# SURFACE WATER SUPPLY OF THE PACIFIC SLOPE BASINS IN SOUTHERN CALIFORNIA, 1894–1927

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## INTRODUCTION

The measurement of the flow of the streams in California was begun by the State engineer in 1878, in accordance with the law requiring him "to investigate the problems of the irrigation of the plains, the condition and capacity of the great drainage lines of the State, and the improvement of the navigation of rivers." The work was restricted to a few localities in the Sacramento and San Joaquin River Basins, the principal station being on the Sacramento at Collinsville.

The State engineer's office was discontinued in 1884, and practically no further stream studies were made in California until 1894, when engineers of the United States Geological Survey made a few measurements of streams in the semiarid parts of the State and established a station on the San Gabriel River near Azusa. Since that time the Geological Survey has gradually extended the work, as funds were made available, until it now has records of flow at a large number of points on California streams.

The records to June 30, 1912, for the Pacific slope basins in southern California were published in Water-Supply Paper 300. All records to September 30, 1918, for stations from the Tia Juana River north to the Santa Maria River, were published in Water-Supply Paper 447. Records from 1912 are contained in the annual series of water-supply papers as follows:

| | Water-Supply Paper | | Water-Supply Paper | | Water-Supply Paper |
|---|---|---|---|---|---|
| 1912 | 331 | 1917 | 461 | 1923 | 571 |
| 1913 | 361 | 1918 | 481 | 1924 | 591 |
| 1914 | 391 | 1919–20 | 511 | 1925 | 611 |
| 1915 | 411 | 1921 | 531 | 1926 | 631 |
| 1916 | 441 | 1922 | 551 | 1927 | 651 |

A few of these reports are out of print, but most of them may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C., or they may be consulted at the Geological Survey offices at 303 Customhouse, San Francisco, and 600 Federal Building, Los Angeles, and at the public libraries in the principal cities.

The records are summarized in this paper to make them readily available for reference. For detailed information of daily discharge, run-off in acre-feet, and station description giving location and equipment of station and other pertinent facts, reference should be made to the above-mentioned water-supply papers or to the files at the Geological Survey offices.

## COOPERATION AND ACKNOWLEDGMENTS

Cooperation in stream measurements between the United States Geological Survey and the State of California was first provided for by the State legislature in an act approved March 16, 1903. Similar acts continued the cooperation until April 22, 1909, when an act placing cooperation between the State of California and the United States Geological Survey on a permanent basis was approved. This act provided as follows:

> The department of engineering is hereby empowered to carry on topographic surveys and investigations into matters pertaining to the water resources of the State along the lines of hydrography, hydro-economics and the use and distribution of water for agricultural purposes, and to that end, where possible and to the best interest of the State, shall enter into contracts for cooperation with the different departments of the Federal Government in such amounts as may be an equitable and necessary division of the work. The State engineer, with the consent of the governor, may maintain and continue such investigations where there is available money not covered by cooperation contract. For the permanent maintenance of said surveys and investigations there is hereby continuously appropriated out of the general fund of the State treasury for each and every fiscal year, commencing with the date upon which this act becomes effective, the sum of $30,000.

Of this sum $9,000 was allotted annually to investigations of water resources. To supplement this fund and the Federal appropriation, the State conservation commission, State board of control (water powers), State water commission, and later the department of public works through the divisions of engineering and irrigation and water rights have allotted additional money.

The State budget for 1928 and 1929 groups all State cooperation with the Geological Survey for investigations of water resources and provides a fund of $25,000 a year for the biennium. This cooperation is disbursed by the division of engineering and irrigation, department of public works, through Edward Hyatt, jr., State engineer.

The earliest stream-gaging work in the State was carried on under the direction of William Ham. Hall, State engineer, by C. E. Grunsky, who continued in charge until the State engineer's department was abolished. Work by the United States Geological Survey was begun in 1894, under the direction of F. H. Newell, chief hydrographer, by Arthur P. Davis and Joseph B. Lippincott. On the establishment of the United States Reclamation Service, in 1902, Mr. Lippincott

became supervising engineer for California, and the field work was continued under his direction by William B. Clapp and Samuel G. Bennett, until the separation of the Reclamation Service from the Geological Survey in 1906, when Mr. Clapp became district engineer. On Mr. Clapp's death in December, 1911, H. D. McGlashan was appointed district engineer.

Much cooperation and many records have been furnished by other Federal bureaus, counties, municipalities, irrigation districts, permittees and licensees of the Federal Power Commission, private companies, and individuals to whom credit is given in the annual progress reports. (See list on p. 169.)

## DRAINAGE

### TIA JUANA RIVER BASIN

The Tia Juana River discharges into the Pacific Ocean below San Diego Bay, near the Mexican boundary. Its principal tributary, Cottonwood Creek, rises in the Laguna Mountains of the Coast Range and flows south and west for about 20 miles, where it is joined by Pine Valley Creek from the north; it then flows southwestward 12 miles to its junction with the Tia Juana River at the Mexican boundary, about 22 miles east of the coast. The total drainage area of Cottonwood Creek above its junction with the Tia Juana River is about 340 square miles. It lies south of the Sweetwater and Otay River Basins and is the most southerly stream in San Diego County. Pine Valley Creek is its only important tributary.

The topography of the basin of Cottonwood Creek is rough throughout, although the basin contains some valley areas at altitudes exceeding 3,000 feet; below 3,000 feet the creek flows through a deep, narrow canyon, broken only by a short stretch of open country with comparatively gentle grade at the junction of Pine Valley Creek. Altitudes range from 600 feet where the creek joins the Tia Juana River to 5,000 feet on the Laguna Mountains.

The Cottonwood Basin is very poorly forested. The timber consists of scattered oaks, cottonwoods, and alders, which are confined almost entirely to the small valleys along the stream and to the higher mountain regions. The mountain slopes are fairly well covered with brush.

The mean annual rainfall ranges from 8 to 10 inches in the foothills and from 20 to 30 inches in the mountains.

The basin affords several good reservoir sites—the Barrett Reservoir, at the junction of Pine Valley Creek, at an altitude of 1,500 feet, and the Morena Reservoir, on Cottonwood Creek, at the lower end of Morena Valley, 8 miles above the Barrett Reservoir have

been constructed. The Dulzura conduit diverts water from the Barrett Reservoir to the Lower Otay Reservoir in the Otay River Basin. This conduit has a capacity of about 60 second-feet. The city of San Diego receives a part of its water supply from the Lower Otay Reservoir.

### SWEETWATER RIVER BASIN

The Sweetwater River rises on the south and east slopes of the Cuyamaca Mountains of the Coast Range, flows nearly due south for a distance of 15 miles, then turns to the west and southwest, and discharges into San Diego Bay south of National City. Its length is 45 miles, and its drainage area comprises about 215 square miles, the greater part of which is in mountainous country. The basin is extremely narrow. It lies directly south of the San Diego River Basin and north of the Otay and Cottonwood Creek Basins.

The topography is not so rough as that of the San Diego River Basin, although the mountains and foothills extend within 3 or 4 miles of the shore line of San Diego Bay, and the valley and mesa lands are not so extensive as along the San Diego River. The basin is poorly forested. The timber is confined almost entirely to the immediate valleys of the streams and to the higher mountain regions. The mountain slopes are fairly well covered with brush, but the lower foothills are almost bare, supporting only a sparse growth of low brush.

The mean annual rainfall ranges from 10 to 15 inches in the foothills and from 20 to 45 inches in the mountains.

A considerable area lying between San Diego Bay and the foothills south from National City to the Mexican boundary is under a high state of cultivation. The greater part of this land is irrigated by water taken from the Sweetwater River.

The celebrated Sweetwater Dam is on the Sweetwater River about 8 miles above its mouth at an altitude of 145 feet. There are two other reservoir sites on the Sweetwater River, one a short distance above Dehesa post office and another 1 mile below Descanso, at an altitude of 3,340 feet.

During the extremely dry period from 1898 to 1904 there were years when no water from the Sweetwater River reached the reservoir. From 1899 to 1904 the reservoir was dry, and to tide over this period pumping was resorted to. Wells were sunk in the reservoir site, and pumps installed, by means of which water was delivered to the distribution system. Pumping was also extensively carried on in the valley along the river below the reservoir. The construction of additional storage reservoirs on the upper stretches of the river would probably serve to tide over an extended dry period.

## SAN DIEGO RIVER BASIN

The San Diego River rises in the Cuyamaca Mountains, on the western slope of the Coast Range, flows southwestward, and discharges into the Pacific Ocean through Mission Bay, at the northern boundary of the city of San Diego. Its length is about 50 miles, half of which lies in the mountains above the town of Lakeside. The San Diego Basin comprises 434 square miles and lies directly south of the San Dieguito Basin and north of the Sweetwater River Basin.

The San Diego has several small tributaries, the largest being Coleman, Cedar, Boulder, South Fork, and Chocolate Creeks, all of which enter from the east and south above Lakeside. San Vicente Creek, the only notable tributary from the north, enters the river at Lakeside.

The upper part of the basin above Lakeside is extremely rugged, but below Lakeside numerous valleys and high mesa lands extend to the coast. Altitudes throughout the basin range from 50 to 600 feet in the foothills and from 600 to 6,000 feet in the mountains. Cuyamaca Peak, the highest point in the basin, is 6,028 feet above sea level.

The geologic formation of the basin is fully described in the report on the geology and ground waters of the western part of San Diego County (Water-Supply Paper 446).

The San Diego Basin is very poorly forested. The timber is confined almost entirely to the valleys along the streams and to the higher mountain areas. The mountain slopes are fairly well covered with brush, but the lower foothills are almost bare, supporting only a scattered growth of low brush.

The mean annual rainfall ranges from 10 to 15 inches in the foothills and from 20 to 45 inches in the mountains.

Irrigation is carried on extensively in the valleys and on the mesa lands between Lakeside and San Diego, and additional areas might be irrigated if an adequate supply of water could be assured. Two storage reservoirs have been constructed. The Cuyamaca Reservoir is on Boulder Creek, 4,600 feet above sea level, and has a capacity of 11,400 acre-feet with the 35-foot earth dam. La Mesa Reservoir is in the foothills about 2 miles northwest of the town of La Mesa at an altitude of 435 feet. The original dam was constructed of earth and rock, was 66 feet high, and had a storage capacity of about 1,500 acre-feet. It was replaced by the Murray Dam, a concrete multiple-arch dam, 100 feet high, a short distance farther downstream. La Mesa Reservoir is filled by water diverted from the San Diego River through the Cuyamaca Water Co.'s flume.

## SAN DIEGUITO RIVER BASIN

The San Dieguito River, or Santa Ysabel Creek, as it is known from its source to San Pasqual Valley, rises in the Volcan Mountains on the western slope of the Coast Range and flows westward through San Pasqual Valley, below which it takes its true name, and discharges into the Pacific Ocean midway between Oceanside and San Diego. Its length is 50 miles, and the maximum width of the drainage basin is about 15 miles. The total drainage area is about 340 square miles. It lies south of the San Luis Rey River Basin and north of the San Diego River Basin.

Numerous small tributaries enter Santa Ysabel Creek between its source and San Pasqual Valley; the largest are Black Canyon and Temescal Creeks from the north and Santa Maria Creek from the south. Above San Pasqual Valley the creek maintains a small flow throughout the year, but below that point the channel is dry during the summer.

The upper part of the basin is rough, the surface being cut by many canyons. The lower part in the foothills is more rolling, with large areas of valley and high mesa land. The basin has very little timber, the principal cover being brush, grass, and a few scattered oaks. The rocks of the region are described in a report on the geology and ground waters of the western part of San Diego County (Water-Supply Paper 446).

The mean annual rainfall ranges from 10 to 15 inches in the foothills and from 20 to 40 inches in the mountains.

There is not much irrigation in this basin. The East and West San Pasqual ditches irrigate a small area along the river in San Pasqual Valley. The Lake Hodges Reservoir, just below Bernardo, is a part of the water-supply system of the city of San Diego. A storage-reservoir site exists on the main stream at Pamo Valley, below the junction of Temescal Creek with the Santa Ysabel.

## SAN LUIS REY RIVER BASIN

The San Luis Rey River drains an area of about 565 square miles, lying wholly in the northern part of San Diego County and extending from the crest of the Coast Range to the Pacific Ocean, a distance of 65 miles, with a maximum width of about 16 miles.

The river is formed by many small streams, which rise in the higher regions of the Coast Range and converge at the lower or west end of what is known as Warner's Valley. Below this point the river flows for 10 miles through a deep, narrow canyon with a steep grade, then for about 40 miles over a sandy and gravelly bed with gentle grade, and finally discharges into the Pacific Ocean at Oceanside.

Altitudes within this basin range from 50 to 500 feet in the foothills near Oceanside and from 500 to 6,000 feet in the mountains. Palomar

Mountain, the highest peak in the basin, has an altitude of 6,126 feet. The upper part of the basin is more or less rolling, and several of the valleys are under cultivation and are used extensively for stock raising; the middle part, occupied by the river in its canyon, is rough; the lower part becomes less rugged, merging into the foothills, which extend to the coast. The geology of the basin is described in a report on the geology and ground waters of the western part of San Diego County (Water-Supply Paper 446).

The basin is poorly forested. Some fairly good timber is found at the higher altitudes, but the greater part of the cover is brush and grass and a scattered growth of oaks.

The mean annual precipitation in this basin probably ranges from 10 to 50 inches, gradually increasing with altitude. It occurs almost entirely as rain, snow appearing only occasionally on the high slopes.

Lake Henshaw, which has a capacity of 164,000 acre-feet, lies at the lower end of Warner Valley and was completed in 1923. The dam has since been raised to give a reservoir capacity of 210,000 acre-feet. The stored water is diverted through the Escondido Mutual Water Co.'s canal to Lake Wohlford and there released for irrigation, power, and domestic use at Escondido, Vista, and vicinity.

### SANTA MARGARITA RIVER BASIN

Temecula Creek, as the Santa Margarita River is known at its source, rises on the western slope of the San Jacinto Mountains in the northwestern part of San Diego County just north of the San Luis Rey Basin, flows north into Riverside County, west about 15 miles to Temecula, and southwest through Temecula Canyon into San Diego County, and empties into the Pacific Ocean as the Santa Margarita River. The highest altitude in the basin is about 5,500 feet, on the divide between the Temecula and the San Luis Rey. Temecula Creek has few tributaries, and the topography is rather broken, though there are several small valleys in the upper parts. The rock formation through which it flows is a loose granite with good soil covering, and there is a considerable growth of small, scrubby timber. The annual precipitation ranges from 10 to 30 inches and occurs almost entirely as rain. The discharge is heavy in the spring during the flood season but is small during the rest of the year.

### SANTA ANA RIVER BASIN

Of the three major streams that traverse the valley of southern California—the Santa Ana, the San Gabriel, and the Los Angeles Rivers—the Santa Ana is the largest. Its drainage basin, lying south of the San Bernardino Mountains and the Sierra Madre and draining their southern slopes, is the most eastern and comprises by far the largest area, including the northern part of Orange County, the north-

western part of Riverside County, and the southwestern part of San Bernardino County. Of the total drainage area, comprising between 1,800 and 1,900 square miles, about two-thirds is in the valley, but only a few hundred square miles yields much run-off.

The Santa Ana rises in the heart of the San Bernardino Mountains, about 30 miles east of Highland, and flows westward for about 25 miles to the mouth of its upper canyon; thence southwestward across San Bernardino Valley, through the lower canyon in the Santa Ana Mountains, and across the coastal plain to the Pacific Ocean at Newport Beach. Although the course of the stream measures about 100 miles, there is continuous surface flow from mountain to sea only during winter floods.

Many small streams from the southern slope of the San Bernardino Mountains and a few from the Sierra Madre west of the Cajon Pass flow toward the Santa Ana, but some of these discharge water to the main stream only in the flood seasons, the ordinary flow either being diverted or sinking into the sand and gravel of San Bernardino Valley. The principal tributaries are Bear, Alder, Mill, Lytle, and Chino Creeks.

Altitudes in the Santa Ana drainage area range from a few feet above sea level on the coastal plain to 2,000 or 3,000 feet on the Santa Ana Mountains, 500 to 1,200 feet in the San Bernardino Basin, and 2,000 to 11,000 feet on the southern slope of the San Bernardino Mountains. The higher regions are rugged, and the mountain sides are incised by many canyons which are the result of active stream erosion. The rocks are granitic. The mesa and valley lands at the base of the mountains are composed of granitic gravel and sand of great depth. The higher mountain slopes support considerable timber; the lower slopes are as a rule covered with brush and grass.

The mean annual precipitation varies considerably in different parts of the Santa Ana Basin. On the coastal plain west of the Santa Ana Range it averages 10 inches or more; eastward, in the San Bernardino Valley, it is 10 to 16 inches. On the mountain slopes it ranges from 20 inches at the base to 40 inches or more near the crest, and in Bear Valley north of the highest peaks, such as San Bernardino and San Gorgonio, it may be even 50 inches.

Considerable snow falls in the region of these high peaks in winter and remains well into the summer, especially on the northern slopes, from which the headwaters of the Santa Ana come.

Irrigation in the valleys of the Santa Ana Basin has attained a very high state of development. Probably no other stream of its size in the United States is made to serve greater or more varied uses. To begin with, a part of the flow is regulated by artificial storage in the upper part of the basin, and the water passes successively through three hydroelectric plants before reaching the mouth of the canyon.

On leaving the lower plant it is turned into high-level canals and used for municipal supply and irrigation about Redlands and Highland. The irrigation water that escapes through seepage to the body of ground water is recovered from springs and flowing wells and from pumped wells and is used for irrigation around San Bernardino and Riverside, the power for pumping being generated on the upper stretches of the stream. Bedrock obstructions at Riverside Narrows, below the city of Riverside, force to the surface a part of the water in the gravel bed of the stream above this point. Only a few miles below it is again diverted and used for irrigation on the coastal plain in the vicinity of Santa Ana and Anaheim. The seepage water from irrigation is once more recovered by numerous pumping plants and flowing wells on the lower coastal plain west of Santa Ana. It is thus evident that the same water, in passing from mountain to sea, a distance of not more than 100 miles, may be used at least seven times for power and irrigation. In like manner the water in many of the tributaries may be used several times before reaching the main stream.

### SAN GABRIEL RIVER BASIN

The San Gabriel River is one of the three principal streams traversing the valley of southern California. Its drainage basin lies wholly in Los Angeles County west of the Santa Ana Basin and east of the Los Angeles Basin and stretches from the crest of the Sierra Madre to the Pacific, a distance of about 50 miles. Its total drainage area is about 700 square miles, about one-third of which consists of mountain slopes, which contribute practically all of the run-off except in heavy storms. The remaining two-thirds is embraced in the San Gabriel Valley at the base of the mountains and in the coastal plain southeast of the city of Los Angeles.

The mountainous part of the basin is somewhat rectangular in shape. Its length east and west is about 25 miles and its width about 10 miles. It lies on the southern slope of the Sierra Madre, opposite the basins of Rock and Little Rock Creeks, at the north, and on the southern slope of the San Gabriel Range, through which the river breaks bear Azusa and enters the San Gabriel Valley.

The main stream is formed by the junction of two principal forks, one from the north and east and the other from the west. Each of the branches receives many tributaries from the crests of the surrounding ranges. The headwaters come from the western slope of San Antonio Peak (Old Baldy), altitude 10,080 feet, and from the southern slope of other high peaks at the north, such as North Baldy and Islip Mountains. The West Fork drains the northern slope of Mount Wilson, the eastern and northern slopes of San Gabriel Peak, and part of the southern slope of the main range to the north. It joins the main stream about 8 miles above the mouth of the canyon.

The general course of the stream is southwestward. After leaving the mountains it traverses San Gabriel Valley in a wide wash of sand, gravel, and boulders, then breaks through the range of foothills separating San Gabriel Valley from the coastal plain at a point called The Narrows, about 5 miles northwest of Whittier, and enters the coastal plain, across which it flows to its mouth in Alamitos Bay, a few miles east of Long Beach. The total length of the stream is about 65 or 70 miles.

