

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

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In the Matter of Applications 2467, 2468, 2469, 2470, 2479
2480, 2481, 3441, 3442, 3443, 3444, 3445, 3446 and 3447 of
the City of Sacramento to appropriate from Gerle Creek,
Rubicon River, Little South Fork of Rubicon River,
Silver Creek and South Fork of Silver Creek,
Tributaries of American River, for
Municipal and Power Purposes

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DECISION NO. A 2467, 2468, 2469, 2470, 2479, 2480, 2481, 3441
3442, 3443, 3444, 3445, 3446, 3447 D 163

Decided *August 8, 1927*
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APPEARANCES AT HEARING HELD February 21, 1924.

For Applicant:

City of Sacramento -

Harrison C. Bottorff, City Manager
Robert L. Shinn, City Attorney
Albert Givan, City Engineer
Edwin D. Hayward of City Engineer's
Office.

For Protestants:

Pacific Gas & Electric Company -

P.M. Downing, Vice President in Charge
of Electrical Construction and Opera-
tion and L.M. Sussman, Attorney.

North Side Water Users Association T.L. Chamberlain (Attorney), George B.
Threlkel (President), and C.R. Sharp
(Director).

Truckee River Power Company -

Messrs. T.W. Dahlquist and R.W. Palmer
of Goodfellow, Bels, Moore & Orrick,
Attorneys, San Francisco.

Western States Gas & Electric Co. -No appearance.

EXAMINER: Edward Hyatt, Jr., Chief of Division of Water Rights.

O P I N I O N

Description of Project.

These applications were filed by the City of Sacramento to appropriate from Gerle Creek, Rubicon River, Little South Fork of Rubicon River, Silver Creek and South Fork of Silver Creek for municipal and power purposes. The essential features of the several applications considered at the time of the hearing on

February 21, 1924 are shown in the accompanying tabulation of applications and the essential features of the project itself are shown on the accompanying map. Briefly stated a coordinated power and municipal supply development was then proposed involving direct diversion and storage along a route commencing at Upper Rubicon River and leading through Rock Bound Lake, Buck Island Lake, Loon Lake, Gerle Creek, Little South Fork of Rubicon River and Union Valley on Silver Creek, whence after receiving direct diversion and storage from Ice House Reservoir on South Fork of Silver Creek the combined appropriations were to pass through Big Bend Power House, pick up additional water from Silver Creek, pass through Brush Creek and Coloma Power Houses and be conducted thence to the City of Sacramento and adjacent territory for municipal purposes.

During the period February 1924 to date the project passed through a developmental stage in which there were numerous major changes in plan including abandonment of the Gerle Creek, Rubicon River and Little South Fork of Rubicon River phases of the development and the substitution of Webber Creek for Coloma Power House.

The Federal Power Commission having denied approval of applications to that office for necessary easements on those sources Applications 2479, 2480, 2481, 3445, 3446 and 3447 to the Division of Water Rights involving appropriations on Gerle Creek, Rubicon River and Little South Fork of Rubicon River were withdrawn by the City of Sacramento on November 19, 1924, and under date of July 11, 1927, the City further advised the Division that if and when Applications 2469, 3441, 3442, 3443 and 3444 were approved Applications 2467, 2468 and 2470 might also be considered withdrawn and therefore be cancelled.

The approval of only five out of the total of fourteen applications considered at the hearing February 21, 1924 is therefore now sought by the applicant. Briefly stated these applications--as the result of amendments since the hearing--now involve the following:

Under Application 2469 there is sought for municipal purposes 309 second feet of direct diversion from Silver Creek and South Fork of Silver Creek, 32,000 acre feet of storage per annum at Ice House on South Fork of Silver Creek, and 58,000 acre feet of storage per annum at Union Valley Reservoir site on Silver Creek, the use to be made in the City of Sacramento and adjacent territory.

