection and in our opinion saline protection is as foreign and as novel to the riparian doctrine as to the appropriative doctrine. It appears that the appropriator in the Delta needs saline protection just as much as does the riparian user and that if the one is not entitled thereto neither is the other. But in any event relatively a small amount of the total available supply which is unused for irrigation is required for saline protection and there is at least over and beyond that necessary for saline control if properly handled a vast quantity of water here available.

The condition on Calaveras River, Esperanza Creek, Dry Creek and Willow Creek with regard to unappropriated water is analogous to that on the Mokelumne River and need not be discussed in detail. The protest of the

Sierra Blue Lakes Company does not lie against these streams. The amounts of water produced by their watersheds has been estimated in Section II of this opinion. There is very little runoff in these streams after July 1st, as they drain watersheds comparatively low in elevation and are therefore flashy in character without sustained summer flow.

The use by direct diversion from these streams is discussed in Section III and shown to be small compared to the water crop. The situation with regard to underground waters and the claims of the Delta both with regard to surface irrigation and salinity control is as outlined for the Mokelumne River.

SECTION VIII. THE EAST BAY MUNICIPAL UTILITY DISTRICT PROJECT

A description of the projects included in the hearing and which are now under consideration and the general position of the protestants has been heretofore set forth. A brief resume' of the nature and extent of the authority and procedure of the Division of Water Rights in passing on applications to appropriate has been included and the doubtful points of legal interpretation of Section 20 cleared up as far as necessary to pass upon the applications before us. It has also been definitely concluded after taking into account prior rights and all classes of protests on this point that a very large amount of unappropriated water is available in the Mokelumne River to satisfy some or all of these applicants. It now remains to give attention to the numerous protests other than those alleging lack of unappropriated water; to apply the governing principles hereinbefore set out to the various applications and projects in the order of their respective priorities and to arrive at the logical conclusions in each case.

The municipal application of the East Bay Municipal Utility District, Number 4228, is under the conclusion of Section VI of this opinion, first in priority of the applications before us. Under this filing applicant proposes to develop a municipal water supply from the Mokelumne River for the said District, the present population of which is given as 600,000. Applicant proposes an immediate diversion of 50 million gallons daily and an ultimate diversion about 50 years hence of 200 million gallons daily. The plans include the immediate construction to ultimate capacity of a large storage reservoir at the Lancha Plana site, some twenty-five miles east of Lodi on the Mokelumne River and about eleven miles downstream from the existing Electra Power Plant of the Pacific Gas and Electric Company.

A bond issue of $39,000,000 has been voted by the District for the express purpose of bringing in water from the Mokelumne River as a municipal

supply, engineering plans and cost estimates covering the work have been made, contracts prepared, bids received and on the western section of the conduit line, construction has actually started in the drilling of tunnels and the laying of pipe. Applicant states that the letting of contracts and the commencement of work thereunder on the eastern section, including the storage dam, await only the granting of State and Federal permits for the use of public waters and lands essential to the project. Conduit easements or rights of way and reservoir lands must be secured from private parties either by agreement or condemnation and the use of such necessary lands as are part of the public domain can only be obtained by license from the Federal Power Commission.

Applicant takes the position that permission on the part of the State to make use of unappropriated water is legally a prerequisite to its initiation of court proceedings to obtain use of or title to private lands and properties. The Federal license is necessary before work on the storage dam, the main feature of this part of the project, can be started, as the site for said dam happens to be upon unentered United States land. The Federal Power Commission does not issue a license on a project involving the appropriation of water until the proper authority to use such water has been secured, therefore the State permit is thus a prerequisite to the occupancy for construction purposes of public lands by applicant. While it is true that it is the application for power use rather than that for municipal which is of greatest importance in this connection and as will be pointed out later the power application cannot be acted upon at this time, it is none the less a fact that State action on the water applications must precede federal action on land easements.

Under the reasoning of the preceding sections applicant's municipal filing is entitled to the earliest priority of the applications awaiting action.