The principal tributaries of the San Gabriel River are Fish Fork and Cattle Creek from the east and Iron and West Forks from the west.

Altitudes in the San Gabriel Basin range from 20 to 200 feet on the coastal plain, from 200 to 900 feet in San Gabriel Valley, and from 1,000 to 10,000 feet in the mountains. The range of foothills near Whittier has an altitude of about 1,250 feet. The topography is rough and rugged in the mountains, especially in the upper part, where deep and narrow canyons exist. The geologic formation is granitic, with a light soil covering. The San Gabriel Valley is more or less rolling and is composed of granitic wash from the mountains.

The basin is rather poorly forested, having a sparse timber growth on the higher slopes and brush and some scattered timber on the middle and lower slopes.

The mean annual precipitation in this basin ranges from 15 to 20 inches in the valley and from 20 to 40 inches in the mountains. It occurs almost entirely as rain except on the higher peaks, where snow falls during the winter. On the northern slopes snow remains for several months.

The total summer flow of the stream is used for irrigation, and the same water may be used several times in its journey from mountain to sea. About 5 miles above the mouth of the canyon a power canal, having a capacity of about 100 second-feet, takes water from the left bank of the stream and delivers it to irrigation canals below the wheels near the mouth of the canyon for irrigation in San Gabriel Valley. In the spring other small diversions for irrigation are made at and below the mouth of the canyon. Most of the excess water issuing from the canyon sinks into the sands and gravels of San Gabriel Valley to augment the underground flow, which is drawn upon for irrigating the lower part of the valley.

Above The Narrows, at the lower end of the valley, the underground flow is forced to the surface by a bedrock obstruction, and this water, with additional water from many wells, is diverted through ditches for irrigating the higher parts of the coastal plain. The seepage loss from irrigation joins the underground water and is recovered from pumped and flowing wells in the lower coastal plain. Storage reservoirs are planned at The Forks, by the Los Angeles

County flood control district, and at Pine Canyon, by the city of Pasadena.

### LOS ANGELES RIVER BASIN

The Los Angeles River is formed by Tujunga, Pacoima, and other small creeks, which rise in the Sierra Madre northeast of the city of Los Angeles. These streams leave the mountains at a point about 25 miles above the city and enter the comparatively flat country of the San Fernando Valley, where, except at times of excessive flood, the waters disappear in the sand and gravel washes. At the lower end of this valley is a secondary range of hills, extending from east to west, and bedrock obstruction forces the water to the surface to form what is known as the Los Angeles River. Below this point the river flows through the flat country of the Los Angeles Valley and enters the Pacific near the town of Long Beach.

At the city of Los Angeles the river is joined by Arroyo Seco, which drains an area of 21 square miles in the Sierra Madre. This stream issues from the mountains on the west side of Pasadena Mesa and passes through Devils Gate Reservoir.

### MALIBU CREEK BASIN

Malibu Creek rises in the Santa Monica Mountains and enters the Pacific Ocean about 15 miles above the town of Santa Monica. This stream is formed by Triunfo and Las Virgenes Creeks, which drain the northern part of the Santa Monica Range and the lower foothill country to the north. The rocks throughout this basin are shale, sandstone, and conglomerate covered with good soil. A sparse growth of timber occurs at the higher altitudes, but the greater part of the area supports a growth of brush and grass that is used extensively for pasturage. Small areas of cultivated land are devoted to raising grain. A reservoir has been constructed on the upper stretches of Triunfo Creek, and the waters are used for irrigation within the basin during the summer. When filled this reservoir covers an area of about 300 acres.

The mean annual precipitation in this basin amounts to about 25 inches and falls wholly in the form of rain.

### SANTA CLARA RIVER BASIN

The Santa Clara River rises in Soledad Canyon, in the northwest end of the Sierra Madre, in Los Angeles County, and flows westward through what are known locally as the Piru, Sespe, and Santa Clara Valleys. The stream is augmented by five tributaries, which enter it from the north—the San Francisquito, the Castac, the Piru, the Sespe, and the Ojai. The river passes through Ventura County and empties into the Pacific Ocean about 3 miles south of Ventura.

For the lower 40 miles of its course the channel of the Santa Clara River is broad and sandy. A remarkable feature is the small run-off from this large drainage basin. The flood stages of the stream occur almost wholly in the winter, and at most points the channel is dry during the summer.

The valley through which the river flows is of a high order agriculturally, and its products include all the citrus fruits common to California.

### VENTURA RIVER BASIN

The Ventura River drains a small area that lies almost wholly in Ventura County. The river rises in the eastern part of Santa Barbara County and flows in general southeastward to Matilija, where it turns and takes a more southerly course to the Pacific Ocean at Ventura.

### SANTA YNEZ RIVER BASIN

The Santa Ynez River is the only large stream wholly in Santa Barbara County. Its drainage basin lies north of the Santa Ynez Mountains, extending for a distance of about 80 miles parallel to the coast line and comprising about 900 square miles. Four-fifths of this area is mountainous, including the northern slope of the Santa Ynez and the southern slope of the San Rafael Mountains, and furnishes practically all the run-off.

The Santa Ynez River rises near the boundary line between Ventura and Santa Barbara Counties, where the Santa Ynez and San Rafael Mountains merge, flows nearly due west, and enters the Pacific Ocean at Surf, about 8 miles north of Point Arguello Lighthouse, where the coast line makes a sharp turn to the north.

Small tributaries are numerous, but the only important one is Mono Creek, which drains 120 square miles on the southern slope of the San Rafael Mountains and joins the Santa Ynez River about 13 miles below its source.

Altitudes in the Santa Ynez Mountains range from 3,000 to 4,000 feet; in the San Rafael Mountains they range from 4,000 to 6,000 feet, with a few high peaks, such as Mount Pinos, extending 8,826 feet above sea level. The rocks throughout the basin consist of shale, sandstone, and conglomerate.

The greater part of the drainage basin is included in the Santa Barbara National Forest and is sparsely covered with brush and small trees, only small areas on the higher slopes having any considerable growth of timber.

The mean annual precipitation in the area ranges from 20 to 30 inches, the increase being gradual from the lower to the higher altitudes, and is almost entirely rain, there being only a light snowfall on the higher slopes during the winter.

Some small diversions for irrigation are made above Lompoc, and present water rights exceed the low-stage flow of the stream. The basin affords good storage sites. The Gibraltar Dam, built by the city of Santa Barbara, forms a reservoir which is a part of the municipal water-supply system.

### SANTA MARIA RIVER BASIN

The Santa Maria River drains the northern slope of the San Rafael Mountains and a smaller area of foothill country north of that range. It flows westward and finally enters the Pacific Ocean at Guadalupe, about 25 miles south of San Luis Obispo. Its flow is torrential; it is subject to floods of short duration during the rainy period but is practically dry during the summer. It has numerous tributaries, the largest of which is the Sisquoc, which enters it about 12 miles above the town of Santa Maria. The country in this basin consists of rolling foothills, except the higher parts of the San Rafael Mountains, which reach altitudes of 6,000 to 8,000 feet. The river breaks from the foothills at a point where it is joined by the Sisquoc and flows through the flat country of the Santa Maria Valley for about 25 miles until it joins the Pacific Ocean. The rocks in this basin consist of shale, sandstone, and conglomerate, which are covered by a heavy clay soil. There is a considerable growth of timber on the higher parts of the San Rafael Mountains, but over most of the area the growth of timber is light, and large areas are covered with brush and grass. Stock raising is carried on extensively throughout the basin. There are no diversions along this stream for irrigation, although tunnel work has been attempted above Santa Maria for developing underground water, with poor results. Numerous wells near Santa Maria produce considerable water for irrigating land in the vicinity, the soil being very deep and exceptionally good, susceptible of the highest cultivation. The mean annual precipitation in this basin is probably about 25 inches. The greatest rainfall occurs on the lower levels near the coast. The higher levels receive some snowfall, which melts early in the spring and does not tend to keep up the flow of the streams through the summer.

### SALINAS RIVER BASIN [1]

The Salinas River Basin lies almost wholly in Monterey and San Luis Obispo Counties and comprises an area of about 4,780 square miles. Its length is 150 miles and its maximum width about 45 miles.

The Salinas rises on the eastern slope of the Santa Lucia Range, near the south end of the basin, and flows northwestward, parallel to the coast, to its mouth, about 4 miles southwest of Castroville.

[1] For a detailed discussion of the water resources of Salinas Valley see Water-Supply Paper 89.

Topographically the Salinas Basin is a long, narrow valley, walled in by steep mountain slopes which have been greatly eroded and dissected by stream action. At the north end of the basin are the Gabilan Range and the Sierra de Salinas, separating it from the San Benito Basin at the east and from the Carmel River at the west; for the rest of its length it is flanked by parallel ridges on the west and by a broad mesa or elevated plain along the southeast, back of which are the crests of the Santa Lucia and Diablo Ranges, respectively. The crest of the encircling mountains ranges in altitude from 2,500 to 4,000 feet. The rocks are sedimentary, resting on a basement complex of granite.

The forest cover in this basin is light and irregularly distributed. The valley has a few scattered trees, and the eastern slopes are covered by grass, brush, and scrubby timber. On the higher parts of the western slope there is considerable timber, most of which is included in a national forest.

The mean annual precipitation is about 10 inches in the Salinas Valley; this increases on the slopes with increase in altitude. It is undoubtedly greatest on the western slope where it probably ranges from 30 to 50 inches in the higher areas and occurs almost entirely as rainfall.

The river has many tributaries, the chief of which, from north to south, are Arroyo Seco, the San Antonio River, and the Nacimiento River from the west and San Lorenzo and Estrella Creeks from the east. The tributaries from the west are peculiar in that they lie west of secondary ranges parallel to the main range and flow southeastward for the greater part of their length, parallel but in a course directly opposite to the general course of the Salinas River.

The streams of this basin are torrential and erratic, particularly the Salinas itself, which has a very heavy discharge in winter but ordinarily has no surface run-off in summer except below Soledad. Some irrigation is carried on in the Salinas Valley, the water being obtained from flowing streams and by pumping, but further development is feasible and very much needed. There are several storage reservoir sites of more or less value on the tributaries of the Salinas River, some of which have been surveyed. Very little power could be developed continuously in the Salinas Basin without storage.

### PAJARO RIVER BASIN

The Pajaro River, which forms the boundary between Santa Cruz and Monterey Counties and between Santa Clara and San Benito Counties, discharges into Monterey Bay about 5 miles southwest of Watsonville. Clark [2] says:

[2] Clark, W. O., Ground water in Santa Clara Valley, Calif.: U. S. Geol. Survey Water-Supply Paper 519, pp. 12–13, 72–73, 1924.

The mountain drainage of the Pajaro River may be divided into three parts—(1) that above San Felipe Lake and east of it, or the mountainous part lying east of Santa Clara Valley, which is drained by Pacheco Creek and other small streams; (2) that on the west side of Santa Clara Valley and north of the Pajaro, drained chiefly by Llagas and Carnadero Creeks; and (3) the mountain borders on both sides of the valley south of the Pajaro drained by San Benito River, which joins the Pajaro just as it is entering the canyon west of the valley. The Pajaro has a larger drainage area than any other stream entering Santa Clara Valley. Its drainage area east of Pajaro Gap is about 37 per cent of the entire drainage basin of Santa Clara Valley exclusive of that portion occupied by San Francisco Bay. Practically every stream south of Madrone is tributary to this river.

The total area tributary to the Pajaro above Pajaro Canyon is about 1,150 square miles, that of the San Benito alone being about 530 square miles. About one-sixth of the Pajaro drainage basin east of the canyon is in Santa Clara Valley; the other five-sixths lies on the mountains. The highest peaks of the Diablo Range are around the headwaters of San Benito River. The highest peak in the Santa Cruz Mountains is on the headwaters of Llagas and Carnadero Creeks; hence Pajaro River receives water from the highest peaks of both the Diablo and Santa Cruz Ranges. * * *

The larger portion of the flood waters of the Pajaro comes from the San Benito. In fact, the Pajaro above its junction with the San Benito is comparatively insignificant. The channel of the San Benito is wide and is composed of very porous materials, which afford an excellent opportunity for the percolation of its waters into the ground-water reservoir. South of Hollister the flat portion of the valley rapidly narrows until it practically disappears at Tres Pinos. The south end of the valley is deeply filled with an older alluvium, which is dissected and gives the rough topography between Hollister and Tres Pinos. The surface of the older alluvium is so rough that little of it can be irrigated, and because of its altitude the water table lies so deep that pumping is generally not economically feasible.

The average annual rainfall is about 20 inches at Gilroy and 13 inches at Hollister. More than 50 per cent of the total rainfall occurs in the wettest three months of the year (January, March, and December) and 80 per cent in the wettest five months.

## STREAM FLOW

### GAGING STATIONS MAINTAINED IN THE PACIFIC SLOPE BASINS OF SOUTHERN CALIFORNIA

The following list comprises the gaging stations that have been maintained in the Pacific slope basins of southern California. The stations are arranged in downstream order, tributaries being indicated by indention. A dash after the last date in a line indicates that the station was being maintained September 30, 1927.

Tia Juana River near Nestor, Calif., 1914–15.
  Cottonwood Creek near Dulzura, Calif., 1906–1915.
    Dulzura conduit near Dulzura, Calif., 1909–1915.
    Pine Valley Creek near Dulzura, Calif., 1906–7.
Sweetwater River near Descanso, Calif., 1906–1927.
Sweetwater River near Dehesa, Calif., 1913–1916.

Sweetwater River at Sweetwater Reservoir, Calif., 1887–
San Diego River at diverting dam, near Lakeside, Calif., 1912–1916.
San Diego River at Lakeside, Calif., 1906–1916.
San Diego River near Santee, Calif., 1912–
San Diego River at San Diego, Calif., 1912–1916.
Boulder Creek near Julian, Calif., 1912–1926.
Boulder Creek at mouth, near Lakeside, Calif., 1912–1926.
Cuyamaca Water Co.'s flume at diverting dam, near Lakeside, Calif., 1912–1924.
Cuyamaca Water Co.'s flume near Lakeside, Calif., 1907–1925.
South Fork of San Diego River near Alpine, Calif., 1913–1915.
South Fork of Cuyamaca Water Co.'s flume near Alpine, Calif., 1913–1915.
San Vicente Creek at Foster, Calif., 1915.
Santa Ysabel Creek near Santa Ysabel, Calif., 1913–14.
Santa Ysabel Creek near Mesa Grande, Calif., 1913–
Santa Ysabel Creek near Ramona, Calif., 1912–1923.
Santa Ysabel Creek near Escondido, Calif., 1906–1912.
San Dieguito River at Bernardo, Calif., 1912–1915.
San Dieguito River near Bernardo, Calif., 1916–1918.
San Dieguito River at Lake Hodges, near Bernardo, Calif., 1918–1925.
San Dieguito River near Del Mar, Calif., 1912–1914.
Black Canyon Creek near Mesa Grande, Calif., 1913–14; 1923–24.
Temescal Creek near Almond, Calif., 1913–1915.
East San Pasqual ditch near Escondido, Calif., 1913.
Guejito Creek near Escondido, Calif., 1915–1917.
West San Pasqual ditch near Escondido, Calif., 1912–1915.
Santa Maria Creek near Ramona, Calif., 1912–1920.
San Luis Rey River near Warner Springs, 1913–1915.
San Luis Rey River near Mesa Grande, Calif., 1905–6; 1911–
San Luis Rey River near Nellie, Calif., 1915–16; 1923–24.
San Luis Rey River near Pala, Calif., 1903–1916.
San Luis Rey River at Pala, Calif., 1912.
San Luis Rey River at Bonsall, Calif., 1912–1916.
San Luis Rey River near Oceanside, Calif., 1912–1914.
West Fork of San Luis Rey River near Nellie, Calif., 1920–21.
West Fork of San Luis Rey River near Warner Springs, Calif, 1913–1915.
Carrizo Creek near Warner Springs, Calif., 1913–1915.
Susanna Creek near Warner Springs, Calif., 1913–1915.
Matagual Creek near Warner Springs, Calif., 1913–1915.
Escondido Mutual Water Co.'s canal near Nellie, Calif., 1915–1922.
Pauma Creek near Nellie, Calif., 1920–21.
Pauma Creek at Pauma Indian Reservation, near Nellie, Calif., 1921.
Temecula Creek at Nigger Canyon, near Temecula, Calif., 1923–
Temecula Creek at Railroad Canyon, near Temecula, Calif., 1923–
Santa Margarita River near Fallbrook, Calif., 1924–
Santa Margarita River near Deluz Station, Calif., 1925–26.
Santa Margarita River near Ysidora, Calif., 1923–
Santa Ana River near Mentone, Calif., 1896–
Santa Ana River near Prado, Calif., 1919–
Santa Ana River at Santa Ana, Calif., 1923–
Southern California Edison Co.'s canal near Mentone, Calif., 1896–1898; 1901; 1904–
Greenspot pipe line near Mentone, Calif., 1897–1905; 1911–

Santa Ana River—Continued.
Mill Creek at Forest Home, Calif., 1903–1918.
Mill Creek at No. 3 power canal intake, near Forest Home, Calif., 1923–
Mill Creek at Crafton headworks, Calif, 1895–1902.
Mill Creek near Craftonville, Calif., 1919–
Mill Creek power canals Nos. 2 and 3 near Craftonville, Calif., 1918–
Mill Creek power canal No. 1 near Craftonville, Calif., 1919–
Plunge Creek near East Highlands, Calif., 1919–
Warm Creek near Colton, Calif., 1920–
Strawberry Creek near Arrowhead Springs, Calif., 1920–
Waterman Canyon Creek near Arrowhead Springs, Calif., 1911–1914; 1920–
City Creek near Highland, Calif., 1919–
City Creek Water Co.'s canal near Highland, Calif., 1924–
Devil Canyon Creek near San Bernardino, Calif., 1911–1914; 1920–
Lytle Creek near San Bernardino, Calif., 1904–1918.
Lytle Creek near Fontana, Calif., 1919–20, 1925–
Lytle Creek at head gates of Rialto Canals, Calif., 1901.
Lytle Creek canals at intake, Calif., 1899.
Fontana pipe line near Fontana, Calif., 1918–
Cajon Creek near Keenbrook, Calif., 1920–
Lone Pine Creek near Keenbrook, Calif., 1920–
Meeks & Daley Canal near Colton, Calif., 1920–
San Jacinto River near San Jacinto, Calif., 1920–
San Jacinto River near Elsinore, Calif., 1916–
Temescal Water Co.'s diversion near Elsinore, Calif., 1921–22.
Temescal Creek near Elsinore, Calif., 1916–
San Antonio Creek near Claremont, Calif., 1917–
San Antonio Creek near Upland, Calif., 1901–1917.
Southern California Edison Co.'s canal near Claremont, Calif., 1917–
Santiago Creek near Villa Park, Calif., 1920–
Serrano & Carpenter Canal near Villa Park, Calif., 1920–
San Gabriel River at headworks, near Azusa, Calif., 1912–13.
San Gabriel River near Azusa, Calif., 1896–
Southern California Edison Co.'s canal near Azusa, Calif., 1896–
Tunnel diversion near Azusa, Calif., 1917–1921.
Rogers Creek near Azusa, Calif., 1917–
Fish Creek near Duarte, Calif., 1916–
Sawpit Creek near Monrovia, Calif., 1916–
Monrovia pipe line near Monrovia, Calif., 1916–
San Dimas Creek near San Dimas, Calif., 1917–
Dalton Creek near Glendora, Calif., 1919–
Dalton diversion near Glendora, Calif., 1920–
Los Angeles River Basin:
Pacoima Creek near San Fernando, Calif., 1917–
Tujunga Creek near Sunland, Calif., 1916–
Haines Creek near Tujunga, Calif., 1917–
Haines Creek upper diversion near Tujunga, Calif., 1918–1920.
Arroyo Seco near Pasadena, Calif., 1910–
Santa Anita Creek near Sierra Madre, Calif., 1916–
Little Santa Anita Creek near Sierra Madre, Calif., 1916–
Eaton Creek near Pasadena, Calif., 1918–
Precipice Canyon Water Co.'s diversion near Pasadena, Calif., 1918.