Under Application 3443 there is sought for municipal purposes from South Fork of Silver Creek 13,000 acre feet per annum for storage at Ice House and from Silver Creek 107,000 acre feet per annum for storage at Union Valley the use to be made in the City of Sacramento and adjacent territory.

Under Application 3441 there is sought for power purposes from South Fork of Silver Creek 300 second feet of direct diversion and 45,000 acre feet per annum for storage at Ice House and 30,000 acre feet per annum for storage at Union Valley, the place of use to be at Big Bend Power House.

Under Application 3442 there is sought for power purposes from Silver Creek 300 second feet of natural and/or regulated flow to be diverted below Big Bend Power House and to be used at Brush Creek and Webber Creek Power Houses.

Under Application 3444 there is sought for power purposes from Silver Creek at Union Valley 300 second feet and 180,000 acre feet per annum for storage at Union Valley, the use to be made at Big Bend Power House.

Applications Completed, Advertised and Protested.

These fourteen applications were completed sufficiently as to form, were advertised and protests were received and thereafter a hearing upon the protests was held by the Division of Water Rights in Room 707 Forum Building, Sacramento, California, on February 21, 1924. Of this hearing applicant and protestants received due notice and appearances were made as noted above.

Western States Gas & Electric Company protested these applications but a stipulation was executed on December 6, 1923, whereby in consideration of recognition of its rights and a disclaimer on the part of the City of Sacramento of any intention "to interfere with, impair, or otherwise damage any of said rights of said Company" the protest was withdrawn. A copy of the stipulation and a letter withdrawing the protest were filed with the Division at the time of the hearing on February 21, 1924.

The North Side Water Users Association and the Truckee River Power Company protested those applications involving appropriations from Gerle Creek, Rubicon River and Little South Fork of Rubicon River and an appearance and showing on behalf of these protestants was made both at the time of the hearing and subsequently in support of their protests. However the applications covering those phases of the development were subsequently withdrawn as noted above and therefore these protestants are no longer concerned as the project involves the use of water to which they have asserted no claim.

The Pacific Gas & Electric Company protested the applications on account of the interference which might result therefrom with its use of water at the Folsom Power Plant. This company claims a right to the first 1000 second feet of natural flow at the Folsom Power Plant on American River based upon appropriations initiated in 1872 and renewed in 1895 by its predecessors in interest. The applicant did not deny these rights. In fact at the time of the hearing Mr. Robert L. Shinn, City Attorney, stated:

"We would stipulate right now that you (Pacific Gas & Electric Company) have a right to one thousand feet of water at Folsom Dam. We have taken that into consideration at all times."

To this Mr. P. M. Downing, Vice President in Charge of Electrical Construction and Operation for Pacific Gas & Electric Company and its representative at the hearing replied:

"Then we have nothing to quarrel about, Mr. Shinn".

It might be said therefore that all protests to approval of the five applications in which the City is presently interested have been removed. There are however clearly periods of the year when, under normal present conditions, there would be no water available for appropriation under ^{certain of} these applications, a fact which will be discussed later under the subject heading of "Water Supply" etc.

Water Requirements of Applicant

Applicant estimates its future growth in population and water consumption as follows: (See Applications 2469 and 3443, Paragraph 18 and letter received July 12, 1927, File 2469, etc.)

Year	Population	WATER CONSUMPTION		
		Sec.Ft.	Million Gallons per day	Gallons per Capita per day
1930	130,000	50	32.00	246
1935	166,000	61	40.00	240
1940	212,000	75	49.00	230
1945	270,000	90	59.00	220
1950	345,000	110	72.00	210
1955	440,000	135	88.00	200
1960	562,000	165	107.00	190
1965	718,000	200	130.00	181
1970	916,000	245	159.00	173
1975	1,170,000	300	195.00	166
1977	1,220,000	309	200.00	164

The report of the Board of Consulting Engineers of the Sacramento Municipal Utility District (January 1927) cites the fact that in the fifty year period following the time when New York, Chicago and Detroit passed the 100,000 population mark--which is the present approximate population of Sacramento--those cities increased on the average 1,350,000 in population. These are recognized as fast growing cities. In the fifty years following the time when Philadelphia, St. Louis, Boston and Baltimore passed the 100,000 popula-

tion mark they increased on the average 442,000 in population. These are recognized as slow growing cities. Applicant's estimate of its own future growth approaches therefore, but does not exceed, the actual experience of fast growing American cities.