There is unappropriated water available, applicant is ready and anxious to proceed, is financially able to carry out the plans set forth, but State permission for the use of water is necessary before Federal easements can be obtained and is stated by the applicant to be necessary before other lands and properties can be acquired.

So far as these matters are concerned nothing stands in the way of the issuance of a permit for municipal purposes to the East Bay Municipal Utility District. A large number of protests on various grounds have been presented and vigorously pressed, however, and some protestants have gone so far as to suggest restrictions and conditions which they feel should be placed in any permits issued the East Bay Municipal Utility District.

The most sweeping objection and one which has been widely voiced from the earliest time that it appeared that the District planned to secure water from the Mokelumne River watershed is that municipalities on San Francisco Bay should not be allowed to divert water from the San Joaquin or Sacramento drainage basin for municipal use as long as other supplies are available even though at increased cost. The contention is that applicant should acquire its water supply from the Eel River where there is an excess over the possible future agricultural needs and not deprive the interior valleys, where there is a deficiency for future needs, of their only supply.

This viewpoint is not limited to the protestants in the Mokelumne River case but has been brought out in connection with other diversions and on other streams. The main feature of the comprehensive State plan being developed to provide for the complete utilization of California's water resources is the movement of water southward from the excess supply in the North to remedy the deficiency in the South. Applicant's water supply project,

proposing a diversion from the interior valley to the coast, is not in consonance with this plan but would be were water from the North to be brought in. Reasoning along this line we cannot question the theoretical superiority of the state wide viewpoint that municipalities around San Francisco Bay should obtain their water supply from the streams of the North. However, the authority and discretion of the Division of Water Rights do not extend to questions of public policy of such broad scope and in the instant case the Division is limited to considering this application of the East Bay District to appropriate the waters of the Mokelumne River.

Another broad general ground of objection on the part of the local interests is that applicant is seeking to appropriate water to provide a municipal water supply sufficient for more than fifty years. It is contended that the District should be limited to the diversion proposed in its first unit only and that it should re-apply for subsequent enlargements thus putting it on an even basis with other appropriators and not reserving to applicant rights to water fifty years into the future to the disadvantage of other uses which may grow up within said time. As in the preceding case there appears to be merit to this contention. It would hardly be possible for a local agricultural development to anticipate its needs so far into the future and successfully withhold water supplies for that length of time. However the Water Commission Act in Section 20 clearly contemplates the appropriation by municipalities of water in excess of the existing municipal needs therefor and the plans and future allowances of applicant do not seem unreasonable when compared to other municipal water supply projects of similar magnitude. Section 20 of the Act also procides for the temporary use of the excess of such permitted appropriation and the later recapture of such temporary appropriation after compensation arrived at by agreement or eminent domain proceedings.

By some protestants the Division is pressed to reserve jurisdiction as it were and to issue permits subject to a general and indefinite conclusion, to-wit: that as adjudications, investigation and studies in the future shall indicate, the Division will from time to time impose conditions to protect vested rights and the general public welfare. We can find no authority within the Water Commission Act for such a reservation of jurisdiction and none is cited by the proponents of such withholding of authority. If it is believed by the parties affected that the facilities and experience of the Division equip it to work out advantageously questions of conflict which may come up and if future conditions or practices develop an injury to the protestants which they deem in violation of their rights it is suggested that court action can then be instituted to ascertain and determine the relative rights of all parties and such suit can be referred to the Division for investigation and report as referee as provided for in Section 24 of the Water Commission Act.

It is urged that the District be directed to acquire the properties of the East Bay Water Company which at present serves the cities within the District, that all local supplies of this company be completely developed, that no water from the Mokelumne River be substituted therefor, and that Mokelumne River water be not used in competition with the East Bay Water Company by the District. There is no authority within the law whereunder the Division of Water Rights is authorized to compel an applicant to forego one source of unappropriated water for another source. If there is unappropriated water available from the source applied for there is no discretion or authority vested in the Division to compel acquisition by purchase or otherwise of other possible sources. It is pointed out, however, that under the preferred priority upon which the District rests this application the use of water is limited to municipal use within the District and that the substitution of water obtained from the Mokelumne River under this priority for local supplies

sold or disposed of to non-municipal use is in our opinion unlawful and if so could be restrained if attempted.