Malibu Creek near Calabasas, Calif., 1903–1906.
Triunfo Creek near Calabasas, Calif., 1903–1906.
Santa Clara River at Fillmore, Calif., 1911–12.
Piru Creek near Piru, Calif., 1912–13.
Sespe Creek near Sespe, Calif., 1915–1927.
Sespe Creek at Sespe, Calif., 1911–1913.
Santa Paula Creek near Santa Paula, Calif., 1912–13.
Ventura River near Ojai, Calif., 1911–1914; 1922–1924.
Ventura River near Ventura, Calif., 1911–1913.
Santa Ynez River above Mono Creek, Calif., 1903.
Santa Ynez River near Santa Barbara, Calif., 1904–1908; 1911–1918.
Santa Ynez River near Lompoc, Calif., 1906–1918; 1925–
Mono Creek near Santa Barbara, Calif., 1903–4.
Santa Maria River near Santa Maria, Calif., 1903–1905.
Salinas River near Santa Margarita, Calif., 1922.
Salinas River near Salinas, Calif., 1900–1901.
Nacimiento River near Bryson, Calif., 1901.
Nacimiento River near Bradley, Calif., 1922.
San Antonio River near Jolon, Calif., 1901.
San Antonio River at Pleyto, Calif., 1922.
San Lorenzo Creek near Kings City, Calif., 1901–1903.
Arroyo Seco near Soledad, Calif., 1901–
Pajaro River at Watsonville, Calif., 1911–1913.
San Benito River at Hernandez, Calif., 1922–23.
San Benito River near Tres Pinos, Calif., 1923.
McCoy Creek near Hernandez, Calif., 1922–23.
Tres Pinos Creek near Tres Pinos, Calif., 1923.

## MAXIMUM AND MINIMUM DISCHARGES

*Maximum and minimum discharges recorded at stations in the Pacific slope basins of southern California*

| Station | Period of record | Drainage area (square miles) | Maximum discharge | | | | Minimum discharge (second-feet) |
|---|---|---|---|---|---|---|---|
| | | | Date | Gage height (feet) | Discharge (second-feet) | | |
| | | | | | Total | Per square mile | |
| Arroyo Seco near Pasadena | 1910–1927 | 16.4 | Feb. 20, 1914 | 12.5 | 5,630 | 343 | 0 |
| Arroyo Seco near Soledad | 1901–1927 | 215 | Feb. 21, 1917 | 16.5 | 22,000 | 102 | 0 |
| Boulder Creek near Julian | 1912–1926 | 11 | Jan. 27, 1916 | | 2,393 | 218 | 0 |
| Boulder Creek near Lakeside | 1912–1926 | 33.5 | do | 9.5 | 3,000 | 89.6 | 0 |
| Cajon Creek near Keenbrook | 1919–1927 | | Dec. 20, 1921 | 9.0 | 5,000 | | .05 |
| City Creek near Highland | 1919–1927 | | Apr. 5, 1926 | 9.75 | 2,360 | | 0 |
| Cottonwood Creek at Morena Reservoir | | 119.5 | Jan. 27, 1916 | | 15,356 | 129 | |
| Dalton Creek near Glendora | 1919–1927 | | Feb. 16, 1927 | | 660 | | 0 |
| Devil Canyon Creek near San Bernardino | 1919–1927 | 6.16 | Apr. 7, 1926 | 3.75 | 220 | 35.7 | 0 |
| Eaton Creek near Pasadena | 1918–1927 | 6.5 | do | 5.0 | 1,360 | 209 | 0 |
| Fish Creek near Duarte | 1916–1927 | 6.5 | Apr. 4, 1925 | 8.0 | 2,180 | 335 | 0 |
| Haines Creek near Tujunga | 1917–1927 | 1.2 | Jan. 2, 1922 | 1.74 | [a] 15 | 12.5 | 0 |
| Jamul Creek near Otay | | 69.8 | Jan. —, 1916 | | [b] 18,100 | 259 | |
| Lone Pine Creek near Keenbrook | 1919–1927 | | Dec. 19, 1922 | 4.1 | 810 | | .1 |
| Lytle Creek at San Bernardino | | | Jan. 18, 1916 | | 16,000 | | 0 |
| Mill Creek near Craftonville | 1919–1927 | | Feb. 16, 1927 | 5.5 | 4,500 | | 0 |
| Moosa Canyon Creek near Bonsall | | 31.0 | Jan. —, 1916 | 9.1 | 8,346 | 269 | |
| Pacoima Creek near San Fernando | 1916–1927 | 27.9 | Feb. 16, 1927 | | 1,860 | 66.7 | 0 |

[a] There are a large number of check dams in the upper part of the drainage area.
[b] Computed from Kutter formula.

*Maximum and minimum discharges recorded at stations in the Pacific slope basins of southern California*—Continued

| Station | Period of record | Drainage area (square miles) | Maximum discharge | | | | Minimum discharge (second-feet) |
|---|---|---|---|---|---|---|---|
| | | | Date | Gage height (feet) | Discharge (second-feet) | | |
| | | | | | Total | Per square mile | |
| Plunge Creek near East Highlands | 1919–1927 | | Feb. 16, 1927 | 3.80 | 1,420 | | 0 |
| Rock Creek near Valyermo | 1923–1927 | | do | | 510 | | 1.2 |
| Rogers Creek near Azusa | 1917–1927 | | Apr. 7, 1926 | | 2,600 | | 0 |
| San Antonio Creek near Claremont | 1917–1927 | 16.9 | Dec. 19, 1921 | 8.20 | 1,020 | 60.4 | .1 |
| San Diego River at diverting dam | 1912–1916 | 102 | Jan. 28, 1916 | | 15,800 | 155 | |
| San Diego River at El Capitan dam site | | 189 | Jan. 27, 1916 | | 34,600 | 183 | |
| San Diego River near Santee | 1912–1927 | 375 | do | 25.1 | [b] 70,200 | 187 | 0 |
| San Diego River at San Diego | 1912–1916 | 434 | do | 19.3 | 75,000 | 173 | 0 |
| San Dieguito River near Bernardo | 1912–1925 | 299 | do | 21.2 | [b] 72,100 | 241 | 0 |
| San Dimas Creek near San Dimas | 1916–1927 | | Feb. 2, 1922 | | 1,140 | | 0 |
| San Gabriel River near Azusa | 1894–1927 | 214 | Jan. 18, 1916 | 12.0 | 40,000 | 187 | 0 |
| San Jacinto River near Elsinore | 1916–1927 | 717 | Feb. 17, 1927 | 11.8 | [b] 16,000 | 22.3 | 0 |
| San Jacinto River at Oak Cliff | | 108 | Jan. —, 1916 | | [b] 30,000 | 278 | |
| San Jacinto River near San Jacinto | 1920–1927 | | Feb. 16, 1927 | | [b] 45,000 | | 0 |
| San Jacinto River, South Fork of, at Hemet Reservoir | | 65.8 | Jan. 27, 1916 | 128.0 | 9,550 | 145 | |
| San Luis Rey River near Mesa Grande | 1911–1922 | 209 | do | 18.0 | [b] 58,600 | 280 | .1 |
| San Luis Rey River near Pala | 1903–1916 | 322 | do | 18.1 | [b] 75,000 | 233 | .6 |
| San Luis Rey River at Oceanside | 1912–1916 | 565 | do | | 95,600 | 169 | 0 |
| San Vicente Creek at Foster | 1914–1916 | 74.9 | do | | [b] 18,600 | 248 | 0 |
| Santa Ana River near Mentone | 1896–1927 | 189 | do | | [b] 29,100 | 154 | .1 |
| Santa Ana River at San Bernardino | | | do | | [b] 40,000 | | |
| Santa Ana River near Prado | 1919–1927 | | Feb. 16, 1927 | 11.5 | [b] 18,000 | | 37 |
| Santa Ana River at Santa Ana | 1923–1927 | | do | 8.2 | [b] 25,000 | | 0 |
| Santa Anita Creek near Sierra Madre | 1916–1927 | | Apr. 7, 1926 | 10.7 | 1,400 | | .1 |
| Santa Margarita River near Fallbrook | 1924–1927 | | Feb. 16, 1927 | 15.6 | 33,100 | | .1 |
| Santa Margarita River near Ysidora | 1923–1927 | | do | 18.0 | 33,600 | | 0 |
| Santa Maria Creek near Ramona | 1912–1918 | 57.3 | Jan. 27, 1916 | 15.9 | [b] 7,140 | 125 | 0 |
| Santa Ynez River near Santa Barbara | 1904–1918 | 218 | Jan. 25, 1914 | 23.0 | 13,100 | 60.1 | 0 |
| Santa Ynez River near Lompoc | (1906–1918) (1925–1927) | 725 | do | 13.0 | 41,800 | 57.7 | .1 |
| Santa Ysabel Creek near Mesa Grande | 1912–1924 | 53.4 | Jan. 27, 1916 | 11.0 | [b] 21,100 | 395 | 0 |
| Santa Ysabel Creek near Ramona | 1912–1923 | 110 | do | 14.0 | [b] 28,400 | 258 | .1 |
| Santa Ysabel Creek near Escondido | 1906–1912 | 128 | Mar. 24, 1906 | | 8,000 | 62.5 | 0 |
| Santiago Creek near Villa Park | 1920–1927 | | Feb. 16, 1927 | 8.4 | [b] 11,000 | | 0 |
| Sawpit Creek near Monrovia | 1916–1927 | 5.3 | Apr. 7, 1926 | | 2,000 | 377 | 0 |
| Sespe Creek near Sespe | 1915–1927 | 216 | do | 16.0 | 27,000 | 125 | .8 |
| Strawberry Creek near Arrowhead Springs | 1919–1927 | | Jan. 2, 1922 | 3.87 | 408 | | .2 |
| Sweetwater River near Descanso | 1905–1927 | 43.7 | Feb. 16, 1927 | | [b] 11,200 | 256 | 0 |
| Sweetwater River near Dehesa | 1913–1916 | 112 | Jan. —, 1916 | | [b] 24,295 | 217 | 0 |
| Sweetwater River near Jamacho | | 172 | do | | [b] 43,002 | 250 | |
| Sweetwater River at Sweetwater Reservoir | 1887–1927 | 181 | Jan. 27, 1916 | | 45,500 | 251 | |
| Switzer Canyon at San Diego | | 3.55 | do | | 668 | 188 | |
| Temecula Creek at Nigger Canyon | 1923–1927 | | Feb. 16, 1927 | 19.5 | 17,100 | | .8 |
| Temecula Creek at Railroad Canyon | 1923–1927 | | do | 15.0 | 27,600 | | .4 |
| Tujunga Creek near Sunland | 1916–1927 | 106 | Dec. 19, 1921 | 6.20 | 8,600 | 81.1 | .1 |
| Warm Creek near Colton | 1920–1927 | | Dec. 21, 1922 | | 2,780 | | 26 |
| Waterman Canyon Creek near Arrowhead Springs | 1920–1927 | 4.55 | Jan. 2, 1922 | | 164 | 36.0 | 0 |

[b] Computed from Kutter formula.

NOTE.—See Water Supply Paper 426 for detailed data on flood of 1916.

## MONTHLY DISCHARGE

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*

**Tia Juana River near Nestor**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1914–15 | 0 | 0 | 0 | 132 | 863 | 649 | 26 | 390 | 2.6 | 0 | 0 | 0 | 168 |

**Cottonwood Creek near Dulzura**

[Drainage area, 246 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905–6 | | | | 15.5 | 24.1 | 594 | 176 | 54.9 | 30.5 | 12.0 | 6.0 | 1.3 | |
| 1906–7 | 3.0 | 20.4 | 80.8 | 175 | 66.9 | 191 | 111 | 44.4 | 23.2 | 4.2 | 1.2 | 1.0 | 60.2 |
| 1907–8 | 7.5 | 8.9 | 9.8 | 25.2 | 58.4 | 34.0 | 15.6 | 9.51 | 3.49 | .145 | .085 | .214 | 14.4 |
| 1908–9 | 2.37 | 4.31 | 6.22 | 104 | 72.4 | 101 | 35.0 | 2.90 | 1.78 | .70 | 2.95 | 2.10 | 27.8 |
| 1909–10 | 1.55 | 9.07 | 16.2 | 33.1 | 4.68 | 9.57 | 8.74 | .95 | .34 | .01 | 0 | 0 | 7.07 |
| 1910–11 | .24 | 2.78 | 2.16 | 3.09 | 4.96 | 2.33 | 1.20 | .98 | .49 | 0 | 0 | 0 | 1.49 |
| 1911–12 | 0 | 0 | 1.04 | 1.92 | 1.31 | 11.8 | 15.2 | 1.32 | .46 | .19 | 0 | 0 | 2.77 |
| 1912–13 | 0 | .91 | 1.52 | 1.49 | 2.98 | 1.76 | 2.66 | 1.04 | .34 | 0 | 0 | 1.70 | 1.18 |
| 1913–14 | 0 | .51 | 1.55 | 3.30 | 26.4 | 1.34 | 1.04 | .96 | .61 | 0 | 0 | 0 | 2.81 |
| 1914–15 | 0 | 0 | .657 | 11.9 | 50.0 | 26.5 | 7.78 | 58.1 | 3.30 | 2.28 | 3 | 3.66 | 14.4 |
| 1915–16 | 3.79 | 5.20 | 8.20 | | | | | | | | | | |
| Average | 1.84 | 5.21 | 12.8 | 37.4 | 31.2 | 97.3 | 37.4 | 17.5 | 6.45 | 1.95 | 1.32 | 1.00 | 14.7 |

**Dulzura conduit near Dulzura**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1908–9 | | | | 10.1 | 41 | 44.7 | 52.5 | 24.4 | 7.3 | 0.16 | 0 | 0 | |
| 1909–10 | 0 | 0 | 17.7 | 48.4 | 35.5 | 30.0 | 19.4 | 4.89 | .32 | 0 | 0 | 0 | 12.9 |
| 1910–11 | 0 | 0 | .06 | 4.81 | 31.0 | 23.6 | 9.45 | 0 | 0 | 0 | 0 | 0 | 5.57 |
| 1911–12 | 0 | 0 | 0 | 8.77 | 3.24 | 19.4 | 30.0 | 13.6 | .89 | 0 | 0 | 0 | 6.33 |
| 1912–13 | 0 | 0 | 0 | 3.04 | 7.02 | 17.3 | 41.0 | 7.34 | 0 | 0 | 0 | 1.13 | 6.35 |
| 1913–14 | 0 | 0 | 1.13 | 6.47 | 17.1 | 10.4 | 8.13 | 3.63 | 0 | 0 | 0 | 0 | 3.82 |
| 1914–15 | 0 | 0 | .942 | 6.76 | 38.1 | 44.2 | 28.3 | 45.4 | 23.0 | 7.46 | .45 | 0 | 16.1 |

**Pine Valley Creek near Dulzura**

[Drainage area, 120 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905–6 | | | | 10.4 | 19.4 | 156 | 89.6 | 39.4 | 9.8 | 2.6 | 4.0 | 0.6 | |
| 1906–7 | 0.8 | 2.6 | 20.1 | 49.3 | 34.8 | 62.4 | 45.0 | 19.8 | 10.0 | 2.0 | .6 | .3 | 20.6 |
| 1907–8 | 3.1 | 3.0 | 3.4 | | | | | | | | | | |

**Sweetwater River near Descanso**

[Drainage area, 43.7 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905–6 | | | | 8.7 | 22.3 | 180 | 48.5 | 21.6 | 7.0 | 1.8 | 1.8 | 1.5 | |
| 1906–7 | 1.1 | 3.0 | 10.1 | 56.7 | 28.6 | 65.0 | 39.8 | 19.6 | 9.8 | 5.0 | 2.9 | 2.6 | 20.3 |
| 1907–8 | 4.5 | 2.6 | 3.8 | 4.9 | 13.8 | 10.2 | 5.4 | 3.6 | 1.0 | .4 | .5 | 1.8 | 4.38 |
| 1908–9 | 1.0 | 1.0 | 1.5 | 24.0 | 61.6 | 37.4 | 35.2 | 10.9 | 6.65 | 3.87 | 4.88 | 4.00 | 16.0 |
| 1909–10 | 3.74 | 6.08 | 12.8 | 65.1 | 13.9 | 12.9 | 11.6 | 4.66 | 1.39 | .63 | .25 | .208 | 11.1 |
| 1910–11 | .955 | 1.51 | 2.66 | 8.05 | 46.2 | 24.4 | 8.95 | 1.81 | .63 | .57 | .46 | .47 | 8.06 |
| 1911–12 | .62 | .76 | 1.14 | .90 | .80 | 38.8 | 30.4 | 10.5 | 2.45 | .58 | .43 | .62 | 6.94 |
| 1912–13 | .86 | .83 | .92 | 3.51 | 9.09 | 12.2 | 5.58 | 1.48 | .70 | 0 | .84 | 2.87 | 3.21 |
| 1913–14 | .10 | .17 | .11 | 17.8 | 33.9 | 7.0 | 5.82 | 3.19 | .205 | .05 | .05 | .05 | 5.52 |
| 1914–15 | .51 | .89 | 1.18 | 18.4 | 114 | 49.9 | 31.7 | 164 | 19.8 | 4.69 | 1.40 | .91 | 33.5 |
| 1915–16 | 1.01 | 8.69 | 5.14 | | 102 | 86.5 | 45.1 | 20.5 | 8.24 | 4.15 | 1.20 | 0 | |
| 1916–17 | 3.91 | 1.52 | 3.09 | 13.2 | 26.4 | 18.1 | 20.8 | 9.02 | 3.79 | 1.19 | .90 | .843 | 8.44 |
| 1917–18 | .84 | .88 | .85 | 2.17 | 4.02 | 82.8 | 18.8 | 3.42 | 4.08 | 1.42 | 1.00 | 1.00 | 10.2 |
| 1918–19 | 1.60 | 1.64 | 2.32 | 1.50 | 12.1 | 14.9 | 6.72 | 1.93 | .99 | .94 | .57 | .92 | 3.79 |
| 1919–20 | 1.67 | 2.09 | 3.41 | 3.89 | 29.7 | 76.1 | 56.4 | 16.0 | 4.96 | 1.36 | .57 | .41 | 16.3 |
| 1920–21 | 1.11 | 1.63 | 1.73 | 3.87 | 3.22 | 3.24 | 1.84 | 3.12 | .61 | .24 | .19 | .25 | 1.75 |
| 1921–22 | .49 | .35 | 77.6 | 59.4 | 164 | 128 | 76.9 | 34.8 | 12.3 | 4.03 | 1.31 | .62 | 46.0 |
| 1922–23 | .82 | 1.85 | 11.8 | 7.55 | 27.5 | 15.9 | 18.1 | 6.64 | 2.38 | .76 | .52 | .97 | 7.75 |
| 1923–24 | .54 | .89 | 1.81 | 1.86 | 1.06 | 7.77 | 12.5 | 1.75 | .50 | .21 | .20 | .19 | 2.44 |
| 1924–25 | .52 | .58 | 1.92 | 1.49 | 1.62 | 3.16 | 12.0 | 3.26 | 1.84 | .41 | .09 | .11 | 2.24 |
| 1925–26 | .55 | .53 | .61 | .70 | 4.80 | 1.70 | 66.6 | 5.03 | 1.10 | .39 | .20 | .20 | 6.77 |
| 1926–27 | .25 | .48 | 26.0 | 9.40 | | | 51.4 | 23.0 | | | | | |
| Average | 1.27 | 1.81 | 8.12 | 14.9 | 34.3 | 41.5 | 27.7 | 16.8 | 4.31 | 1.56 | .96 | .98 | 11.3 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Sweetwater River near Dehesa**