Sacramento today has a daily per capita water consumption of approximately 350 gallons and applicant it will be noted, anticipates a gradual decrease to 164 gallons at the end of a fifty year period. As Sacramento now has practically the maximum per capita consumption of any American City of its size it is probable that either through the introduction of meters or more drastic regulation of irrigation use some reduction may be anticipated. In a project of this magnitude it appears reasonable that a City should anticipate a growth of fifty years. The estimated requirement of 309 second feet or 200 million gallons per day in 1977 which amount is sought for domestic purposes does not appear unreasonable.

The applicant already holds a permit from the Division of Water Rights under its Application 1743 allowing the appropriation of 225 second feet for municipal purposes from Sacramento River at the existing pumping and filtration plant near the confluence of American River. The city is allowed until 1960 to complete this use. In addition to this right the city claims also another right of some 75 second feet under an earlier priority. (See file Application 1743, letter received from Robert L. Shinn, City Attorney, on April 9, 1921). It is apparently the intention to abandon these two earlier rights, except insofar as they may be required for standby service in case of interruption to service from the mountain supply contemplated under Applications 2469 and 3443. (See Report of the Board of Consulting Engineers of the Proposed Silver Creek Development for the Sacramento Municipal Utility District, Sacramento, California, January 1927, pp. 22 and 24). Such being the case it would appear reasonable if these applications for municipal purposes are approved, to insert a clause in the permits explicitly setting forth the declared intention of applicant to utilize the

appropriations now sought as alternative rather than supplementary to the appropriation allowed under Permit 992 heretofore issued upon Application 1743.

The appropriations sought for power purposes under Applications 3441, 3442 and 3444 are intended merely to make available for power uses the regulated flow developed in the mountain areas as it passes on its way along the conduit line toward the City of Sacramento. The amounts which it is sought to appropriate are the same as those estimated for the ultimate municipal supply development, and therefore appear reasonable. In the earlier years of each stage or unit of development of the project it is probable that some water in excess of what will be then needed for municipal supply can be diverted and used through the several power drops proposed--Big Bend, Brush Creek, Webber Creek and Sweetwater Creek--and returned to American River either at the confluence of Sweetwater Creek and American River or above. Any water so returned would be available to Pacific Gas & Electric Company for use at its Folsom Power Plant, but water can be used in the Big Bend Power Plant and Brush Creek Power Plant only of the City without by-passing the American River Plant of the Western States Gas & Electric Company which is now owned by the Pacific Gas & Electric Company.

Water Supply and Availability of Appropriations Sought.

The two municipal applications (2469 and 3443) which the City now seeks to have approved contemplate a diversion of 309 second feet from natural flow of Silver Creek and South Fork of Silver Creek by means of direct diversion, 45,000 acre feet per annum storage from South Fork of Silver Creek in Ice House Reservoir and 165,000 acre feet per annum storage in Union Valley Reservoir of which 58,000 acre feet would come from South Fork at Ice House.

The three power applications (3441, 3442, 3444) which the City now seeks to have approved contemplate a diversion from natural flow of 300 second feet from Silver Creek and South Fork of Silver Creek, 45,000 acre feet per

annum storage in Ice House Reservoir from South Fork of Silver Creek and 210,000 acre feet of storage per annum in Union Valley of which 30,000 acre feet is to come from South Fork and 180,000 acre feet from the main stream.