A definite restriction that storage be prohibited between July 1st and November 15th and at no time when the flow would be less than 375 cubic feet per second is asked. It is the practice of the Division in issuing permits to limit the season of diversion to that in which there is ordinarily unappropriated water available and the period commonly designated in Mokelumne River permits will be applicable in this case. Whether or not storage can be collected at a time when the flow is less than 375 cubic feet per second is dependent upon the extent of vested rights at such time.

There are many other protests on file and other restrictions urged which are aimed at the protection of prior rights or the maintenance of a certain flow of water in the river. The permittee in this case will be under the clear obligation of amply safeguarding prior rights, and it will be much more efficient and less expensive for permittee to provide complete protection than to withstand ensuing litigation and damages if he does not. The exact extent of prior rights the Division can not determine in this proceeding nor the compensation due any such which may be affected.

The engineers of the District estimated 70,000 acre feet of water per annum was the limit of the amount required to care for prior vested rights for irrigation use east of the Delta and then doubled this amount and concluded that there was sufficient unappropriated water remaining beyond this allowance to make their project feasible. It is difficult if not impossible with our present knowledge of conditions to make a close estimate in this matter but as brought out in Section VII hereof there is no doubt but that there is an ample supply of unappropriated water available after making due allowance for all who have any equitable claim of present right to supply from Mokelumne River; and it is not the function of the Division to impose upon a present appropriator the burden of providing assistance to those appropriators who follow.

In connection with one class of vested rights, namely the use of water pumped from the underflow which is fed from the Mokelumne River, applicant, as its case was presented at the hearing, was apparently considerably in the dark. The position was at that time taken that the Mokelumne River is not a source of supply of the underground basin lying contiguous thereto but that it acts as a drain for this region instead. In the brief filed subsequent thereto applicant has apparently modified this contention but insists that the amount of percolation is small. We wish to point out for applicant's benefit that, while as concluded in Section VII of this opinion there is a vast amount of unappropriated water available in the Mokelumne River after the rights of the underground users are considered, such rights do exist, are entitled to protection and on account of the difficulty of an accurate engineering analysis are in a position to insist on generous treatment and to materially obstruct applicant's plans in case this is not provided for. If applicant's allowance for vested rights included nothing for the underground users, such estimate was clearly erroneous. While any permit issued is of course subject to all classes of vested rights and no specific mention thereof is necessary, as it appears that applicant is, or was at the time of the hearing not fully cognizant of the responsibility which he as a permittee must accept toward the underground water users it is concluded that it will be advisable to include in such permit as may be issued a special clause pointing out such responsibility.

A general ground of protest and one on which many restrictions are suggested is the demand of the valley interests that the East Bay District contribute to the cost of storage for the future agricultural development of the surrounding country and for flood and salinity control. It so happens that there exists on Arroyo Seco just north of the Mokelumne River a site upon which a reservoir could be constructed of large capacity and at relatively low cost and the plans of applicant as first announced included the construction of this

reservoir as a means of providing for prior and vested rights to water from the Mokelumne. Whether or not the District will carry out this part of its plans remains to be seen.

It appears physically possible and also that it would be feasible and practical from an engineering and economic standpoint to construct and operate such a reservoir at Arroyo Seco as would amply protect all present vested rights dependent upon the lower Mokelumne River, control Mokelumne River and Dry Creek floods, practically control the salinity problem in the Delta and provide an irrigation supply for a very large block of arid lands east of the present irrigated area on the valley floor.

If the East Bay District should in the course of the development of its municipal water supply from the Mokelumne River bring about or provide the initial means of bringing about the construction of this reservoir it would be a benefactor of this area. It is to be hoped that such result will ensue.