[Drainage area, 112 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1913–14 | | | 0.42 | 17.5 | 37 | 10.2 | 8.25 | 6.15 | 0.94 | 0.085 | 0.069 | 0.05 | |
| 1914–15 | 0.05 | 0.27 | .78 | 23.8 | 168 | 97.6 | 44.6 | 214 | 23.5 | 3.60 | .11 | 0 | 47.4 |
| 1915–16 | .10 | | | | | | 76.0 | 43.1 | 17.7 | 6.05 | | | |

**Sweetwater River at Sweetwater Reservoir**

[Drainage area, 181 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1887–88 | | | a 19.2 | a 28.5 | a 26.4 | a 37.1 | a 3.09 | a 2.21 | | | | | 9.71 |
| 1888–89 | | 2.17 | 35.8 | 32.2 | 39.2 | a201 | a 75.7 | 20.3 | 11.1 | | | | 34.8 |
| 1889–90 | | | | | | | | | | | | | 28.4 |
| 1890–91 | | | | 7.97 | 271 | 62.6 | 24.8 | 11.8 | | | | | 29.8 |
| 1891–92 | | | | | 36.4 | 16.5 | 26.5 | 24.7 | | | | | 8.54 |
| 1892–93 | | | | | 8.68 | 209 | 45.5 | 3.76 | | | | | 22.5 |
| 1893–94 | | | | | 12.9 | 10.1 | | | | | | | 1.85 |
| 1894–95 | | | | a 876 | a 185 | a 89.4 | a 40.3 | a16.3 | a 5.38 | | | | 101 |
| 1895–96 | | | | 4.44 | 4.64 | 12.7 | | | | | | | 1.82 |
| 1896–97 | | | | 3.69 | 44.9 | 56.6 | 8.96 | 2.26 | | | | | 95.2 |
| 1897–98 | | | | | .07 | | | | | | | | .006 |
| 1898–99 | | | | 3.98 | | | | | | | | | .34 |
| 1899–1900 | | | | | | | | | | | | | 0 |
| 1900–1 | | | | .08 | 14.8 | | | | | | | | 1.14 |
| 1901–2 | | | | | | | | | | | | | 0 |
| 1902–3 | | | | | | | | | | | | | 0 |
| 1903–4 | | | | | | | | | | | | | 0 |
| 1904–5 | | | | | 42.6 | 122 | 28.4 | 24.7 | 8.99 | 2.57 | | | 19.0 |
| 1905–6 | | | | | 20.6 | a416 | a112 | a23.3 | 2.76 | | | | 48.3 |
| 1906–7 | | | 11.3 | a139 | a 70.0 | a159 | a 97.5 | 15.5 | 5.53 | | | | 41.4 |
| 1907–8 | | | | 11.7 | 37.7 | 17.9 | 2.49 | | | | | | 5.70 |
| 1908–9 | | | | 42.6 | a700 | a61.0 | a 57.3 | 9.90 | .60 | | | | 22.1 |
| 1909–10 | | | 21.7 | 92.6 | 25.8 | 12.0 | 6.27 | .70 | | | | | 13.3 |
| 1910–11 | | | | 4.16 | 18.8 | 23.0 | 7.43 | | | | | | 4.36 |
| 1911–12 | | | | | | 15.2 | 53.8 | 14.0 | | | | | 6.89 |
| 1912–13 | 0.10 | .10 | .10 | .39 | .40 | 10.3 | 3.02 | .39 | .10 | .03 | 0.05 | 0.07 | 1.26 |
| 1913–14 | .10 | .10 | .10 | 6.15 | 40.2 | 8.64 | 3.33 | 2.23 | .34 | .07 | .03 | .03 | 4.87 |
| 1914–15 | .10 | .10 | .57 | 15.9 | 158 | 82.0 | 34.1 | 149 | 17.0 | .86 | .05 | .05 | 37.4 |
| 1915–16 | .05 | .05 | .99 | 1,830 | 484 | 199 | 83.1 | 32.2 | 13.9 | 2.28 | .20 | .20 | 221 |
| 1916–17 | 12.2 | 5.70 | 19.3 | 53.7 | 67.1 | 31.8 | 38.2 | 19.2 | 8.03 | 1.38 | | | 21.1 |
| 1917–18 | | | | 2.98 | 10.4 | 144 | 9.50 | | | | | | 14.1 |
| 1918–19 | | 1.58 | 7.79 | 2.13 | 24.9 | 24.0 | 5.28 | 2.86 | | | | | 5.60 |
| 1919–20 | | | | .36 | 44.1 | 121 | 62.9 | 18.1 | 1.29 | | | | 20.6 |
| 1920–21 | | | 1.50 | 3.82 | 6.32 | 6.55 | | 10.9 | | | .98 | | 2.50 |
| 1921–22 | | | 232 | 170 | 237 | 210 | 122 | 44.5 | 14.0 | 4.26 | | | 85.6 |
| 1922–23 | | 3.76 | 29.5 | 15.4 | 48.3 | 28.8 | 28.0 | | | | | | 12.6 |
| 1923–24 | | | 2.60 | .46 | 1.56 | 18.5 | 21.9 | 1.61 | | | | | 3.88 |
| 1924–25 | | 1.11 | 2.36 | | | 1.40 | 11.6 | 2.47 | | | | | 1.57 |
| 1925–26 | 4.85 | 2.35 | 2.73 | 2.15 | 3.96 | 2.21 | 217 | 6.33 | .59 | | | | 19.9 |
| 1926–27 | | | | 9.03 | 1,520 | 412 | 101 | 33.00 | 8.30 | | | | 164 |
| Average | .44 | .43 | 9.69 | 84.0 | 105 | 70.5 | 33.3 | 12.3 | 2.45 | .29 | .01 | .03 | 27.8 |

a Estimated.

NOTE.—No flow when discharge is not given. Record furnished in acre-feet and converted into second-feet by U. S. Geol. Survey.

**San Diego River at diverting dam near Lakeside**

[Drainage area, 102 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1912–13 | 0 | 0 | 0 | 2.34 | 9.45 | 1.21 | 0.18 | 0 | 0 | 0 | 0 | 0 | 1.04 |
| 1913–14 | 0 | 0 | .05 | 47.4 | 96.2 | 4.47 | 2.3 | 2.35 | .01 | 0 | 0 | 0 | 12.2 |
| 1914–15 | 0 | 0 | 0 | 33.8 | 182 | 60.5 | 26.6 | 170 | 9.78 | .13 | 0 | 0 | 39.4 |
| 1915–16 | 0 | 0 | 0 | 1,510 | 256 | 153 | 59.3 | 9.27 | .23 | .47 | 0 | 0 | 167 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**San Diego River and flume at diverting dam near Lakeside**

[Drainage area, 102 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1912-13 | 4.07 | 3.58 | 3.12 | 7.38 | 21.4 | 33.5 | 14.7 | 3.94 | 5.95 | 6.28 | 3.60 | 3.10 | 9.15 |
| 1913-14 | 1.81 | 0 | 3.50 | 51.1 | 112 | 25.5 | 17.3 | 14.2 | 3.26 | 2.50 | 3.36 | 2.25 | 19.1 |
| 1914-15 | ------ | ------ | ------ | 39.3 | 199 | 98.2 | 65.2 | 232 | 34.2 | 10.1 | 7.21 | 7.35 | ------ |
| 1915-16 | 5.50 | 3.47 | 3.39 | 1,510 | 256 | 153 | 75.1 | 31.1 | 11.4 | 5.86 | 3.93 | 5.88 | 173 |

**San Diego River at Lakeside**

[Drainage area, 203 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905-6 | ------ | ------ | ------ | 16.7 | 43.6 | 683 | 277 | 65.7 | 15.1 | 1.2 | 0.6 | 0.1 | ------ |
| 1906-7 | 0 | 0 | 11 | 183 | 87.6 | 242 | 157 | 45.4 | 15 | .44 | 0 | 0 | 61.8 |
| 1907-8 | 0 | .2 | .6 | 15.5 | 76 | 44 | 11.6 | 5 | .4 | .1 | 0 | 0 | 12.4 |
| 1908-9 | 0 | 0 | .08 | 148 | 281 | 122 | 74.5 | 18.2 | 7.17 | 3.19 | 16.6 | 0 | 54.5 |
| 1909-10 | 0 | 0 | 23.5 | 156 | 49.5 | 41.4 | 31.7 | 1.68 | .38 | .12 | 0 | 0 | 25.4 |
| 1910-11 | 0 | 0 | 0 | 3.5 | 84.1 | 75.3 | 24.2 | .98 | .20 | 0 | 0 | 0 | 15.2 |
| 1911-12 | 0 | 0 | 0 | 0 | 0 | 55.3 | 109 | 33.7 | .58 | .16 | .01 | 0 | 16.5 |
| 1912-13 | 0 | 0 | 0 | 0 | 3.80 | 19.4 | 5.48 | .15 | 0 | 0 | 0 | 0 | 2.40 |
| 1913-14 | 0 | 0 | 0 | 46.8 | 110 | 14.5 | 4.55 | 4.39 | .48 | 0 | 0 | 0 | 14.4 |
| 1914-15 | 0 | 0 | 0 | 42.9 | 270 | 124 | 84.6 | 276 | 27.3 | 1.08 | .02 | 0 | 67.6 |
| 1915-16 | 0 | 0 | 0 | 2,420 | 361 | 259 | 98.4 | 35.0 | 8.78 | 1.65 | .032 | 0 | 267 |
| Average | 0 | .02 | 3.52 | 276 | 124 | 153 | 79.8 | 44.2 | 6.85 | .72 | 1.57 | .009 | 53.7 |

**San Diego River and flume near Lakeside**

[Drainage area, 203 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906-7 | ------ | ------ | ------ | 188 | 90.5 | 246 | 165 | 57.0 | 24.4 | 10.2 | 8.92 | 9.24 | ------ |
| 1907-8 | 6.63 | 3.36 | 3.38 | 21.9 | 82.6 | 47.8 | 20.9 | 14.2 | 7.28 | 7.58 | 7.20 | 7.47 | 19.0 |
| 1908-9 | 6.76 | 5.22 | 2.74 | 155 | 285 | 124 | 83.5 | 30.6 | 14.7 | 10.4 | 23.6 | 7.40 | 61.0 |
| 1909-10 | 5.87 | 4.70 | 31.3 | 159 | 51.2 | 46.0 | 39.8 | 10.9 | 8.68 | 7.89 | 7.80 | 8.50 | 31.8 |
| 1910-11 | 7.27 | 4.83 | 4.99 | 10.1 | 93.6 | 80.8 | 35.3 | 9.26 | 4.18 | 3.47 | 5.19 | 3.05 | 21.8 |
| 1911-12 | .08 | 0 | .13 | .78 | 1.06 | 66.0 | 122 | 45.7 | 10.0 | 7.81 | 5.55 | 2.73 | 21.8 |
| 1912-13 | 3.81 | 2.47 | 2.29 | 3.97 | 8.70 | 28.9 | 14.8 | 3.62 | 4.86 | 4.80 | 2.62 | 1.89 | 6.88 |
| 1913-14 | .64 | 0 | 0 | 47.1 | 120 | 31.1 | 19.4 | 16.1 | 3.66 | 3.56 | 4.59 | 3.88 | 20.1 |
| 1914-15 | 2.32 | 1.81 | .99 | 48.6 | 282 | 142 | 101 | 289 | 39.9 | 11.2 | 7.62 | 6.31 | 76.5 |
| 1915-16 | 6.35 | 4.71 | 4.74 | 2,420 | 361 | 261 | 117 | 57.2 | 27.4 | 11.9 | 7.49 | 8.72 | 276 |
| Average | 4.41 | 3.01 | 5.62 | 305 | 138 | 107 | 71.9 | 53.4 | 14.5 | 7.88 | 8.06 | 5.92 | 59.4 |

**San Diego River near Santee**

[Drainage area, 375 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1912-13 | 0.05 | 0.1 | 0.2 | 1.72 | 3.75 | 17.2 | 5.64 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 2.40 |
| 1913-14 | 0 | 0 | 0 | 49.5 | 175 | 23.0 | 1.8 | 2.4 | 0 | 0 | 0 | 0 | 19.9 |
| 1914-15 | 0 | 0 | 0 | 118 | 563 | 212 | 116 | 379 | 11.7 | 0 | 0 | 0 | 114 |
| 1915-16 | ------ | ------ | ------ | ------ | ------ | ------ | 121 | 28.8 | 3.88 | 0 | 0 | 0 | ------ |
| 1916-17 | ------ | ------ | ------ | 111 | 136 | 74.7 | 81.8 | 33.8 | 6.83 | 0 | 0 | 0 | ------ |
| 1917-18 | 0 | 0 | .1 | .2 | .2 | 320 | 12.1 | .7 | 0 | 0 | 0 | 0 | 28.3 |
| 1918-19 | .1 | .1 | .1 | .2 | 1.0 | 20.0 | 1.0 | .1 | .1 | 0 | 0 | 0 | 1.9 |
| 1919-20 | ------ | ------ | ------ | ------ | 39.9 | 181 | 86.7 | 8.61 | ------ | ------ | ------ | ------ | ------ |
| 1920-21 | .1 | .17 | .29 | .30 | .41 | .80 | .10 | .42 | .1 | .1 | .1 | .1 | .25 |
| 1921-22 | .10 | .30 | 883 | 370 | 630 | 545 | 261 | 96.9 | 15.6 | .24 | .10 | .10 | 232 |
| 1922-23 | 0 | .04 | 14.3 | 6.47 | 61.5 | 47.0 | 40.6 | 1.61 | 0 | 0 | 0 | 0 | 13.9 |
| 1923-24 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | (b) |
| 1924-25 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | (b) |
| 1925-26 | .1 | .3 | .4 | .2 | .3 | .2 | 428 | 5.09 | .3 | .1 | .1 | .1 | 35.8 |
| 1926-27 | 0 | 0 | 10.7 | .37 | 1,590 | 478 | 175 | 60.4 | 7.96 | 0 | 0 | 0 | 184 |
| Average | ------ | ------ | 90.9 | 59.8 | 267 | 160 | 102 | 47.5 | 3.88 | ------ | ------ | ------ | 52.7 |

[b] Practically dry throughout year.

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**San Diego River at San Diego**

[Drainage area, 434 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1912–13 | 0 | 0 | 0 | 0 | 0 | 1.7 | 1.54 | 0 | 0 | 0 | 0 | 0 | 0.27 |
| 1913–14 | | | | 44.6 | 186 | 25.6 | 2.9 | 0 | | | | | |
| 1914–15 | 0 | 0 | 0 | 136 | 672 | 209 | 66.1 | 316 | 25.4 | 0 | 0 | 0 | 115 |
| 1915–16 | | | | 3,460 | | | | | | | | | |

**Boulder Creek near Julian**

[Drainage area, 12.0 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | | | | | | | | | 9.45 | 8.24 | 4.80 | |
| 1912–13 | 3.21 | 2.40 | 0.87 | 0.57 | 0 | 0 | 0 | 0.34 | 6.37 | 8.72 | 6.41 | 5.57 | 2.89 |
| 1913–14 | 1.85 | .06 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.48 | 5.09 | 3.57 | 1.27 |
| 1914–15 | 1.78 | .82 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2.13 | 6.86 | 6.54 | 1.52 |
| 1915–16 | 6.57 | 2.06 | .22 | 153 | 42.1 | 15.6 | 0 | 0 | 0 | 0 | 2.00 | 4.53 | 18.9 |
| 1916–17 | .11 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | .73 | 8.20 | 8.36 | 8.90 | 2.21 |
| 1917–18 | 6.10 | 3.14 | .61 | .90 | 11.9 | 0 | 0 | .90 | 5.43 | 10.6 | 11.6 | 8.93 | 4.96 |
| 1918–19 | 7.50 | 2.82 | 0 | 0 | 0 | 0 | 0 | 2.93 | 10.9 | 12.8 | 10.5 | 5.76 | 4.46 |
| 1919–20 | 2.08 | 2.23 | 0 | 0 | 0 | 0 | 0 | 0 | 1.10 | 11.6 | 13.3 | 10.5 | 3.41 |
| 1920–21 | 8.64 | 3.39 | 1.40 | 1.16 | 0 | 0 | 1.30 | 1.93 | 3.20 | 8.76 | 6.32 | 9.46 | 3.82 |
| 1921–22 | 0 | 0 | .88 | 0 | 0 | 0 | 0 | 0 | 0 | 1.74 | 7.84 | 9.17 | 1.64 |
| 1922–23 | 5.99 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4.41 | 11.1 | 11.9 | 10.7 | 3.70 |
| 1923–24 | 3.72 | 4.94 | 1.53 | 0 | 1.41 | .37 | 0 | 4.19 | 7.17 | 9.63 | 9.46 | 9.07 | 4.30 |
| 1924–25 | 6.19 | 2.74 | .71 | 0 | 0 | .32 | 0 | 0 | .37 | 3.86 | 3.90 | 4.90 | 1.93 |
| 1925–26 | 4.55 | .89 | 0 | 0 | 0 | 0 | 0 | 0 | 1.25 | 6.53 | 7.79 | 6.80 | 2.34 |
| Average | 4.16 | 1.82 | .44 | 11.1 | 3.96 | 1.16 | .09 | .74 | 2.92 | 7.31 | 7.97 | 7.28 | 4.10 |

**Boulder Creek at mouth, near Lakeside**

[Drainage area, 33.5 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | | | | | | | | | | | 4.20 | |
| 1912–13 | 4.63 | 3.18 | 2.56 | 3.70 | 6.64 | 12.2 | 5.77 | 2.34 | 5.14 | 5.40 | 3.70 | 3.23 | 4.86 |
| 1913–14 | 2.22 | 2.05 | 2.13 | | | 4.91 | 4.64 | 5.15 | 2.06 | 2.77 | 2.96 | 2.01 | |
| 1914–15 | 1.99 | 2.46 | 2.71 | 10.2 | 43.5 | 24.3 | 18.1 | 60.8 | 11.4 | 5.24 | 6.62 | 7.11 | 16.0 |
| 1915–16 | 5.05 | 3.17 | 3.24 | | | | | | | | | | |
| 1919–20 | 2.23 | 4.42 | 3.32 | 2.28 | 17.7 | 38.4 | 29.0 | 10.4 | 5.25 | 9.71 | 9.84 | 8.36 | 11.7 |
| 1920–21 | 7.32 | 4.17 | 4.18 | 5.06 | 4.70 | 6.57 | 2.86 | 6.24 | 3.81 | 7.60 | 4.39 | 6.91 | 5.33 |
| 1921–22 | .47 | .15 | 56.0 | 28.6 | 57.1 | 63.3 | 43.5 | 21.4 | 9.53 | 3.21 | 8.40 | 8.53 | 25.0 |
| 1922–23 | 5.97 | 2.76 | 11.5 | 4.74 | 14.5 | 13.6 | 13.2 | 6.03 | 6.19 | 8.66 | 10.1 | 8.72 | 8.78 |
| 1923–24 | 4.71 | 5.79 | 4.07 | 2.56 | 2.64 | 7.05 | 9.21 | 6.00 | 6.13 | 6.82 | 7.45 | 7.33 | 5.82 |
| 1924–25 | 5.92 | 3.90 | 6.74 | 1.68 | 2.45 | 4.37 | 15.8 | 3.44 | 2.12 | 2.11 | 2.64 | 3.34 | 4.54 |
| 1925–26 | | | | | | | 45.9 | 4.87 | | | 5.46 | 4.96 | |
| Average | 4.05 | 3.20 | 9.64 | 7.35 | 18.7 | 19.4 | 18.8 | 12.7 | 5.74 | 5.94 | 6.16 | 5.88 | 10.3 |