Some 30,000 acre feet of storage replenishment or roughly 18 per cent is therefore contemplated in Union Valley Reservoir under the power applications --that Reservoir having a proposed ultimate capacity of 165,000 acre feet--but no replenishment is proposed under the municipal applications.

We have only meager records of flow covering the discharge of these two streams at the proposed points of diversion. Records of the Water Resources Branch of the United States Geological Survey which are available for the period October 1, 1924 to September 30, 1926, would indicate the probable normal annual discharge of South Fork of Silver Creek at Ice House may be expected to approach 75,000 acre feet and the maximum annual discharge 165,000 acre feet. Records of the same office for the same period would indicate the probable normal annual discharge of Silver Creek at Union Valley will approach 200,000 acre feet and the maximum annual discharge 450,000 acre feet.

There are no present diversions of importance on the American River at points downstream from these two gauging stations except the American River Power Plant diversion of the Pacific Gas & Electric Company (formerly owned by the Western States Gas & Electric Company) and the Folsom Power Plant diversion of the Pacific Gas & Electric Company near Folsom.

The rights claimed for the American River Plant in the stipulation signed by the City of Sacramento amount to 150 second feet under old appropriations and 280 second feet under Permit 993 heretofore issued by the Division of Water Rights upon Application 1439, or a total of 430 second feet.

As stated above the rights claimed for Folsom Plant of Pacific Gas & Electric Company which the City of Sacramento agreed at the time of the hearing to recognize amount to 1,000 second feet.

In Decision 5214 D 150 of February 15, 1927 the flow of American River at Folsom with relation to the rights of Pacific Gas & Electric Company was considered in some detail. It was concluded that normally Pacific Gas & Electric Company used the entire flow available from about the middle of July to about January 1st. There is no change in the situation since February 15, 1927 and inspection of the records of the Water Resources Branch of the United States Geological Survey would indicate that during approximately the same season the entire flow normally available would be used at the American River Plant under the rights claimed for that plant.

It therefore appears reasonable that the periods for collection of stored waters under these applications should be limited to the period from about January 1st to about July 15th of each year.

Under Applications 3441 and 3444--which propose use of the water for power purposes at Big Bend Power House with return to the stream above either the American River Power Plant or the Folsom Power Plant diversions--there can be no interference with the rights of the owners of those plants by reason of direct diversion for immediate use and therefore clearly no limitation of season is necessary.

Under Application 3442, which involves use at the Brush Creek and Webber Creek plants, a part of the water at least (i.e. any which is not carried beyond in the municipal supply conduit) can be used at both plants and returned above the diversion for the Folsom Plant. All Brush Creek Plant water could be returned above the American River Power Plant diversion but such water as is used at the Webber Creek Plant will of course by-pass the American River Plant.

Diversions for municipal uses under Applications 2469 and 3443 will of course by-pass both the American River and Folsom Plants. Applicant however asks that it be not limited as to season of direct diversion in the permits which are to be issued upon these two applications and in support of its request urges

(1) that the applications are for unappropriated water only subject to vested rights and therefore the permit without any limitation of season cannot be construed to give any right to interfere with prior and existing rights; (2) that municipal use is a higher use than power use and therefore it is within the power of applicant to condemn these two conflicting earlier priorities and (3) that power drops along the proposed municipal supply conduit line of the City will make possible the use of any water so taken from the earlier priorities through 1014 feet of fall at Brush Creek Plant and 676 feet of fall at the Webber Creek Plant in lieu of the present 573 feet fall at American River Plant and 55 feet of fall at the Folsom Plant--a fact which makes it entirely practicable for the City to substitute power generated at its own stations for that which would be generated at the American River and Folsom Plants and thereafter be in possession of the water for municipal use through its municipal supply conduit.