In connection with the protests filed by present users of water from the Mokelumne and their suggestion that the applicant should contribute financially to the construction of the Arroyo Seco Reservoir it appears that, while the leaders of such protestants may appreciate the value of such storage, of the maintenance of ground water levels, of the bringing in of a gravity water supply and of the extension of irrigation in the territory, most of the actual landowners are apathetic. Although this area is as favorably situated as any in the State as to soil, climate, location, and water supply, there appears to be no real desire for the extension of irrigation, either in the section at present developed around Lodi, or in the grain and pasture lands to the east. The East Bay District has publicly announced a desire not to hinder the development of the back country and a willingness to cooperate with the valley in some

plan such as the building of Arroyo Seco reservoir, which would relieve the District from further expense in providing for prior rights and be of immense benefit to the entire valley below. The landowners have remained largely indifferent however, both to the need of protection of their present rights and to the opportunity of constructive planning for the future, the most visible evidences of such lack of interest being the recent rejection by a large majority of a proposed protective district sponsored by a few leaders and the difficulties encountered by the Stockton Mokelumne Canal Company in its effort to secure enough consumers to enable it to continue as a public utility. The powers and limitations of the Division of Water Rights should be understood by the residents of this area. It is impossible for the Division to undertake to secure for them such benefits not now in their possession as they request. In the face of a continuance of their own attitude of unconcern the Division can only endeavor to safeguard to the best of its ability the present vested rights, and cease contemplation of the great possibilities in the situation.

The construction of the Lancha Plana Dam is an important item in the consideration of the Arroyo Seco storage project since the Lancha Plana structure when built to the height contemplated by the District will act as a means of diverting the water of the Mokelumne River into the Arroyo Seco watershed. The availability of the Lancha Plana dam as such means of diversion is an asset of great value to the territory which must some day be dependent upon the Mokelumne River for an irrigation supply. Likewise this dam might conceivably be advantageously used as a diversion for water to the southward. At the hearing it was stipulated by applicant that the use of the Lancha Plana Dam as a means of diversion for water as it might be required in the future either North or South

would be allowed to other interests without cost insofar as this did not interfere with applicants own uses and purposes. As a result of this stipulation such a condition will be inserted in the permit under consideration.

Much is urged as to conditions relative to reservoir construction and regulation and to insure flood control. The application before us if approved and carried to completion will aid and better flood conditions but it was filed and is being considered for the appropriation and beneficial use of water only. 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 the jurisdiction of the Division to impose conditions relative to flood control.

It is requested by protestants that cyclic storage of water be prohibited. We fail to see how cyclic storage subject to vested rights could be detrimental to lower users and on the contrary if for power purposes it would probably result to their advantage. In any event there is no authority under the Water Commission Act to prohibit the same.

It is asked that an adequate limitation be adopted to protect Delta lands from saline conditions brought about by salt water incursion from the ocean. This subject is fully covered in Section VII of this opinion.

While the foregoing does not discuss specifically all of the protests which have been filed versus the municipal application of the East Bay District the principal grounds of objection by the various groups have been covered. The conclusion is that permit should be issued to the applicant to make use of the waters of the Mokelumne River for municipal purposes as described in the application, subject to the usual limitations as applied to permits on the Mokelumne River, subject also to special limitations relative to the use of the Lancha Plana

Dam as a means of diversion of water either to the North or South and to the safeguarding of the existing rights of the users from the underground water basin of the Mokelumne River.

During the progress of the hearing on the municipal application, Number 4228, the District filed with the Division a new application, Number 4768, requesting the use of 375 second feet of water through a power house located at the foot of Lancha Plana Dam. It was stated by applicant that it was the intention to use through this power plant such of the waters applied for in the municipal filing as was in excess of immediate municipal needs, the water which applicant would be required to turn down the stream for the use of vested rights, and such unappropriated water as would be available. The application was included in the hearing by stipulation of all parties present and was thoroughly considered. It has since been completed as to form and regularly advertised as required by law. The advertising period has not yet expired and it is impossible to tell whether or not a hearing will be required precedent to action. Discussion of the effect of the operation of such a power plant and of any protests directed specifically against this application is therefore not in point at this time.

The East Bay District has also on file an application for agricultural purposes, Number 4229, proposing the irrigation of the entire territory from Galt to Stockton. It is incomplete in a great many respects and as applicant stated at the hearing that no activity was contemplated thereunder, this application should be rejected.