**Cuyamaca Water Co.'s flume at diverting dam near Lakeside**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | | | | | | | | 8.63 | 9.04 | 6.33 | 3.20 | |
| 1912–13 | 4.07 | 3.58 | 3.12 | 5.05 | 12.0 | 32.2 | 14.6 | 3.94 | 5.95 | 6.28 | 3.60 | 3.10 | 8.11 |
| 1913–14 | 1.81 | 0 | 1.09 | 2.55 | 15.6 | 21.0 | 15.0 | 11.9 | 3.23 | 2.50 | 3.36 | 2.25 | 6.64 |
| 1914–15 | | | | 5.56 | 16.5 | 27.2 | 16.4 | 26.0 | 24.4 | 9.99 | 7.21 | 7.35 | |
| 1915–16 | 5.50 | 3.47 | 3.39 | 6.09 | 0 | 0 | 15.8 | 21.8 | 11.1 | 5.39 | 3.93 | 5.88 | 6.88 |
| 1916–17 | 4.99 | 5.35 | 3.70 | 5.52 | 2.09 | 4.71 | 2.90 | 4.96 | 6.31 | 3.48 | 6.67 | 6.28 | 5.19 |
| 1917–18 | 5.50 | 4.79 | 1.70 | 4.53 | 19.6 | 20.6 | 15.9 | 7.74 | 6.24 | 8.56 | 10.1 | 8.08 | 9.37 |
| 1918–19 | 7.31 | 5.05 | 1.61 | 2.68 | 17.2 | 18.3 | 15.2 | 9.05 | 12.5 | 14.2 | 10.1 | 7.19 | 9.96 |
| 1919–20 | 2.17 | 2.41 | 2.40 | 1.89 | 11.3 | 18.9 | 14.3 | 16.4 | 8.99 | 10.9 | 12.4 | 9.75 | 9.31 |
| 1920–21 | 9.42 | 4.93 | 3.89 | 6.95 | 9.21 | 9.85 | 5.88 | 10.5 | 4.82 | 7.92 | 4.50 | 8.09 | 7.16 |
| 1921–22 | 0 | .35 | .88 | 12.8 | 17.6 | 16.5 | 13.2 | 7.94 | 8.86 | 5.80 | 8.40 | 8.28 | 8.32 |
| 1922–23 | 6.29 | 2.63 | 5.19 | 9.91 | 12.9 | 4.72 | 4.12 | 9.01 | 8.28 | 10.2 | 10.9 | 9.16 | 7.75 |
| 1923–24 | 3.26 | 6.22 | 3.75 | 4.60 | 3.11 | 11.9 | 18.0 | 6.45 | 6.06 | 7.51 | 7.83 | 7.10 | 7.15 |
| Average | 4.57 | 3.53 | 2.79 | 5.68 | 11.4 | 15.5 | 12.6 | 11.3 | 8.87 | 7.83 | 7.33 | 6.59 | 7.80 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Cuyamaca Water Co.'s flume near Lakeside**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906–7 | | | | 4.62 | 2.97 | 3.31 | 7.79 | 11.58 | 9.44 | 9.76 | 8.91 | 9.20 | |
| 1907–8 | 6.63 | 3.16 | 2.79 | 6.38 | 6.02 | 3.58 | 9.27 | 9.29 | 6.94 | 7.95 | 7.20 | 7.50 | 6.39 |
| 1908–9 | 6.76 | 5.22 | 2.65 | 6.47 | 3.26 | 2.28 | 9.00 | 12.4 | 7.59 | 7.11 | 6.89 | 7.35 | 6.43 |
| 1909–10 | 5.88 | 4.57 | 7.79 | 2.63 | 1.71 | 4.57 | 8.14 | 9.22 | 8.30 | 7.77 | 7.80 | 8.50 | 6.43 |
| 1910–11 | 7.27 | 4.83 | 4.99 | 6.60 | 9.58 | 5.62 | 11.0 | 8.25 | 3.98 | 3.47 | 5.19 | 3.05 | 6.13 |
| 1911–12 | .08 | 0 | .13 | .78 | 1.06 | 10.8 | 13.1 | 12.0 | 9.47 | 7.65 | 5.54 | 2.73 | 5.29 |
| 1912–13 | 3.81 | 2.47 | 2.29 | 3.97 | 4.89 | 9.49 | 10.1 | 3.47 | 4.86 | 4.80 | 2.62 | 1.89 | 4.55 |
| 1913–14 | .64 | 0 | 0 | .26 | 9.66 | 16.5 | 14.9 | 11.7 | 3.18 | 3.56 | 4.59 | 3.88 | 5.71 |
| 1914–15 | 2.32 | 1.81 | .99 | 5.68 | 11.4 | 18.0 | 16.8 | 12.7 | 12.5 | 10.1 | 7.61 | 6.31 | 8.84 |
| 1915–16 | 6.35 | 4.71 | 4.74 | 3.16 | | | 18.9 | 22.3 | 18.8 | 10.2 | 7.46 | 8.72 | |
| 1916–17 | 5.24 | 6.17 | 5.51 | 4.61 | 2.79 | 4.55 | 4.55 | 6.33 | 6.64 | 8.24 | 6.83 | 5.57 | 5.61 |
| 1917–18 | 4.92 | 5.35 | 1.87 | 5.11 | 19.8 | 17.0 | 16.2 | 9.49 | 5.79 | 7.08 | 8.18 | 5.96 | 8.82 |
| 1918–19 | 5.52 | 4.52 | 2.47 | 4.58 | 15.5 | 19.3 | 16.7 | 8.35 | 7.80 | 9.82 | 7.80 | 7.43 | 9.10 |
| 1919–20 | 7.24 | 2.86 | 2.63 | 2.73 | 10.7 | 19.9 | 21.7 | 21.1 | 9.97 | 9.19 | 9.51 | 7.00 | 10.38 |
| 1920–21 | 5.99 | 3.37 | 3.45 | 6.07 | 8.82 | 9.82 | 4.72 | 9.50 | 5.36 | 8.56 | 7.83 | 10.1 | 6.96 |
| 1921–22 | 0 | 1.92 | 2.29 | 13.7 | 23.3 | 25.1 | 23.4 | 18.2 | 15.6 | 8.25 | 8.58 | 8.33 | 12.3 |
| 1922–23 | 6.68 | 3.77 | 7.86 | 13.5 | 18.4 | 6.55 | 5.65 | 11.7 | 8.88 | 8.59 | 10.0 | | |
| 1923–24 | 6.83 | 6.16 | 4.07 | 5.55 | 3.64 | 12.8 | 21.0 | 7.16 | 9.53 | 8.93 | 8.48 | 9.82 | 8.66 |
| 1924–25 | 8.43 | 4.12 | 8.37 | 3.23 | 6.01 | 12.4 | 17.4 | 9.27 | 5.78 | 5.74 | 9.09 | 11.7 | 8.47 |
| Average | 5.03 | 3.61 | 3.60 | 5.24 | 8.86 | 11.2 | 13.2 | 11.3 | 8.44 | 7.72 | 7.37 | 6.95 | 7.50 |

**South Fork of San Diego River near Alpine**

[Drainage area, 44.5 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1913–14 | 0 | 0 | 0 | 3.88 | 21.4 | 0 | 1.88 | 1.77 | 0.003 | 0 | 0 | 0 | 2.41 |
| 1914–15 | 0 | 0 | 0 | 6.15 | 29.3 | 14.1 | 2.46 | 13.3 | .05 | 0 | 0 | 0 | 5.30 |

**South Fork of Cuyamaca Water Co.'s flume near Alpine**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1912–13 | | | | | 3.42 | 8.91 | 5.09 | 0.43 | 0.09 | 0 | 0 | 0.19 | |
| 1913–14 | 0 | 0.15 | 0.008 | 1.89 | 1.24 | 2.03 | .86 | 0.72 | .045 | 0 | 0 | 0 | 0.575 |
| 1914–15 | 0 | 0 | 0 | .953 | 13.0 | 15.2 | 11.4 | 21.4 | 8.43 | 1.27 | .07 | 0 | 5.93 |

**San Vicente Creek at Foster**

[Drainage area, 74.9 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1914–15 | | | | | 149 | 47 | | | | | | | |

**Santa Ysabel Creek near Santa Ysabel**

[Drainage area, 12.8 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1912–13 | | | | | | | | | | | | 0.32 | |
| 1913–14 | 0.10 | 1.10 | 1.78 | 8.68 | 16.7 | 8.17 | 6.37 | 5.34 | 2.98 | 0 | 0 | 0 | 4.18 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Santa Ysabel Creek near Mesa Grande.**

[Drainage area, 53.4 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1912–13 | | | | 6.00 | 15.6 | 23.6 | 11.0 | 7.42 | 3.58 | 0.65 | 0.14 | 0.06 | |
| 1913–14 | 0.24 | 1.76 | 3.37 | 50.2 | 63.9 | 23.6 | 16.2 | 11.3 | 5.28 | .74 | .05 | .19 | 14.4 |
| 1914–15 | .78 | 1.27 | 4.39 | 36.2 | 156 | 79.8 | 44.4 | 150 | 34.4 | 10.0 | 3.77 | 3.07 | 43.0 |
| 1915–16 | 2.12 | 3.70 | 7.13 | 1,080 | 201 | 127 | 68.8 | 34.8 | 19.2 | 9.63 | 4.36 | 7.06 | 131 |
| 1916–17 | 7.87 | 6.43 | 11.4 | 30.6 | 62.1 | 40.8 | 26.5 | 21.5 | 13.0 | 5.48 | 2.71 | 2.25 | 19.0 |
| 1917–18 | 1.20 | 2.61 | 2.08 | 3.60 | 6.29 | 64.9 | 16.6 | 12.1 | 7.14 | 1.57 | 1.59 | 1.46 | 10.2 |
| 1918–19 | 2.06 | 5.50 | 9.11 | 5.82 | 16.7 | 23.4 | 10.8 | 5.07 | 1.0 | .2 | .15 | .6 | 6.65 |
| 1919–20 | 1.04 | 4.38 | 7.12 | 4.09 | 23.8 | 81.9 | 50.1 | 22.2 | 6.31 | 1.41 | 4.12 | .50 | 17.2 |
| 1920–21 | 1.66 | 2.83 | 3.75 | 7.06 | 7.48 | 10.5 | 5.34 | 9.70 | 4.07 | .31 | 0 | 0 | 4.38 |
| 1921–22 | 1.05 | .91 | 186 | 90.0 | 187 | 151 | 90.3 | 47.8 | 22.0 | 8.13 | 3.46 | 1.63 | 65.2 |
| 1922–23 | 2.10 | 5.32 | 22.5 | 13.4 | 43.6 | 26.9 | 27.1 | 11.7 | 5.58 | 1.47 | .81 | .64 | 13.2 |
| 1923–24 | 1.20 | 2.05 | 3.74 | 4.24 | 2.41 | 14.0 | 13.3 | 3.69 | .60 | 0 | 0 | 0 | 3.77 |
| 1924–25 | .10 | 1.20 | 10.0 | 5.14 | 4.77 | 6.28 | 18.5 | 5.90 | 5.65 | .18 | 0 | 0 | 4.79 |
| 1925–26 | 2.65 | 2.99 | 3.27 | 2.72 | 21.4 | 6.54 | 190 | 21.0 | 6.07 | 1.21 | .20 | .05 | 21.1 |
| 1926–27 | .41 | 1.92 | 33.7 | 14.1 | 555 | 133 | 61.8 | 33.3 | 19.2 | 4.03 | 2.39 | 3.48 | 68.4 |
| Average | 1.75 | 3.06 | 22.0 | 90.2 | 91.1 | 54.2 | 43.4 | 26.5 | 10.2 | 3.00 | 1.58 | 1.40 | 30.2 |

NOTE.—Record beginning Oct. 1, 1924, was furnished in acre-feet and converted into second-feet by U. S. Geol. Survey.

**Santa Ysabel Creek near Ramona**

[Drainage area, 110 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | | | | | 46.7 | 75.0 | 35.4 | 9.22 | 2.90 | 0.37 | 0.19 | |
| 1912–13 | 4.29 | 2.38 | 3.77 | 7.68 | 24.3 | 29.0 | 15.4 | 7.19 | 2.60 | .19 | .10 | .19 | 7.99 |
| 1913–14 | .10 | 3.33 | 4.53 | 82.4 | 153 | 40.5 | 27.2 | 17.9 | 8.77 | .32 | .10 | .10 | 27.3 |
| 1914–15 | .57 | 2.10 | 6.45 | 70.2 | 259 | 122 | 81.6 | 221 | 47.0 | 15.6 | 9.26 | 3.90 | 68.7 |
| 1915–16 | 2.75 | 6.05 | 12.2 | 1,690 | 345 | 182 | 102 | 54.3 | 28.2 | 14.9 | 10.5 | 8.6 | 206 |
| 1916–17 | 16.9 | 12.8 | 30.3 | 57.5 | 130 | 59.2 | 46.4 | 32.8 | 13.3 | 5.66 | 2.66 | 3.15 | 33.6 |
| 1917–18 | 2.48 | 5.13 | 5.06 | 12.0 | 16.3 | 127 | 20.9 | 9.99 | 2.32 | 1.42 | 1.25 | 1.11 | 17.2 |
| 1918–19 | 2.84 | 7.5 | 12 | 7.85 | 17.3 | 27.5 | 14.1 | 7.21 | .953 | .077 | .10 | .413 | 8.11 |
| 1919–20 | .46 | 2.94 | 5.49 | 4.60 | 40.7 | 117 | 80.1 | 28.2 | 9.17 | 1.59 | .69 | .24 | 24.2 |
| 1920–21 | 1.16 | 2.52 | 4.67 | 10.6 | 9.50 | 16.5 | 5.96 | 12.9 | 3.61 | .166 | 0 | 0 | 5.63 |
| 1921–22 | .64 | .65 | 330 | 153 | 308 | 249 | 153 | 83.5 | 33.3 | 13.3 | 4.78 | 2.50 | 110 |
| 1922–23 | 4.03 | 9.77 | 38.9 | 25.0 | | | | | | | | | |
| Average | 3.29 | 5.02 | 41.2 | 193 | 130 | 92.4 | 56.5 | 46.4 | 14.4 | 5.10 | 2.71 | 1.85 | 50.9 |

**Santa Ysabel Creek near Escondido**

[Drainage area, 128 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905–6 | | | | 11.4 | 30.5 | 633 | 221 | 69.7 | 28.4 | 12.4 | 4.2 | 3.1 | |
| 1906–7 | 4.7 | 9 6 | 12.4 | 155 | 72.4 | 138 | 108 | 49 | 24.6 | 8.6 | 5.0 | 5.5 | 49.4 |
| 1907–8 | 8.1 | 10.2 | 12 | 25.6 | 54.1 | 37.7 | 20.9 | 13.7 | 5.06 | .129 | 0 | 0 | 15.6 |
| 1908–9 | .603 | 2 74 | 5.65 | 293 | 216 | 118 | 74.8 | 34.5 | 23.2 | 11.7 | 5.32 | 4.33 | 65.8 |
| 1909–10 | 5.87 | 17.1 | 90.2 | 300 | 51.0 | 41.3 | 39.1 | 11.4 | 2.6 | .16 | 0 | 0 | 46.6 |
| 1910–11 | 0 | 0 | 0 | | | | | 15.8 | 7.82 | .39 | 0 | 0 | |
| 1911–12 | .032 | 2.06 | 5.60 | 7.65 | 5.03 | 108 | 93.4 | 32.6 | 9.92 | 4.46 | .019 | 0 | 22.5 |

**San Dieguito River at Bernardo**

[Drainage area, 266 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | | | | | | | 32.4 | 0.55 | 0 | 0 | 0 | |
| 1912–13 | 0 | 0.2 | 0.2 | 0.2 | 5.58 | 22.6 | 5.37 | .13 | .05 | 0 | 0 | 0 | 2.80 |
| 1913–14 | 0 | 0 | .04 | 71.4 | 229 | 39.1 | 20.3 | 11.3 | .4 | 0 | 0 | 0 | 29.6 |
| 1914–15 | 0 | 0 | 0 | 102 | 450 | 153 | 139 | 322 | 29.5 | .88 | .86 | 0 | 97.4 |
| 1915–16 | 0 | 0 | 7.18 | | | | | | | | | | |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**San Dieguito River near Bernardo**

[Drainage area, 299 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1915–16 | | | | 4,180 | 432 | 265 | 113 | 54.0 | 20.2 | 4.71 | | | |
| 1916–17 | 25.8 | 11.2 | 49.7 | 124 | 150 | 75.6 | 59.2 | 32.8 | 9.27 | 0 | 0 | 0 | 44.2 |
| 1917–18 | 0 | .10 | .15 | 4.25 | 19.8 | 364 | 26.4 | 3.45 | .23 | 0 | 0 | 0 | 35.3 |
| 1918–19 | 0 | 1.87 | 1.90 | 1.51 | 17.8 | 27.5 | 6.38 | .38 | 0 | 0 | .40 | .12 | 4.74 |
| 1919–20 | .82 | .59 | .78 | .72 | 29.2 | 135 | 64.5 | 8.01 | .04 | .64 | .60 | 0 | 20.0 |
| 1920–21 | .64 | .97 | .83 | 2.17 | 1.64 | 11.3 | 1.75 | 3.69 | 0 | .91 | .17 | .32 | 2.05 |
| 1921–22 | .19 | .68 | 584 | 215 | 495 | 396 | 179 | 76.1 | 22.4 | 5.29 | 1.11 | 4.03 | 163 |
| 1922–23 | 2.85 | 3.51 | 43.3 | 30.3 | 86.7 | 49.5 | 37.8 | 7.16 | 2.97 | 3.42 | 3.03 | 1.31 | 22.2 |
| 1923–24 | .39 | 1.06 | 1.35 | 1.50 | 1.77 | 33.5 | 28.1 | 2.42 | 1.70 | 3.84 | 2.78 | 0 | 6.54 |
| 1924–25 | .64 | 0 | 3.25 | 1.17 | 1.57 | 1.43 | 18.9 | 1.71 | .30 | 0 | 0 | 0 | 2.39 |
| Average | 3.48 | 2.22 | 76.1 | 456 | 124 | 136 | 53.5 | 19.0 | 5.71 | 1.88 | .90 | .64 | 33.4 |

NOTE.—Record beginning Oct. 1, 1918, is computed inflow into Lake Hodges and was furnished in acre-feet and converted into second-feet by U. S. Geological Survey.