We cannot accept the first argument as a proper one. It has been the established practice of the Division since the inception of the office not to approve an application when there was clearly no water available for appropriation without interference with prior rights. Neither has the Division approved applications where the water was only infrequently available, nor for seasons of the year when it was only infrequently available. It has been the conception of the Division in its administration of the laws governing appropriations that existing rights should be protected insofar as reasonably practicable, and color of right to interfere with the enjoyment of earlier priorities should not be given by the state in its approval of pending applications for the surplus which yet remained. If there was doubt in the matter the Division has given the new appropriator the benefit of that doubt feeling that means were at hand through the courts if need be by which existing rights could be defended against encroachment, but where the case was clear the Division has denied the

application entirely or limited the season of diversion to the period of the year when there was normally water available. In 1923 the legislature amended the Water Commission Act (Section 1b) making the existence of unappropriated water a prerequisite to the issuance of a permit, thereby clearing up any uncertainty as to what should be the policy of the Division on this point.

Applicant does however enjoy the right of eminent domain and the municipal use which it proposes is a higher use than that being made by the conflicting rights. The physical situation is such that by construction of the power plants which it proposes applicant can generate more than sufficient power with the water which it would take from the conflicting rights to replace the power which they could generate with the same water. If applicant proceeds with the project it is altogether conceivable--in fact probable--that a means will be worked out to accomplish some such purpose. The conflicting rights are so well defined by stipulation of the owners and the applicant that applicant will be clearly responsible for any violation thereof. There is also a wide variability in the season when there will be water subject to appropriation. In view of these facts and the avowed intention of applicant to acquire the conflicting rights or compensate the owners thereof it appears in order if and when permits are issued to allow a certain elasticity in the season of diversion from natural flow for municipal uses under Applications 3469 and 3443 and not limit the season otherwise than to indicate when water may normally be expected to be available.

There need be no limitation of the diversion season for immediate use in permits for power purposes because the water may in part at least be at all times used and returned to the stream without interference with present conflicting rights.

The season for collection of storage in all permits should however for reasons noted above, be limited to the season from about January 1st to about July 15th when there is normally water available.

This municipal supply being alternative rather than supplementary to the present rights of the City of Sacramento to divert by pumping at the filtration plant it is felt that the fact should be so noted by appropriate clause in the permits for municipal use.

O R D E R

Applications 2467, 2468, 2469, 2470, 3441, 3442, 3443, 3444 for permits to appropriate water having been filed with the Division of Water Rights as above stated, protests having been received, a hearing having been held and the Division of Water Rights now being fully informed in the premises:

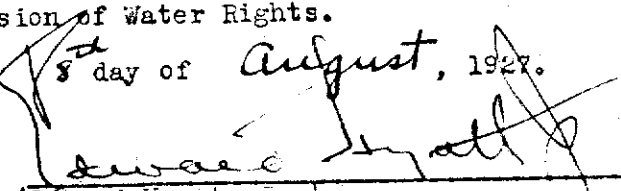
IT IS HEREBY ORDERED that Applications 2469 and 3443 be approved subject to the usual terms and conditions except that the season for collection of storage shall be limited to the period from about January 1st to about July 15th, the season of direct diversion for immediate use shall be limited to the period when there is unappropriated water available which will be during years of normal flow from about January 1st to about July 15th, and the following special term and condition to be inserted in each permit:

"This appropriation shall be considered as alternative rather than supplementary to the appropriative rights claimed by applicant and permittee to divert at the existing filtration plant of the City of Sacramento".

IT IS FURTHER ORDERED that Applications 3441, 3442 and 3444 be approved subject to the usual terms and conditions except that the season for collection of storage be limited to the period from about January 1st to about July 15th.

IT IS FURTHER ORDERED that Applications 2467, 2468 and 2470 be cancelled upon the records of the Division of Water Rights.

Dated at Sacramento, this 18th day of August, 1927.


(Edward Hyatt, Jr.)