SECTION IX. THE J. W. PRESTON, JR. PROJECTS

This applicant's plans are divided into two projects--the Amador and the South Mokelumne. By referring to the map on page 8 it will be seen that the Amador project includes the storage and diversion of the water of the North Fork of the Mokelumne by means of Salt Springs Reservoir, the use of such water through the Tiger Creek power house, its re-diversion immediately below and re-use through a new generating station near the Electra Plant. Also storage in Volcano Reservoir on Sutter Creek is in contemplation, the plan being to divert excess waters of the Mokelumne which can not be either used directly or stored at Salt Springs by means of a tunnel to Volcano Reservoir for storage and later to carry the water so stored back through the same tunnel and pass them through the lower power house. The plan also contemplates the use of these waters for agricultural purposes in the area delineated on the map, the proposed Mehrton Reservoir some distance below Lancha Plana to be used for regulation of such water for the irrigation draft.

Permits covering the entire power development with the exception of the Volcano unit have already been issued to the applicant and under an agreement with the Pacific Gas and Electric Company it is understood that construction of the items under permit will start at an early date. This leaves for consideration under the Preston Amador power project only Application 2534 covering storage in Volcano Reservoir.

This part of the project is also included in the agreement with the Pacific Gas and Electric Company, and it appears that the latter concern is undecided as to the advisability of proceeding with the Volcano construction, but that their decision on this point will be arrived at shortly. Therefore

action on Application Number 2534 will be withheld for a reasonable time to allow applicant to submit tangible evidence that construction of the project will result in case permit is issued.

The agricultural feature of the plan can not be considered as ready for final consideration or approval for the reason that the applicant can not show any desire for the use of the water on the part of the lands included in the filings. There is no reason to believe that construction work and use of water for agricultural purposes would ensue were such permits granted, on the contrary the lands delineated by the applicant as the areas to be served will admittedly be very slow of development on account of the fact that the owners thereof are conservative about bringing these lands under irrigation. There is at present practically no demand for such an irrigation project as proposed by the applicant and a well defined sentiment against any irrigation district or project proposing a gravity supply of water exists. It has been stated that one of the chief reasons for the rejection by the residents of this region of a county water district was the fear that such district might attempt to vote bonds for the purpose of bringing in a water supply.

However, if applicant can develop one or more irrigation projects desiring the use of this water there is no reason why he should not be allowed to do so and it may be considered that the construction of the storage reservoir for power purposes is a manifestation of diligence on the agricultural filings since such filings contemplate the use of water primarily stored for power purposes.

Therefore the applications of J. W. Preston, Jr. for agricultural purposes under the Amador project will not be acted upon at this time but will be withheld for a reasonable period in order to allow applicant to develop plans whereby the application of any water granted to beneficial use within a reasonable period appears probable.

The South Mokelumne project likewise contemplates both power and irrigation. However, it is of a different status from the Amador project in that no contract has been made for the sale of the power. It appears that the project is not attractive from the power standpoint, this being due primarily to the fact that the Middle and South Mokelumne Rivers are of small and uncertain water supply as compared to the North Fork of the River. The applications covering the South Mokelumne project were acquired by J. W. Preston, Jr. from the Mokelumne River Water and Power Company and are of early priority, therefore it is incumbent upon applicant to get these filings ready for issuance of permit at an early date or cease to stand in the way of later applicants. The irrigation phase of the South Mokelumne project is as described for the Amador project with this difference, that no diligence can be assumed on the agricultural applications through construction of a power reservoir. Therefore action will be withheld for the time being upon the Preston South Mokelumne project applications and a further showing required of applicant in the matter of his ability to proceed should permit be granted.