**San Dieguito River near Del Mar**

[Drainage area, 328 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1912–13 | 0 | 0 | 0 | 0 | 2.5 | 13.0 | 2.5 | 0 | 0 | 0 | 0 | 0 | 1.5 |
| 1913–14 | 0 | 0 | 0 | | | 36.5 | 18.0 | 8.9 | 0 | 0 | 0 | 0 | |

**Black Canyon Creek near Mesa Grande**

[Drainage area, 15.2 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1913–14 | 0 | 0.41 | 0.13 | 10.4 | 29.9 | 7.04 | 3.96 | 2.41 | 1.0 | 0.15 | 0 | 0 | 4.44 |
| 1922–23 | | | | | 9.00 | 5.06 | 4.88 | 1.93 | .90 | .20 | .10 | .10 | |
| 1923–24 | .11 | .21 | .74 | .78 | .39 | 3.55 | 3.79 | .63 | .09 | 0 | 0 | 0 | .86 |

**Temescal Creek near Almond**

[Drainage area, 31.5 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1913–14 | 0.077 | 0.483 | 0.23 | 10.9 | 29.6 | 5.05 | 3.44 | 1.67 | 0.70 | 0.10 | 0 | 0 | 4.18 |
| 1914–15 | .11 | .43 | .70 | 4.88 | 23.0 | 15.4 | 7.98 | 23.9 | 5.63 | 1.68 | .83 | .35 | 6.98 |

**East San Pasqual ditch near Escondido**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1912–13 | | | | 5.16 | 7.08 | 3.65 | 3.89 | 3.96 | 1.65 | | | | |

**Guejito Creek near Escondido**

[Drainage area, 27.6 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1914–15 | | | | | | 11.6 | 6.67 | 16.1 | 2.33 | | | | |
| 1916–17 | 1.5 | 1.5 | 1.89 | 4.97 | 7.73 | 3.63 | 3.03 | 2.31 | .40 | 0 | 0 | 0 | 2.21 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**West San Pasqual ditch near Escondido**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1912–13 | 0 | 0 | 0 | 1.02 | 2.07 | 5.10 | 4.27 | 0.39 | 0.02 | 0 | 0 | 0 | 1.06 |
| 1913–14 | 0 | .30 | .60 | 2.16 | 5.32 | 6.32 | 4.17 | 3.73 | 1.15 | 0 | 0 | 0 | 1.96 |
| 1914–15 | 0 | 0 | 0 | .84 | 2.48 | 1.31 | 4.12 | 1.55 | 3.80 | 5.85 | 0 | 0 | 1.65 |

**Santa Maria Creek near Ramona**

[Drainage area, 57.3 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1912–13 | | 0.06 | 0.05 | 0.05 | 0.12 | 0.12 | 0.05 | 0.05 | 0.05 | 0 | 0 | 0 | |
| 1913–14 | 0 | .04 | .08 | 9.72 | 25.2 | .70 | .13 | .08 | .01 | 0 | 0 | 0 | 2.84 |
| 1914–15 | 0 | .09 | .13 | 44.0 | 85.0 | 24.9 | 10.6 | 31.0 | 1.17 | .08 | 0 | 0 | 15.9 |
| 1915–16 | 0 | 0 | .06 | 545 | 85.7 | 33.8 | 11.4 | 3.39 | .98 | .10 | 0 | 0 | 57.1 |
| 1916–17 | .10 | .10 | 2.38 | 13.3 | 13.4 | 5.12 | 3.59 | .78 | .05 | 0 | 0 | 0 | 3.18 |
| 1917–18 | 0 | 0 | .05 | .113 | .09 | 39.9 | 1.01 | .10 | .05 | 0 | 0 | 0 | 3.50 |
| 1918–19 | 0 | .10 | .19 | .20 | .23 | 1.41 | .26 | .23 | .10 | 0 | 0 | 0 | .23 |
| 1919–20 | 0 | 0 | 0 | 0 | .13 | 14.8 | 2.59 | .10 | 0 | 0 | 0 | 0 | 1.49 |

**San Luis Rey River near Warner Springs**

[Drainage area, 35.8 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1912–13 | | | | 1.0 | 4.23 | 1.39 | 0.89 | 0.74 | 0.68 | 0.52 | 0.87 | 0.59 | |
| 1913–14 | 0.71 | 0.83 | 1.61 | 9.35 | 25.6 | 1.16 | 1.02 | .88 | .60 | .70 | .60 | .70 | 3.45 |
| 1914–15 | .89 | .87 | 1.18 | 11.8 | 39.4 | 14.2 | 5.21 | 17.9 | 1.45 | 1.23 | 1.08 | 1.17 | 7.85 |
| 1915–16 | 1.15 | | | | | | | | | | | | |

**San Luis Rey River near Mesa Grande**

[Drainage area, 209 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1905–6 | | | 7.1 | 28.8 | 45.3 | 766 | 174 | 47.6 | 28.1 | 9.47 | | | |
| 1911–12 | 1.81 | 1.68 | 2.73 | 4.72 | 3.69 | 75.4 | 79.5 | 21.1 | 3.43 | 1.62 | 1.32 | 1.51 | 16.6 |
| 1912–13 | 3.73 | 2.02 | 2.23 | 8.10 | 33.7 | 29.5 | 11.3 | 4.13 | 1.40 | .85 | 2.18 | .90 | 8.18 |
| 1913–14 | 1.12 | 2.02 | 3.15 | 78.8 | 230 | 35.9 | 21.7 | 11.4 | 3.28 | 1.42 | 1.29 | .82 | 31.2 |
| 1914–15 | 1.13 | 1.31 | 5.55 | 96.6 | 381 | 157 | 78.5 | 253 | 37.6 | 7.45 | 1.63 | 1.50 | 83.4 |
| 1915–16 | 2.01 | 4.41 | 12.3 | 2,290 | 370 | 180 | 68.7 | 33.3 | 11.9 | 3.06 | 5.77 | 2.60 | 251 |
| 1916–17 | 14.4 | 11.9 | 41.7 | 78.8 | 144 | 65.4 | 89.3 | 34.3 | 9.28 | 1.82 | 2.21 | 4.03 | 40.8 |
| 1917–18 | 2.65 | 5.42 | 6.86 | 12.5 | 27.5 | 291 | 26.4 | 14.3 | 7.78 | 2.18 | 2.22 | 2.34 | 33.7 |
| 1918–19 | 2.65 | 6.09 | 12.2 | 8.87 | 35.9 | 38.9 | 10.0 | 3.03 | 1.65 | 1.35 | 1.30 | 1.40 | 10.1 |
| 1919–20 | 1.85 | 3.09 | 5.05 | 5.80 | 83.6 | 200 | 63.6 | 16.9 | 3.67 | 1.82 | 1.76 | 1.76 | 32.3 |
| 1920–21 | 2.15 | 2.57 | 4.94 | 15.7 | 12.2 | 21.8 | 4.89 | 14.2 | 2.24 | 1.52 | 1.39 | 1.28 | 7.08 |
| 1921–22 | 1.44 | 1.55 | 409 | 192 | 561 | 314 | 146 | 68.3 | 19.0 | 4.05 | 1.46 | .68 | 141 |
| 1922–23 | 1.90 | 6.37 | 35.9 | 32.6 | 66.5 | 41.8 | 26.3 | 6.29 | 3.97 | 3.95 | 3.77 | 1.51 | 19.0 |
| 1923–24 | 2.68 | 3.91 | 10.7 | 10.1 | 6.12 | 34.2 | 25.6 | 5.58 | 3.37 | 3.35 | [a] 1.04 | | 8.98 |
| 1924–25 | 2.17 | .73 | 17.7 | 5.81 | 6.58 | 10.7 | 21.7 | 3.99 | 1.53 | .49 | [a] 2.14 | | 6.31 |
| 1925–26 | 5.21 | 2.67 | 3.09 | 3.99 | 40.8 | 5.81 | 230 | 16.4 | 5.42 | 4.97 | 6.17 | 2.68 | 26.8 |
| 1926–27 | 2.19 | 2.89 | 15.8 | 6.31 | 1,200 | 141 | 74.9 | 33.5 | 12.9 | 10.7 | 10.9 | 4.57 | 119 |
| Average | 3.07 | 3.66 | 35.1 | 169 | 191 | 142 | 67.8 | 34.5 | 9.21 | 3.53 | 3.10 | 1.97 | 52.2 |

[a] Mean for August and September.

NOTE.—Record beginning Oct. 1, 1922, is computed inflow into Lake Henshaw and was furnished in acre-feet and converted into second-feet by U. S. Geol. Survey.

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**San Luis Rey River near Nellie**

[Drainage area, 240 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1915–16 | 3.68 | 9.40 | 18.5 | 2,680 | | | 101 | 45.8 | 22.1 | | | | |
| 1922–23 | | | | 9.78 | 15.2 | 9.18 | 8.72 | 4.14 | 2.14 | 1.49 | 10.8 | 6.01 | |
| 1923–24 | 7.67 | 7.87 | 6.57 | 3.45 | 7.02 | 9.38 | 7.89 | 2.27 | 1.53 | | | | |

**San Luis Rey River near Pala**

[Drainage area, 322 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4 | | 1.4 | 1.2 | 1.5 | 2.0 | 41.6 | 43.6 | 16.2 | 10.8 | 3.8 | 2.0 | 2.0 | |
| 1904–5 | 2.5 | 2.4 | 3.7 | 19.1 | 151 | 336 | 64.9 | 88.1 | 23 | 4.1 | 3.0 | 2.6 | 58.4 |
| 1905–6 | 3.2 | 17.8 | 18.3 | 21.4 | 28.6 | 1,120 | 301 | 158 | 65.6 | 19 | 10.3 | 3.7 | 147 |
| 1906–7 | 3.0 | 8.3 | 79.3 | 541 | 154 | 326 | 167 | 62.5 | 22.8 | 3.27 | 1.42 | 2.22 | 114 |
| 1907–8 | 28.1 | 27.8 | 13.3 | 62.6 | 175 | 61.1 | 21.3 | 13.2 | 7.4 | 3.0 | 3.4 | 2.0 | 34.8 |
| 1908–9 | 3.5 | 6.1 | 8.6 | 198 | 332 | 137 | 91.0 | 27.6 | 6.23 | 5.35 | 5.13 | 5.00 | 68.8 |
| 1909–10 | 5.0 | 12.4 | 107 | 431 | 66.7 | 70.6 | 51.1 | 9.99 | 5.47 | | | | |
| 1910–11 | | | | 50.1 | 192 | 187 | 78.0 | 11.3 | 6.75 | | | | |
| 1912–13 | | 6.2 | 8.6 | 18.5 | 19.6 | 20.9 | 9.8 | 5.6 | 3.9 | 2.9 | 3.0 | 2.4 | |
| 1913–14 | 2.8 | 4.0 | 6.3 | 99.5 | 277 | 55.1 | 41.3 | 16.1 | 5.0 | 4.1 | 1.9 | 1.5 | 41.3 |
| 1914–15 | 4.18 | 5.28 | 8.37 | 113 | 577 | 260 | 144 | 397 | 67.6 | 9.56 | 7.03 | 6.50 | 130 |
| 1915–16 | 5.58 | 7.53 | 13.4 | 3,270 | | | | | | | | | |
| Average | 6.43 | 9.02 | 24.4 | 402 | 180 | 238 | 92.1 | 73.2 | 20.4 | 6.12 | 4.13 | 3.10 | 84.9 |

**San Luis Rey River at Pala**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | | | | | | 91.9 | 33.7 | | | | | |

**San Luis Rey River at Bonsall**

[Drainage area, 465 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | | | | | | | 33.7 | 0.60 | 0 | 0 | 0 | |
| 1912–13 | 0 | 0 | 1.9 | 19.8 | 41.1 | 36.1 | 10.2 | .28 | .09 | 0 | 0 | 0 | 8.93 |
| 1913–14 | 0 | 0 | 4.0 | 102 | | 87.5 | 33.1 | 18.9 | 1.3 | 0 | 0 | 0 | |
| 1914–15 | 0 | .53 | 6.26 | 265 | 939 | 308 | 133 | 420 | 75.3 | 4.88 | .205 | 0 | 175 |
| 1915–16 | 0 | 1.7 | 28.4 | 4,180 | | | | | | | | | |

**San Luis Rey River near Oceanside**

[Drainage area, 563 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | | | | | | | 26.6 | 0 | 0 | 0 | 0 | |
| 1912–13 | 0 | 0 | 0 | 0.3 | 33.0 | 21.0 | 1.85 | 0 | 0 | 0 | 0 | 0 | 4.50 |
| 1913–14 | 0 | 0 | 0 | 83.5 | 379 | 60.5 | 31.2 | 9.4 | 0 | 0 | 0 | 0 | 44.6 |

**West Fork of San Luis Rey River near Nellie**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1920–21 | | 0.83 | 1.66 | 3.44 | 3.05 | 10.1 | 2.93 | 6.49 | 1.73 | 0.68 | 0.29 | 0.16 | |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**West Fork of San Luis Rey River near Warner Springs**

[Drainage area, 25.6 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1912–13 | ------ | ------ | ------ | ------ | ------ | 13.7 | 6.18 | 1.90 | 0.38 | 0.12 | 0 | 0 | ------ |
| 1913–14 | 0 | 0.16 | 0.89 | 19.9 | 60 | 17.1 | 13.6 | 7.29 | 2.46 | .08 | 0 | 0 | 9.78 |
| 1914–15 | 0 | 0 | .52 | 24.1 | 95.1 | 52.1 | 37.5 | 96.6 | 15.9 | 3.06 | .55 | .16 | 26.7 |
| 1915–16 | .025 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |

**Carrizo Creek near Warner Springs**

[Drainage area, 4.9 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1913–14 | 0.15 | 0.23 | 0.22 | 3.56 | 8.58 | 1.00 | 0.75 | 0.56 | 0.50 | 0.50 | 0.40 | 0.20 | 1.34 |
| 1914–15 | .20 | .30 | .70 | 2.78 | 8.95 | 5.37 | 2.10 | 4.16 | 1.35 | .34 | .19 | .13 | 2.17 |

**Susanna Creek near Warner Springs**

[Drainage area, 4.6 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1913–14 | 0 | 0 | 0.07 | 3.87 | 9.84 | 2.07 | 1.72 | 1.52 | 0.49 | 0 | 0 | 0 | 1.58 |
| 1914–15 | 0 | 0 | .28 | 3.67 | 15.4 | 8.85 | 5.55 | 12.3 | 3.93 | 1.05 | .46 | .12 | 4.23 |

**Matagual Creek near Warner Springs**

[Drainage area, 9.2 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1913–14 | 0.38 | 0.54 | 0.73 | 6.50 | 16.5 | 2.02 | 1.67 | 1.39 | 0.72 | 0.26 | 0.30 | 0.20 | 2.50 |
| 1914–15 | .37 | .46 | .75 | 4.25 | 15.1 | 8.94 | 4.55 | 12.0 | 5.10 | 1.87 | 1.3 | .83 | 4.56 |

**Escondido Mutual Water Co.'s canal near Nellie**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1915–16 | 0 | 0 | 0 | 0 | 0 | 0 | 12.2 | 27.3 | 16.4 | 8.42 | 6.82 | 0.837 | 6.03 |
| 1916–17 | 0 | 1.80 | 10.7 | 16.3 | 21.0 | 9.34 | 9.57 | 11.7 | 8.73 | 5.45 | 4.25 | 4.00 | 7.49 |
| 1917–18 | 14.7 | 13.8 | 9.19 | 12.2 | 14.3 | 15.6 | ------ | 16.1 | 10.2 | 4.64 | 3.95 | .98 | ------ |
| 1918–19 | 0 | 0 | 11.0 | 9.53 | 21.7 | 20.6 | 13.8 | 5.11 | 2.44 | 1.03 | 0 | 0 | 7.01 |
| 1919–20 | 2.07 | 4.83 | 7.04 | 7.93 | 19.2 | 38.0 | 38.4 | 25.2 | 4.23 | 0 | 0 | 0 | 12.2 |
| 1920–21 | 0 | 2.95 | 7.03 | 13.6 | 15.7 | 17.7 | 8.68 | 17.1 | 5.49 | .67 | 0 | 0 | 7.38 |
| 1921–22 | 1.46 | .60 | 4.81 | 29.5 | 28.2 | 21.2 | 20.7 | 18.6 | 17.6 | 7.94 | 3.19 | 2.28 | 12.9 |

**Pauma Creek near Nellie**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1920–21 | 0.50 | 0.44 | 0.60 | 1.44 | 1.56 | 4.54 | 1.67 | 3.97 | 1.46 | 0.50 | 0.32 | 0.28 | 1.44 |

**Pauma Creek at Pauma Indian Reservation, near Nellie**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1920–21 | ------ | ------ | ------ | 3.54 | 3.81 | 7.88 | 3.66 | 7.28 | 3.35 | 1.42 | 0.97 | 0.93 | ------ |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Temecula Creek at Nigger Canyon, near Temecula**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1922–23 | | | | | 30.7 | 16.8 | 11.5 | 5.36 | 5.12 | 3.54 | 3.20 | 3.14 | |
| 1923–24 | 4.13 | 6.45 | 7.27 | 8.31 | 7.31 | 22.1 | 14.2 | 5.53 | 3.40 | 2.80 | 2.82 | 3.38 | 7.31 |
| 1924–25 | 2.48 | 3.37 | 5.76 | 6.18 | 6.00 | 6.53 | 12.9 | 5.18 | 3.22 | 2.30 | 2.59 | 2.08 | 4.87 |
| 1925–26 | 4.50 | 4.16 | 4.47 | 4.18 | 18.3 | 5.70 | 90.6 | 8.41 | 3.46 | 2.60 | 1.93 | 1.84 | 12.3 |
| 1926–27 | 2.02 | 2.66 | 5.21 | 5.92 | 642 | 27.8 | 16.3 | 7.24 | 3.85 | 2.59 | 2.24 | 2.35 | 55.8 |

**Temecula Creek at Railroad Canyon, near Temecula**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1922–23 | | | | | 19.7 | 16.7 | 10.4 | 6.45 | 6.52 | 5.05 | 4.37 | 5.77 | |
| 1923–24 | 6.39 | 10.4 | 12.4 | 12.6 | 8.70 | 14.9 | 16.0 | 6.66 | 3.46 | 3.32 | 3.60 | 3.66 | 8.50 |
| 1924–25 | 3.77 | 8.95 | 11.4 | 12.0 | 7.59 | 6.91 | 8.27 | 3.68 | 3.66 | 3.40 | 2.40 | 2.79 | 6.22 |
| 1925–26 | 4.95 | 7.98 | 9.73 | 8.24 | 14.9 | 8.05 | 87.9 | 7.86 | 4.49 | 2.26 | 1.90 | 2.31 | 13.2 |
| 1926–27 | 4.75 | 9.02 | 12.0 | 11.5 | 1,210 | 27.0 | 15.1 | 8.19 | 5.79 | 2.73 | 2.26 | 4.07 | 101 |

**Santa Margarita River near Fallbrook**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1924–25 | | | 13.0 | 12.3 | 7.86 | 6.79 | 8.98 | 2.78 | 2.94 | 1.85 | 1.02 | 1.69 | |
| 1925–26 | 4.85 | 7.59 | 9.89 | 8.34 | 18.2 | 8.37 | 137 | 8.45 | 4.51 | 1.61 | .78 | .98 | 17.3 |
| 1926–27 | 3.38 | 7.08 | 14.6 | 11.3 | 1,380 | 53.5 | 23.6 | 11.8 | 7.19 | 2.67 | 1.40 | 3.37 | 118 |

**Santa Margarita River near Deluz Station**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1924–25 | | | | | | | | | | 0.93 | 0.68 | 0.67 | |
| 1925–26 | 3.59 | 7.25 | 10.7 | 8.84 | 21.5 | 8.56 | | | | | | | |

**Santa Margarita River near Ysidora**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1922–23 | | | | | | 15.3 | 1.47 | 0.12 | 0 | 0 | 0 | 0 | |
| 1923–24 | 0 | 0 | 7.08 | 9.77 | 4.07 | 8.63 | 9.04 | .31 | 0 | 0 | 0 | 0 | 3.25 |
| 1924–25 | 0 | 0 | 2.68 | 6.42 | 1.33 | 1.18 | 1.33 | .08 | 0 | 0 | 0 | 0 | 1.09 |
| 1925–26 | 0 | 0 | .30 | .16 | 20.5 | 3.38 | 239 | 2.41 | .38 | 0 | 0 | 0 | 21.8 |
| 1926–27 | 0 | 0 | .71 | 5.71 | [a]1,470 | [a]100 | [a]38 | [a]7.0 | [a]5.0 | [a].7 | [a].05 | 0 | 126 |

[a] Estimated.

**Santa Ana River near Mentone**

[Drainage area, 189 square miles [d]]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1895–96 | | | | | | | | | | 64 | 56 | 55 | |
| 1896–97 | 54 | 33 | 35 | 63 | 181 | 117 | 146 | 61 | 63 | 67 | 58 | 47 | 77.2 |
| 1897–98 | 42 | 38 | 27 | 40 | 40 | 32 | 31 | 55 | 44 | 41 | 42 | 36 | 39.1 |
| 1898–99 | 26 | 22 | 22 | 26 | 28 | 34 | 25 | 22 | 22 | 22 | 13 | 12 | 22.6 |
| 1899–1900 | 16 | 21 | 23 | 23 | 21 | 23 | 25 | 57 | 22 | 19 | 11 | 12 | 22.9 |
| 1900–1 | 13 | 107 | 28 | 78 | 194 | 68 | 43 | 42 | 37 | 38 | 50 | 49 | 62.3 |
| 1901–2 | 48 | 26 | 24 | | | | | | | | | | |
| 1904–5 | | | | 5.32 | 53.0 | 79.9 | 35.4 | 131 | 35.7 | 2.23 | 1.00 | 1.00 | |
| 1905–6 | 1.0 | 13.8 | 8.6 | 9.3 | 15.8 | 488 | 209 | 179 | 102 | 48.2 | 11.7 | 4.45 | 91.6 |
| 1906–7 | 7.66 | 2.50 | 47.8 | 166 | 216 | 608 | 476 | 170 | 101 | 66.2 | 21.2 | 10 0 | 157 |
| 1907–8 | 13.9 | 45.0 | 1.68 | 31.0 | 65.8 | 67.7 | 22.3 | 5.81 | 2.00 | 2.00 | 2.00 | 2.00 | 21.6 |
| 1908–9 | 2.00 | 2.00 | 2.00 | 62.7 | 171 | 107 | 133 | 84.2 | 32.0 | 2.50 | 2.73 | 2.78 | 49.4 |

[d] Drainage area above Warm Springs Canyon, where station was located until Oct. 1, 1914, is 182 square miles.