TABULATION OF APPLICATIONS

App.:	Purpose	Source	Point of Diversion	Amount	Sec. Etc. Ac. Ft.	Place of Use
2467:	Power	South Fork Silver Creek	NE SW Sec. 1 T11N R14E M.D.M. SE NE Sec. 1 T11N R14E M.D.M.	32,000	150	Big Bend P.H. NE NW Sec. 4 T11N R13E M.D.M. Brush Creek P.H. NW NW Sec. 21 T11N R12E M.D.M.
2468:	Power	Silver Creek	NE NW Sec. 4 T11N R13E M.D.M.	300	1	Brush Creek P.H. NW NW Sec. 21 T11N R12E M.D.M.
2469:	Municipal:	Silver Creek as brought about by App. 2467-2470	NE SW Sec. 1 T11N R14E M.D.M. SE NE Sec. 1 T11N R14E M.D.M. NW NE Sec. 29 T12N R14E M.D.M. SW SE Sec. 20 T12N R14E M.D.M. NE NW Sec. 4 T11N R13E M.D.M.	309	90,000	Secramento and vicinity
2470:	Power	Silver Creek	SW SE Sec. 20 T12N R14E M.D.M. NW NE Sec. 29 T12N R14E M.D.M. NE NW Sec. 4 T11N R13E M.D.M.	250	90,000	Big Bend P.H. NE NW Sec. 4 T11N R13E M.D.M. Brush Creek P.H. NW NW Sec. 21 T11N R12E M.D.M.
2479:	Power	Little South Fork Rubicon R.	NW SE Sec. 22 T13N R14E M.D.M.	200	45,000	Big Bend P.H. NE NW Sec. 4 T11N R13E M.D.M. Brush Creek P.H. NW NW Sec. 21 T11N R12E M.D.M.
2480:	Power	Rubicon River	SE SW Sec. 9 T13N R16E M.D.M.	150	5,000	Big Bend P.H. NE NW Sec. 4 T11N R13E M.D.M. Brush Creek P.H. NW NW Sec. 21 T11N R12E M.D.M.
2481:	Power	Gerle Creek	SW NE Sec. 15 T13N R14E M.D.M.	70	42,000	Big Bend P.H. NE NW Sec. 4 T11N R13E M.D.M. Brush Creek P.H. NW NW Sec. 21 T11N R12E M.D.M.
3441:	Power	South Fork Silver Creek	NE SW Sec. 1 T11N R14E M.D.M. SE NE Sec. 1 T11N R14E M.D.M.	500	75,000	Big Bend P.H. NE NW Sec. 4 T11N R13E M.D.M.
3442:	Power	Natural and regulated flow of Silver Creek	NE NW Sec. 4 T11N R13E M.D.M.	500		Brush Creek P.H. NW NW Sec. 21 T11N R12E M.D.M. Coloma P.H. SW SW Sec. 21 T11N R10E M.D.M.
3443:	Municipal:	Natural and regulated flow of Silver Creek	NE NW Sec. 4 T11N R13E M.D.M.	500		Secramento and vicinity

TABULATION OF APPLICATIONS

(Continued)

App.:	Purpose	Source	Point of Diversion	Sec. Ft.	Ac. Ft.	Place of Use
3444:	Power	Silver Creek	SW SE Sec. 20 T12N R14E M.D.M. NW NE Sec. 29 T12N R14E M.D.M.	500	180,000	Big Bend P.H. NE NW Sec. 4 T11N R13E M.D.M.
3445:	Power	Little South Fork Rubicon R.	NW SE Sec. 22 T13N R14E M.D.M.	250	60,000	Big Bend P.H. NE NW Sec. 4 T11N R13E M.D.M.
3446:	Power	Rubicon River	SE SW Sec. 9 T13N R16E M.D.M.	300	75,000	Big Bend P.H. NE NW Sec. 4 T11N R13E M.D.M.
3447:	Power	Gerle Creek	SW NW Sec. 4 T13N R16E M.D.M.	400	100,000	Big Bend P.H. NE NW Sec. 4 T11N R13E M.D.M.

map accompanying location
not sure