SECTION X. THE STEPHEN E. KIEFFER PROJECT

The plans of this applicant include the use of the waters of the Mokelumne River, Dry Creek and Willow Creek for irrigation, municipal purposes, power, and saline control. In brief, the plan proposes the construction of the Lancha Plana Reservoir and the supplying of the East Bay Municipal Utility District and the cities and towns enroute thereto with a municipal water supply, the diversion of the excess waters of the Mokelumne, by means of the Lancha Plana Dam, to the Arroyo Seco Reservoir where they together with the runoff of Dry Creek would be stored. A power plant to utilize the fall between Lancha Plana Dam and the Arroyo Seco Reservoir is proposed. Said reservoir is to be used for flood and salinity control and to furnish an agricultural supply for the areas shown on the map on page 8 as coming within the Kieffer project.

It is apparent that applicant can not proceed with the municipal feature of his project so far as the East Bay District is concerned since the District has itself developed its own plans for securing a water supply. Furthermore the priority of the District to store water at the Lancha Plana site is by the conclusion of Section VI hereof superior to that of this applicant. Applicant is reported to have control of a large part of the reservoir site which the District will need in its project, however, this is a matter for adjustment between these two parties and not of great importance in connection with water rights, since the District enjoys the right of eminent domain and has announced its intention of securing the needed equities by this method if no other is acceptable.

It is not probable that applicant's plan to furnish other cities enroute to the East Bay District with municipal water is feasible if the District itself is eliminated, however, applicant's position on this point is not clearly brought out. It is the practice of the Division in considering two opposing applications covering the same project to withhold action on the

filings of the unsuccessful applicant until it becomes reasonably apparent whether or not permittee will consummate the appropriation proposed by him. If it becomes apparent that the successful applicant will consummate the appropriation, the application of the unsuccessful applicant is rejected, and if it appears he will not, the original permit is revoked and the unsuccessful applicant given a permit and an opportunity to proceed.

Therefore, action on the municipal application of Mr. Kieffer will be withheld for a reasonable time.

With the elimination of the municipal phase of the Kieffer project the other uses do not appear to present the probability or feasibility of construction of the works and use of water in case permits were granted. The proposed power house between Lancha Plana spillway and Arroyo Seco reservoir is problematical as to feasibility even if Arroyo Seco was built on account of the fact that water would flow through this spillway for only a few months of the year. It remains to be shown that this power development is feasible or that it will be constructed by the applicant even if it is feasible.

The flood control and salinity control features do not hold out much promise of financing the Arroyo Seco project at this time. The agricultural phase of this project is practically the same as for the Amador project of J. W. Preston, Jr., as it is proposed to irrigate about the same lands as specified by that applicant, and both projects are of the same present status.

One class of protest not yet touched upon is that concerning the flooding of lands in the Arroyo Seco reservoir site which would occur by reason of the construction of the Arroyo Seco dam. The owners of these lands would of course have to be compensated by any one proposing to utilize this site. This is a subject for agreement between the

parties or for reference to the courts in case an agreement cannot be reached.

It is concluded that while no part of the Kieffer project is ready for approval, it is proper to withhold action on the various applications in order to allow applicant to develop plans whereby part or all of the project may be advanced to the point where final consideration is possible.

Many considerations remain to be worked out between the applicant Kieffer and the East Bay Municipal Utility District. Also various issues will arise as between the said District and the applicant J. W. Preston, Jr. These questions can be worked out between these parties subsequent to the issuance of the permit to the East Bay Municipal District.

It is, therefore, concluded from the reasoning heretofore that the Division should grant to the East Bay Municipal Utility District a permit for municipal purposes under its application 4228, should reject the District's application No. 4229 for agricultural use, and should for the present withhold action on the power application (No. 4760) of the District and all filings of J. W. Preston, Jr., and S. E. Kieffer.

On February 14, 1925, the East Bay Municipal Utility District filed an amended application which would extend the season of collection of storage from the period January 1st to August 1st to a period January 1st to December 31st. It has been the practice of the Division heretofore not to allow such an amendment unless the applicant showed immediately after filing that an error was made in the original application. This practice was adopted because of the feeling that a water right is measured not alone in terms of rate of flow and volume, but in time of diversion as well and that therefore an increase in season would con-

stitute the initiation of a new right which could in any case have a priority only as of the date of the attempt to amend. Such being the case if the amendment were accepted it would create a split priority - the original application having a priority as to its date of receipt in the office of the Division and the amendment having a priority as of its date of receipt. From a practical standpoint it has seemed proper therefore that an applicant seeking to extend his season of diversion should do so through the instrumentality of a new application. This consideration does not enter in the present case because both the application and the amendment may be considered to have a preferred priority under the provisions of Section 20 of the Water Commission Act. The amendment of February 14, 1925, extending the season of diversion to the period January 1st to December 31st has therefore been accepted.