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Santa Ana River near Mentone**—Continued

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1909–10 | 2.50 | 3.93 | 72.0 | ------ | 41.9 | 35.1 | 29.4 | 9.1 | 2.9 | 19.7 | 3.0 | 6.6 | ------ |
| 1910–11 | 4.0 | 2.0 | 2.0 | 72.4 | 125 | 381 | 141 | 56.2 | 30.9 | 30.2 | 1.0 | 2.2 | 70.6 |
| 1911–12 | 1.1 | 1.0 | 1.0 | 1.0 | 1.0 | 30.8 | 23.9 | 8.36 | 1.28 | 1.20 | 1.83 | 1.64 | 6.19 |
| 1912–13 | 1.20 | 1.36 | 1.20 | 1.32 | 1.71 | 1.35 | 1.52 | 1.80 | 1.36 | 25.1 | 1.20 | 1.04 | 3.38 |
| 1913–14 | .66 | 26.4 | .72 | 116 | 208 | 59.1 | 45.7 | 64.3 | 33.3 | 6.6 | 2.0 | 1.2 | 43.9 |
| 1914–15 | 1.70 | 1.70 | 1.88 | 26.5 | 214 | 103 | 160 | 226 | 150 | 75.2 | 15.0 | 2.18 | 80.3 |
| 1915–16 | 1.84 | 2.27 | 4.16 | ------ | ------ | 763 | 331 | 170 | 89.4 | 46.5 | 20.2 | 17.4 | ------ |
| 1916–17 | 19.6 | 6.15 | 4.49 | 8.40 | 25.6 | 13.6 | 32.7 | 39.5 | 4.63 | 5.41 | 12.6 | 6.79 | 14.9 |
| 1917–18 | 5.22 | 1.52 | 4.03 | 1.25 | 3.85 | 469 | 16.9 | 5.42 | 4.06 | 3.43 | 3.91 | 4.58 | 44.3 |
| 1918–19 | 4.12 | 3.88 | 3.02 | 1.97 | 5.96 | 8.07 | 3.15 | 2.25 | 1.87 | 2.10 | 1.79 | 5.48 | 3.62 |
| 1919–20 | 2.82 | 2.65 | 3.18 | 1.28 | 74.5 | 167 | 117 | 44.4 | 10.7 | 4.95 | 4.75 | 3.49 | 36.2 |
| 1920–21 | 4.84 | 1.75 | 2.95 | 16.8 | 3.32 | 41.2 | 2.40 | 10.4 | 2.98 | 2.51 | 3.05 | 2.14 | 7.96 |
| 1921–22 | 16.8 | 1.64 | 260 | 138 | 297 | 151 | 270 | 356 | 158 | 85.3 | 35.8 | 17.9 | 148 |
| 1922–23 | 12.4 | 6.70 | 39.3 | 6.39 | 32.9 | 9.63 | 53.9 | 8.92 | 4.55 | 5.84 | 2.64 | 1.75 | 15.3 |
| 1923–24 | 1.66 | 1.74 | 1.42 | 1.39 | 1.11 | 11.6 | 14.5 | 1.94 | 1.49 | 1.02 | .90 | .99 | 3.32 |
| 1924–25 | 1.06 | 1.49 | 2.23 | 1.13 | 1.31 | 2.01 | 4.29 | 1.65 | 1.72 | 18.2 | 1.08 | .68 | 3.10 |
| 1925–26 | 1.92 | .80 | .80 | .82 | 8.20 | 11.8 | 199 | 31.9 | 1.75 | 1.46 | 1.31 | 1.26 | 21.6 |
| 1926–27 | 1.05 | 3.40 | 5.95 | 3.13 | 770 | 75 | 25 | 22.3 | 4.61 | 3.59 | 3.17 | 2.62 | 71.7 |
| Average | 11.0 | 13.6 | 22.4 | 34.7 | 104 | 141 | 93.5 | 66.7 | 34.5 | 24.5 | 13.2 | 10.7 | 44.7 |

**Santa Ana River and canals near Mentone**

[Drainage area, 189 square miles [d]]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1895–96 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | 77 | 71 | 69 | ------ |
| 1896–97 | 71 | 37 | 39 | 68 | 185 | 124 | 150 | 76 | 80 | 83 | 75 | 67 | 87.9 |
| 1897–98 | 54 | 45 | 33 | 49 | 48 | 40 | 39 | 61 | 48 | 43 | 43 | 38 | 45.1 |
| 1898–99 | 26 | 22 | 22 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| 1901–2 | ------ | ------ | ------ | 24 | 38 | 79 | 51 | 36 | 33 | 26 | 25 | 24 | ------ |
| 1902–3 | 39 | 24 | 22 | 33 | 48 | 148 | 352 | 92 | 64 | 51 | 55 | 52 | 81.7 |
| 1903–4 | 47 | 30 | 27 | 26 | 33 | 64 | 53 | 41 | 44 | 45 | 46 | 50 | 42.2 |
| 1904–5 | 48 | 20 | 20 | 36.6 | 97.6 | 130 | 90.5 | 172 | 77.7 | 62.9 | 66.8 | 68.3 | 74.2 |
| 1905–6 | 49.2 | 47.5 | 38.4 | 46.8 | 63.1 | 530 | 274 | 245 | 172 | 119 | 80.5 | 64.1 | 144 |
| 1906–7 | 71.4 | 60.3 | 111 | 239 | 292 | 681 | 552 | 236 | 171 | 135 | 90.2 | 73.2 | 226 |
| 1907–8 | 84.2 | 119 | 60.4 | 82.1 | 135 | 125 | 98.9 | 76.3 | 61.6 | 64.3 | 63.8 | 58.8 | 85.8 |
| 1908–9 | 57.8 | 42.8 | 43.4 | 120 | 238 | 183 | 209 | 158 | 97.3 | 69.0 | 64.2 | 61.8 | 112 |
| 1909–10 | 57.9 | 53.0 | 136 | 173 | 112 | 103 | 105 | 84.9 | 69.4 | 65.0 | 62.5 | 65.0 | 90.7 |
| 1910–11 | 61.4 | 47.0 | 44.4 | 128 | 197 | 453 | 213 | 130 | 104 | 89 | 64.5 | 65.8 | 133 |
| 1911–12 | 60.6 | 50.5 | 46.3 | 44.6 | 40.7 | 93.6 | 101 | 86.5 | 63.1 | 60.7 | 60.2 | 59.2 | 64.0 |
| 1912–13 | 54.8 | 39.1 | 36.6 | 34.2 | 44.6 | 54.3 | 61.4 | 58.4 | 57.5 | 66.3 | 58.5 | 57.7 | 52.0 |
| 1913–14 | 53.8 | 33.5 | 28.8 | 170 | 275 | 139 | 125 | 142 | 115 | 87.3 | 71.1 | 63.8 | 108 |
| 1914–15 | 59.1 | 47.9 | 49.2 | 76.5 | 287 | 181 | 242 | 307 | 235 | 160 | 100 | 81.3 | 151 |
| 1915–16 | 71.4 | 67.5 | 63.1 | ------ | ------ | 768 | 399 | 254 | 183 | 140 | 108 | 108 | ------ |
| 1916–17 | 109 | 89.0 | 80.9 | 85.5 | 99.5 | 103 | 121 | 131 | 84.8 | 92.4 | 106 | 101 | 100 |
| 1917–18 | 94.2 | 75.7 | 58.6 | 61.1 | 63.6 | 536 | 104 | 88.7 | 84.6 | 87.4 | 88.5 | 89.2 | 120 |
| 1918–19 | 79.3 | 66.5 | 48.9 | 43.2 | 57.8 | 72.1 | 77.3 | 73.5 | 73.3 | 77.1 | 77.5 | 75.7 | 68.6 |
| 1919–20 | 59.6 | 50.1 | 40.8 | 31.3 | 118 | 201 | 172 | 132 | 101 | 88.7 | 88.0 | 82.0 | 96.9 |
| 1920–21 | 78.8 | 54.8 | 50.6 | 69.9 | 59.7 | 114 | 70.5 | 88.4 | 76.5 | 75.7 | 76.9 | 71.6 | 74.1 |
| 1921–22 | 68.7 | 55.3 | 318 | 219 | 381 | 237 | 358 | 447 | 246 | 175 | 124 | 106 | 227 |
| 1922–23 | 102 | 82.3 | 118 | 75.5 | 119 | 90.9 | 142 | 95.1 | 85.7 | 90.1 | 87.2 | 84.1 | 97.5 |
| 1923–24 | 81.4 | 61.5 | 45.6 | 39.6 | 37.6 | 56.0 | 100 | 80.0 | 80.4 | 83.0 | 88.4 | 88.3 | 70.2 |
| 1924–25 | 76.8 | 40.4 | 39.4 | 34.3 | 40.5 | 44.3 | 66.5 | 65.4 | 64.0 | 69.5 | 78.7 | 75.5 | 58.1 |
| 1925–26 | 39.5 | 37.0 | 26.7 | 24.0 | 53.1 | 34.0 | 199 | 82.0 | 66.5 | 72.5 | 76.1 | 73.5 | 65.1 |
| 1926–27 | 65.3 | 52.9 | 40.9 | 42.1 | 830 | 147 | 113 | 97.3 | 83.5 | 84.7 | 84.5 | 82.1 | 139 |
| Average | 65.0 | 51.8 | 60.3 | 76.9 | 148 | 198 | 166 | 130 | 97.2 | 84.1 | 75.2 | 70.9 | 101 |

[d] Drainage area above Warm Springs Canyon, where station was located until Oct. 1, 1914, is 182 square miles.

**Santa Ana River near Prado**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1918–19 | ------ | ------ | ------ | ------ | 303 | 350 | 161 | 120 | 74.1 | 56.6 | 58.9 | 79.0 | ------ |
| 1919–20 | 120 | 135 | 210 | 246 | 363 | 527 | 281 | 140 | 82.1 | 63.8 | 58.3 | 80.1 | 192 |
| 1920–21 | 103 | 145 | 172 | 251 | 240 | 360 | 133 | 172 | 114 | 78.2 | 72.7 | 76.0 | 160 |
| 1921–22 | 129 | 131 | 1,010 | 767 | 1,050 | 653 | 455 | 432 | 216 | 109 | 73.4 | 64.2 | 421 |
| 1922–23 | 90.5 | 166 | 347 | 439 | 410 | 239 | 247 | 98.6 | 80.2 | 66.7 | 68.6 | 80.1 | 193 |
| 1923–24 | 100 | 150 | 186 | 219 | 153 | 239 | 333 | 99.6 | 71.6 | 61.1 | 55.7 | 66.4 | 144 |
| 1924–25 | 95.5 | 116 | 151 | 188 | 156 | 119 | 166 | 94.8 | 80.8 | 57.1 | 57.0 | 64.4 | 112 |
| 1925–26 | 109 | 93.6 | 155 | 116 | 259 | 140 | 631 | 125 | 74.1 | 57.8 | 52.8 | 58.5 | 154 |
| 1926–27 | 73.4 | 105 | 166 | 183 | 1,300 | 334 | 225 | 99.5 | 73.4 | 53.5 | 51.0 | 56.2 | 219 |
| Average | 103 | 130 | 300 | 301 | 470 | 329 | 292 | 154 | 96.3 | 67.1 | 60.9 | 69.4 | 199 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Santa Ana River at Santa Ana**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1922–23 | | | | | 17.5 | 1.86 | 5.47 | 0.54 | 0 | 0 | 0 | 0 | |
| 1923–24 | 0 | 2.43 | 3.80 | 13.3 | 2.13 | 2.51 | 3.62 | .58 | 0 | 0 | 0 | 0 | 2.37 |
| 1924–25 | 0 | 0 | 2.34 | 1.15 | 0 | .14 | 4.22 | 0 | 0 | 0 | 0 | 0 | .66 |
| 1925–26 | 0 | 0 | 0 | 0 | 4.02 | .10 | 358 | 1.84 | 0 | 0 | 0 | 0 | 29.9 |
| 1926–27 | 0 | 1.67 | 5.03 | 3.16 | 1,030 | 100 | 50 | 1.5 | 0 | 0 | 0 | 0 | 92.4 |

**Southern California Edison Co.'s canal near Mentone**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1895–96 | | | | | | | | | | 14 15.6 | 14 | 14 | |
| 1896–97 | 16 | 3.5 | 4.2 | 5.6 | 4.0 | 5.2 | 3.8 | 15.0 | 16.6 | 2 | 18.3 | 20 | 10.6 |
| 1897–98 | 12.4 | 7 | 7 | 9 | 8 | 8 | 8 | 6 | 4 | | 2 | 2 | 6.28 |
| 1898–99 | 0 | 0 | 0 | | | | | | | | | | |
| 1900–1901 | | | | | | 2.71 | 2.34 | 3.96 | | | | | |
| 1903–4 | | | | 24.1 | 24.7 | 11.6 | 16.8 | 17.9 | 24.5 | 19.4 | 36.8 | 54.5 | |
| 1904–5 | 46.7 | 18.6 | 17.9 | 31.4 | 44.5 | 49.8 | 55.0 | 41.0 | 42.0 | 60.7 | 65.8 | 67.3 | |
| 1905–6 | 48.2 | 33.7 | 29.8 | 37.5 | 47.3 | 41.8 | 65.2 | 66.2 | 70.1 | 71.1 | 68.9 | 59.6 | 53.3 |
| 1906–7 | 63.7 | 57.9 | 66.5 | 73.5 | 76.0 | 73.6 | 75.9 | 65.7 | 70.0 | 69.0 | 69.0 | 63.2 | 68.6 |
| 1907–8 | 70.3 | 73.9 | 58.7 | 51.0 | 69.2 | 57.0 | 76.6 | 70.5 | 59.6 | 62.3 | 61.8 | 56.8 | 63.9 |
| 1908–9 | 55.8 | 40.8 | 41.4 | 57.0 | 67.1 | 76.0 | 76.0 | 73.3 | 65.4 | 66.5 | 61.4 | 58.8 | 61.6 |
| 1909–10 | 55.4 | 49.0 | 64.4 | 44.7 | 69.7 | 67.8 | 75.6 | 75.8 | 66.5 | 45.3 | 59.5 | 58.4 | 60.9 |
| 1910–11 | 57 5 | 45.0 | 42.4 | 55.9 | 71.8 | 72.1 | 71.8 | 73.5 | 72.8 | 58.8 | 63.5 | 61.1 | 62.1 |
| 1911–12 | 57.4 | 45.5 | 42.7 | 40.2 | 35.6 | 62.0 | 76.4 | 74.2 | 58.0 | 55.5 | 54.3 | 53.5 | 54.7 |
| 1912–13 | 48.9 | 34.1 | 33.0 | 30.7 | 40.4 | 46.9 | 56.2 | 53.0 | 51.6 | 38.6 | 53.5 | 53.7 | 45.1 |
| 1913–14 | 50.3 | 28.9 | 25.9 | 51.4 | 62.9 | 74.9 | 73.4 | 72.9 | 76.1 | 72.9 | 63.9 | 57.6 | 59.2 |
| 1914–15 | 52.1 | 41.0 | 43.8 | 47.9 | 71.1 | 75.3 | 76.5 | 75.9 | 79.0 | 79.0 | 79.6 | 73.0 | 66.1 |
| 1915–16 | 63.0 | 60.2 | 56.2 | 38.3 | 0 | 5.00 | 64.5 | 76.2 | 85.0 | 85.0 | 78.9 | 81.6 | 58.0 |
| 1916–17 | 84.6 | 74.7 | 71.3 | 74.2 | 69.8 | 85.0 | 80.6 | 83.3 | 71.9 | 78.5 | 84.0 | 85.0 | 78.6 |
| 1917–18 | 80.0 | 65.4 | 46.7 | 51.3 | 54.2 | 64.5 | 80.0 | 74.2 | 71.6 | 74.9 | 75.5 | 75.6 | 67.9 |
| 1918–19 | 66.1 | 53.6 | 42.3 | 38.5 | 46.9 | 61.3 | 67.0 | 63.6 | 63.8 | 65.9 | 66.6 | 61.5 | 58.2 |
| 1919–20 | 50.3 | 42.6 | 34.3 | 27.6 | 40.1 | 32.4 | 52.6 | 82.1 | 84.0 | 75.7 | 76.3 | 73.1 | 55.9 |
| 1920–21 | 68.4 | 47.4 | 44.2 | 49.3 | 52.2 | 69.4 | 61.9 | 71.0 | 67.1 | 68.0 | 68.5 | 64.8 | 61.1 |
| 1921–22 | 47.4 | 47.2 | 53.0 | 79.1 | 82.1 | 84.0 | 83.8 | 82.8 | 80.7 | 80.3 | 79.2 | 79.2 | 73.2 |
| 1922–23 | 80.3 | 67.1 | 72.9 | 63.9 | 80.5 | 76.7 | 81.4 | 78.2 | 75.4 | 76.1 | 77.7 | 75.6 | 75.4 |
| 1923–24 | 72.9 | 54.7 | 42.1 | 35.5 | 33.2 | 41.4 | 81.0 | 72.6 | 71.4 | 74.3 | 78.6 | 78.4 | 61.4 |
| 1924–25 | 67.8 | 33.9 | 34.2 | 29.3 | 37.5 | 37.7 | 53.9 | 54.7 | 53.2 | 44.5 | 68.9 | 67.7 | 48.7 |
| 1925–26 | 34.5 | 31.8 | 21.8 | 19.0 | 41.4 | 18.3 | 0 | 44.9 | 61.0 | 67.7 | 71.3 | 68.0 | 40.0 |
| 1926–27 | 59.4 | 46.6 | 34.3 | 38.4 | 57.4 | 69.7 | 85.9 | 68.7 | 69.8 | 72.0 | 73.4 | 70.1 | 62.1 |
| Average | 54.2 | 42.5 | 39.7 | 42.5 | 49.5 | 50.7 | 59.3 | 60.6 | 62.0 | 59.0 | 61.9 | 60.5 | 56.4 |