O R D E R

Applications numbered 1462, 1477, 1478, 1479, 1480, 1481, 1482, 1938, 1964, 2099, 2408, 2409, 2410, 2534, 2535, 2997, 3348, 3469, 4228, 4229, 4737, 4768 for permits to appropriate water having been heretofore filed with the Division of Water Rights as above stated, protests having been filed, a public hearing having been held, and the Division of Water Rights now being fully advised in the premises

IT IS HEREBY ORDERED that Application Number 4228 of the East Bay Municipal Utility District be approved subject to the usual terms and conditions and the following special terms and conditions to wit:

1. The amount of water appropriated shall be limited to the amount which can be beneficially used and shall not exceed 310 cubic feet per second for direct diversion from January 1st to December 31st of each season and 217,000 acre feet per annum for storage to be collected from about October 1st to about July 15th of each season when there is unappropriated water available at the proposed point of diversion, the season of unappropriated water being in years of normal flow from about December 1st to about July 15th, provided however that combined diversions from natural flow and storage shall not exceed the equivalent of 310 cubic feet per second or approximately 200,000,000 gallons per day.

2. No water shall be diverted under this permit for other than municipal purposes within the boundaries of the East Bay Municipal Utility District.

3. As the right of the United States to control streams in the interest of navigation is paramount, this permit will in no way hinder the United States if it desires to stop this diversion under claim of its interference with navigation.

4. As there is a possibility that there will not be sufficient water in the Mokelumne River during the latter part of the irrigation season to satisfy all requirements, this permit is issued subject to the express condition that the use hereunder may be regulated by the Division of Water Rights during such periods of water scarcity to the end that such use will not interfere with rights under prior applications.

5. Permittee shall construct Lancha Plana Dam and spillways in accordance with such final plans as approved by the Division of Water Rights so that the same may be used to divert water to the northward into the Jackson Creek Watershed or south-

ward into Mokelumne River. The use, however, of said dam and appurtenances by permittee for its municipal supply herein approved shall be paramount and superior to said other use thereof. Any water in excess of that required for the needs of permittee for said municipal supply, which may be so lawfully diverted at said dam into said Jackson Creek watershed or southward into Mokelumne River may be so diverted upon application to and approval by the Division of Water Rights of the State of California without compensation to said permittee for the use of said dam and spillways. Anyone so diverting shall save the permittee harmless from any damage resulting therefrom.

6. In order to determine the extent of prior vested rights to the use of Mokelumne River water which percolates into or supplies underground basins permittee shall conduct such a study of the replenishment of and draft upon underground storage supply from the Mokelumne River as to determine with reasonable certainty the effect of the proposed diversion and storage upon the underground supplies and shall file such information as a matter of public record with the Division of Water Rights from time to time and at any time upon demand by the said Division.

7. Permittee agrees to negotiate with the proper state agencies regarding modification of the plan or operation of the Lancha Plana Project to the end that the project may conform as near as practicable with such coordinated general plan of flood control and other water development as may be formulated by the State.

IT IS FURTHER ORDERED that Application Number 4229 of East Bay Municipal Utility District be cancelled and that action upon Application Number 4768 of East Bay Municipal Utility District and Applications 1462, 1477, 1478, 1479, 1480, 1481, 1482, 1938, 1964, 2099, 2534, 2535, 2997 and 3469 of J. W. Preston, Jr. and Applications 2408, 2409, 2410, 3348 and 4737 of Stephen E. Kieffer be withheld until further order is entered.

Dated at Sacramento, California, this seventeenth day of April, 1926.

Edward Hyatt

(Edward Hyatt, Jr.)
CHIEF OF DIVISION OF WATER RIGHTS