**Greenspot pipe line near Mentone**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1896–97 | | | | | | | | | | | 21.5 | 15.8 | |
| 1897–98 | | | | | | | 17.0 | 17.2 | 13.2 | 9.1 | 9.1 | 8.2 | |
| 1898–99 | 9.0 | 10 | 10.7 | | 11.6 | 12.2 | 11.8 | 11.2 | 5.4 | 5.8 | 5.8 | 4.1 | |
| 1899–1900 | 6.6 | 8.6 | 9.5 | 2.1 | 2.5 | 1.5 | 2.3 | 1.9 | .4 | | 0 | 0 | |
| 1900–1901 | 0 | 0 | 0 | | | | | | 1.5 | 2.3 | 2.7 | 5.5 | |
| 1901–2 | 5.7 | 1.7 | 1.2 | | | | | | | | | | |
| 1902–3 | | | | | | | 0 | 0 | 0 | 0 | 4.24 | 6.43 | |
| 1903–4 | 5.08 | 2.21 | 2.13 | 2.97 | 3.10 | 2.37 | 3.12 | 3.44 | 5.75 | 4.62 | 3.81 | 4.36 | |
| 1904–5 | 5.28 | 1.10 | 1.36 | | | | | | | | | | |
| 1911–12 | 2.22 | 4.10 | 2.53 | 3.39 | 4.09 | .77 | .70 | 3.95 | 3.88 | 3.93 | 4.10 | 4.13 | 3.14 |
| 1912–13 | 4.74 | 3.40 | 2.23 | 2.31 | 2.28 | 5.73 | 3.73 | 3.55 | 4.52 | 2.65 | 3.71 | 3.02 | 3.51 |
| 1913–14 | 2.91 | 2.08 | 2.11 | 1.90 | 4.59 | 5.42 | 6.24 | 4.63 | 6.02 | 7.43 | 5.27 | 5.00 | 4.46 |
| 1914–15 | 4.97 | 4.87 | 3.35 | 1.94 | 2.00 | 2.55 | 5.35 | 5.16 | 6.00 | 6.23 | 6.38 | 6.13 | 4.59 |
| 1915–16 | 6.50 | 5.27 | 2.58 | 1.16 | 0 | .08 | 3.83 | 3.03 | 8.50 | 8.50 | 8.50 | 8.50 | 5.13 |
| 1916–17 | 4.64 | 8.27 | 5.05 | 2.87 | 4.12 | 4.63 | 7.73 | 8.50 | 8.22 | 8.53 | 9.00 | 9.00 | 6.72 |
| 1917–18 | 9.0 | 9.0 | 8.06 | 8.72 | 5.48 | 2.11 | 6.90 | 9.0 | 9.0 | 9.0 | 9.0 | 9.0 | 7.87 |
| 1918–19 | 9.00 | 9.00 | 3.61 | 2.75 | 5.00 | 2.77 | 7.07 | 7.73 | 7.63 | 9.00 | 9.00 | 8.90 | 6.79 |
| 1919–20 | 6.58 | 4.83 | 3.52 | 2.35 | 3.66 | 1.03 | 3.03 | 6.00 | 6.20 | 8.00 | 6.95 | 5.50 | 4.81 |
| 1920–21 | 5.50 | 5.42 | 3.39 | 3.67 | 4.21 | 3.61 | 6.20 | 7.03 | 6.80 | 5.18 | 5.32 | 4.78 | 5.09 |
| 1921–22 | 4.60 | 6.45 | 4.65 | 1.8 | 2.0 | 2.0 | 4.4 | 8.0 | 8.0 | 8.0 | 8.6 | 9.0 | 5.64 |
| 1922–23 | 9.0 | 8.6 | 5.3 | 5.2 | 6.0 | 4.5 | 7.0 | 7.97 | 5.7 | 8.1 | 6.8 | 6.9 | 6.76 |
| 1923–24 | 6.8 | 5.0 | 2.2 | 2.8 | 3.4 | 3.0 | 5.0 | 5.4 | 7.65 | 7.7 | 8.85 | 8.8 | 5.55 |
| 1924–25 | 7.94 | 4.95 | 3.02 | 4.00 | 1.80 | 4.45 | 8.18 | 9.00 | 9.00 | 6.78 | 8.74 | 6.87 | 6.25 |
| 1925–26 | 2.94 | 4.17 | 4.00 | 4.00 | 3.61 | 3.77 | 0 | 5.16 | 3.66 | 3.40 | 3.77 | 4.40 | 3.58 |
| 1926–27 | 4.69 | 2.85 | .60 | .60 | 2.96 | 2.19 | 2.50 | 6.16 | 9.00 | 9.00 | 7.89 | 9.00 | 4.79 |
| Average | 5.62 | 5.08 | 3.69 | 3.03 | 3.81 | 3.40 | 5.34 | 6.62 | 6.18 | 6.35 | 6.91 | 6.67 | 5.29 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Mill Creek at Forest Home**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4 | 13.7 | 11.4 | 10.5 | 9.50 | 9.76 | 14.4 | ------ | 15.7 | 12.7 | 10.2 | ------ | 9.07 | ------ |
| 1904–5 | 8.37 | ------ | 7.55 | 8.08 | ------ | ------ | 29.0 | ------ | 44.6 | 29.7 | 21.5 | 18.0 | ------ |
| 1905–6 | 15.6 | 15.8 | 15.0 | 14.0 | 14.5 | ------ | 50.4 | ------ | 43.1 | 30.4 | 28.1 | 26.8 | ------ |
| 1906–7 | ------ | 17.9 | ------ | 21.1 | 29.5 | ------ | ------ | ------ | 43.5 | 33.5 | 30.0 | 27.0 | ------ |
| 1907–8 | 22.8 | 19.8 | 17.8 | 16.1 | 16.6 | 26.1 | 34.6 | 40.0 | 30.8 | 20.0 | 18.2 | ------ | ------ |
| 1908–9 | 13.0 | 11.5 | 11.7 | ------ | 21.9 | 27.3 | 34.5 | 45.7 | 34.2 | 26.9 | ------ | 19.5 | ------ |
| 1909–10 | 17.1 | 16.3 | ------ | ------ | 51.9 | 50.6 | 57.0 | 53.9 | 40.8 | 35.5 | 28.2 | 23.3 | ------ |
| 1910–11 | 22.8 | 22.8 | 21.4 | ------ | ------ | ------ | ------ | ------ | ------ | 50.6 | 34.6 | 29.4 | ------ |
| 1911–12 | 30.0 | 25.9 | 24.0 | 22.2 | 20.1 | 31.0 | 34.4 | 42.5 | 37.7 | 28.3 | 21.5 | 18.0 | 28.0 |
| 1912–13 | 21.8 | 18.9 | 16.8 | 16.0 | 17.1 | 20.9 | 27.4 | 25.5 | 17.7 | 13.3 | ------ | 10.1 | ------ |
| 1913–14 | 9.81 | 9.77 | 9.77 | 17.4 | 46.0 | 50.8 | 48.0 | 55.4 | 44.0 | 32.1 | 25.4 | 19.9 | 30.6 |
| 1914–15 | 17.2 | 15.8 | 15.1 | 15.4 | 30.9 | 34.1 | 53.2 | 89.1 | 114 | 63.2 | 33.4 | 26.1 | 62.2 |
| 1915–16 | 20.6 | 18.0 | 16.9 | ------ | 99.4 | 124 | 119 | 98.4 | 53.1 | 30.6 | 26.0 | 22.0 | ------ |
| 1916–17 | 22.8 | 17.5 | 14.6 | 14.1 | 15.7 | 19.0 | 25.4 | 29.1 | 25.8 | 22.8 | 17.6 | 13.6 | 19.9 |
| 1917–18 | 12.2 | 11.8 | 10.7 | 9.66 | 10.2 | 200 | 38.8 | 37.9 | 34.1 | 25.3 | 20.0 | 15.9 | 35.9 |
| Average | 17.7 | 16.7 | 14.8 | 14.9 | 29.5 | 54.4 | 46.0 | 48.5 | 41.2 | 30.2 | 25.4 | 19.9 | 35.3 |

**Mill Creek at No. 3 power canal intake, near Forest Home**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1922–23 | ------ | ------ | ------ | 21.2 | 23.5 | ------ | ------ | ------ | ------ | 21.4 | 17.3 | 16.4 | ------ |
| 1923–24 | 15.6 | 14.7 | 14.0 | 13.6 | 11.8 | 12.2 | ------ | ------ | 20.4 | 14.3 | 11.4 | 10.4 | ------ |
| 1924–25 | 10.7 | ------ | 10.8 | 9.95 | 10.1 | 11.2 | 15.9 | 16.2 | 13.1 | 11.8 | 9.87 | 8.10 | ------ |
| 1925–26 | 7.68 | 7.61 | 8.88 | 8.12 | 11.0 | 10.9 | ------ | ------ | ------ | ------ | 18.3 | 15.4 | ------ |
| 1926–27 | 13.4 | 12.8 | 12.9 | 12.6 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | 19.6 | ------ |

**Mill Creek at Crafton headworks**

[Drainage area, 47 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1894–95 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | 24.5 | 20.0 | ------ |
| 1895–96 | 19.6 | ------ | ------ | ------ | ------ | ------ | ------ | 13.4 | 10.3 | 11.5 | 11.6 | 11.5 | ------ |
| 1896–97 | 10.5 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| 1898–99 | ------ | ------ | ------ | ------ | 11.6 | 12.2 | 11.8 | 11.2 | 8.7 | 5.8 | 5.8 | 4.1 | ------ |
| 1899–1900 | 6.5 | 8.6 | 9.5 | ------ | 10 | 10 | 10 | 12 | 7 | 5 | 5 | 5 | ------ |
| 1900–1901 | 5 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | 15.9 | ------ | 14.0 | ------ |
| 1901–2 | 12.6 | 12.3 | 12.0 | ------ | ------ | ------ | ------ | ------ | 15.6 | 11.7 | 9.10 | ------ | ------ |
| 1902–3 | 8.6 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |

**Mill Creek near Craftonville**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1918–19 | ------ | ------ | ------ | ------ | 1.49 | 6.62 | 3.57 | 0 | 0 | 0 | 0 | 0.46 | ------ |
| 1919–20 | 2.22 | 0.42 | 0 | 0 | 9.07 | 30.0 | 38.0 | 80.3 | 40.2 | 14.9 | 7.14 | 0 | 18.6 |
| 1920–21 | 0 | 0 | 0 | 3.81 | 0 | 13.5 | .60 | 16.2 | 15.5 | 0 | 0 | 0 | 4.16 |
| 1921–22 | 0 | 0 | 71.6 | 79.4 | 117 | 91.0 | 92.2 | 193 | 174 | 73.0 | 37.9 | 15.0 | 78.5 |
| 1922–23 | 0 | 0 | 8.5 | 0 | 0 | 0 | 8.1 | 16.8 | 0 | 0 | 0 | .06 | 2.9 |
| 1923–24 | 0 | 0 | 0 | 0 | 0 | 1.42 | 9.80 | 2.26 | 0 | 0 | 0 | 0 | 1.11 |
| 1924–25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1925–26 | 0 | 0 | 0 | 0 | 4.04 | 0 | 55.5 | 42.1 | 12.4 | 0 | 0 | 0 | 9.47 |
| 1926–27 | 0 | 2.53 | .58 | 0 | 135 | 35.8 | 35.7 | 59.8 | 28.2 | 1.61 | .11 | .15 | 24.1 |
| Average | 0.28 | .37 | 10.1 | 10.4 | 29.6 | 19.8 | 27.1 | 45.6 | 30.0 | 9.95 | 5.02 | 1.74 | 17.4 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Mill Creek and canals near Craftonville**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1918–19 | | | | | 22.5 | 31.0 | 32.7 | 32.3 | 23.2 | 18.8 | 17.0 | 15.8 | |
| 1919–20 | 15.8 | 16.4 | 17.6 | 15.9 | 26.9 | 61.1 | 70.0 | 113 | 73.5 | 46.9 | 38.4 | 26.3 | 43.6 |
| 1920–21 | 25.5 | 26.0 | 26.8 | 28.5 | 25.8 | 44.7 | 37.8 | 49.1 | 48.7 | 33.7 | 27.2 | 21.4 | 33.0 |
| 1921–22 | 21.8 | 19.0 | 93.4 | 113 | 151 | 124 | 125 | 226 | 206 | 105 | 68.3 | 46.5 | 108 |
| 1922–23 | 34.3 | 35.4 | 43.2 | 34.5 | 36.8 | 37.5 | 43.8 | 49.2 | 36.8 | 30.2 | 24.8 | 27.4 | 36.1 |
| 1923–24 | 24.2 | 22.7 | 22.1 | 22.5 | 20.6 | 23.1 | 42.0 | 38.2 | 26.9 | 18.6 | 14.8 | 14.5 | 24.2 |
| 1924–25 | 15.1 | 16.6 | 18.8 | 16.6 | 16.6 | 18.0 | 24.3 | 21.2 | 17.1 | 14.4 | 12.7 | 11.4 | 16.9 |
| 1925–26 | 10.8 | 12.4 | 12.1 | 12.2 | 21.3 | 17.3 | 82.4 | 71.8 | 44.2 | 32.1 | 27.2 | 19.6 | 30.3 |
| 1926–27 | 17.5 | 19.6 | 19.0 | 19.5 | 157 | 73.0 | 75.1 | 96.1 | 66.2 | 43.3 | 33.7 | 26.5 | 53.1 |
| Average | 20.6 | 21.0 | 31.6 | 32.8 | 53.2 | 47.7 | 59.2 | 77.4 | 60.3 | 38.1 | 29.3 | 23.3 | 43.2 |

**Mill Creek power canals Nos. 2 and 3 near Craftonville**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1918–19 | | | | 17.0 | 18.8 | 23.0 | 26.8 | 29.1 | 20.8 | 16.4 | 14.7 | 13.4 | |
| 1919–20 | 11.9 | 14.2 | 15.7 | 13.9 | 16.2 | 31.1 | 32.0 | 33.0 | 32.7 | 32.0 | 29.7 | 23.2 | 23.8 |
| 1920–21 | 22.3 | 23.4 | 24.3 | 22.0 | 22.4 | 28.1 | 31.9 | 31.7 | 31.7 | 29.5 | 24.0 | 19.4 | 25.9 |
| 1921–22 | 19.1 | 16.6 | 20.0 | 33.5 | 33.9 | 33.1 | 33.0 | 32.2 | 32.7 | 32.3 | 30.4 | 30.9 | 28.9 |
| 1922–23 | 28.7 | 30.6 | 30.8 | 29.6 | 29.8 | 31.1 | 31.4 | 30.8 | 31.9 | 27.7 | 23.1 | 22.5 | 29.0 |
| 1923–24 | 21.8 | 20.5 | 19.6 | 20.2 | 18.5 | 18.5 | 27.7 | 32.0 | 25.0 | 17.2 | 13.5 | 13.2 | 20.6 |
| 1924–25 | 13.6 | 14.7 | 16.2 | 14.6 | 14.5 | 15.6 | 21.6 | 19.2 | 15.2 | 11.6 | 11.5 | 10.9 | 14.9 |
| 1925–26 | 9.68 | 11.5 | 9.27 | 10.7 | 14.6 | 15.5 | 26.7 | 29.7 | 30.7 | 29.0 | 24.5 | 18.8 | 19.2 |
| 1926–27 | 16.7 | 16.2 | 16.7 | 17.4 | 19.1 | 27.4 | 31.8 | 28.4 | 31.6 | 30.9 | 30.2 | 24.7 | 24.3 |
| Average | 18.0 | 18.5 | 19.1 | 19.9 | 20.9 | 24.8 | 29.2 | 29.6 | 28.0 | 25.2 | 22.4 | 19.7 | 23.3 |

**Mill Creek power canal No. 1 near Craftonville**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1918–19 | | | | | 2.37 | 1.30 | 2.33 | 3.41 | 2.27 | 2.44 | 2.37 | 1.97 | |
| 1919–20 | 1.64 | 1.74 | 2.08 | 1.93 | 1.60 | 0 | 0 | 0 | 0 | 0 | 1.56 | 3.17 | 1.14 |
| 1920–21 | 3.38 | 2.60 | 2.64 | 2.79 | 3.22 | 3.22 | 5.35 | 1.26 | 1.51 | 4.09 | 3.10 | 2.16 | 2.94 |
| 1921–22 | 2.78 | 2.39 | 1.82 | | | | | 1.25 | 8.62 | 9.56 | 7.16 | 4.83 | 3.22 |
| 1922–23 | 5.58 | 4.83 | 3.88 | 4.84 | 7.00 | 6.33 | 8.58 | 8.65 | 4.96 | 2.52 | 1.65 | 4.00 | 5.22 |
| 1923–24 | 2.31 | 2.24 | 2.60 | 2.37 | 2.09 | 3.22 | 4.59 | 3.97 | 1.93 | 1.43 | 1.34 | 1.24 | 2.44 |
| 1924–25 | 1.55 | 1.94 | 2.53 | 2.00 | 2.02 | 2.35 | 2.73 | 2.01 | 1.85 | 2.75 | 1.30 | .53 | 1.96 |
| 1925–26 | 1.17 | .91 | 2.82 | 1.46 | 2.71 | 1.80 | .24 | 0 | 1.05 | 3.10 | 2.68 | .90 | 1.57 |
| 1926–27 | .74 | .89 | 1.65 | 2.11 | 2.57 | 9.83 | 7.56 | 8.02 | 6.48 | 10.8 | 3.38 | 1.83 | 4.68 |
| Average | 2.39 | 2.19 | 2.50 | 2.50 | 2.95 | 3.51 | 3.92 | 3.17 | 3.19 | 4.08 | 2.73 | 2.29 | 2.90 |

**Plunge Creek near East Highlands**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1918–19 | | | | | 4.84 | 10.7 | 3.79 | 0 | 0 | 0 | 0 | 0 | |
| 1919–20 | 0 | 1.70 | 3.24 | 0.03 | 19.8 | 43.5 | 31.8 | 5.98 | .64 | 0 | 0 | 0 | 8.83 |
| 1920–21 | .03 | 0 | .44 | 6.83 | 4.55 | 31.3 | 2.53 | 9.13 | 1.60 | 0 | 0 | 0 | 4.74 |
| 1921–22 | 0 | 0 | 66.0 | 52.6 | 87.5 | 46.6 | 28.4 | 12.4 | 3.10 | .21 | .02 | 0 | 24.4 |
| 1922–23 | 0 | 1.40 | 13.4 | 3.42 | 12.7 | 6.86 | 11.0 | 1.25 | 0 | 0 | 0 | 0 | 4.11 |
| 1923–24 | 0 | .03 | .40 | .50 | .08 | 2.95 | 11.6 | .21 | .03 | 0 | 0 | 0 | 1.30 |
| 1924–25 | 0 | .26 | .86 | .03 | .10 | .45 | 5.19 | .27 | .31 | 0 | 0 | 0 | .62 |
| 1925–26 | .06 | .12 | .25 | .08 | 8.30 | .04 | 69.0 | 4.63 | 0 | 0 | 0 | 0 | 6.74 |
| 1926–27 | 0 | .61 | 1.83 | 1.75 | 82.7 | 15.3 | 9.25 | 1.25 | .10 | 0 | 0 | 0 | 8.88 |
| Average | 0.01 | .52 | 10.8 | 8.16 | 24.5 | 17.5 | 19.2 | 3.90 | .64 | .02 | .002 | 0 | 7.45 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Warm Creek near Colton**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1919–20 | | | | | | | | | | | | 59.1 | |
| 1920–21 | 57.7 | 62.8 | 69.3 | 88.3 | 84.4 | 113 | 79.7 | 65.7 | 62.8 | 54.6 | 48.9 | 48.7 | 69.6 |
| 1921–22 | 54.7 | 55.8 | 214 | 158 | 200 | 183 | 134 | 96.8 | 65.6 | 64.4 | 64.0 | 62.2 | 112 |
| 1922–23 | 63.0 | 100 | 145 | 109 | 108 | 96.7 | 89.7 | 65.2 | 62.7 | 58.9 | 56.5 | 54.4 | 84 |
| 1923–24 | 57.5 | 73.9 | 80.9 | 87.1 | 83.9 | 86.8 | 90.3 | 67.9 | 61.7 | 54.2 | 50.8 | 45.1 | 70.0 |
| 1924–25 | 50.9 | 54.3 | 74.6 | 71.3 | 67.2 | 73.3 | 72.6 | 55.3 | 50.5 | 47.2 | 44.1 | 40.7 | 58.5 |
| 1925–26 | 49.1 | 52.4 | 63.4 | 57.4 | 70.9 | 54.1 | 179 | 70.3 | 49.4 | 41.3 | 37.9 | 39.2 | 63.5 |
| 1926–27 | 42.1 | 49.0 | 66.4 | 62.3 | 172 | 80.9 | 76.0 | 49.7 | 46.4 | 36.2 | 34.8 | 35.5 | 61.8 |
| Average | 53.6 | 64.0 | 102 | 90.5 | 112 | 98.3 | 103 | 67.3 | 57.0 | 51.0 | 48.1 | 48.1 | 74.2 |

**Warm Creek and Meeks & Daley Canal near Colton**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1920–21 | 67.0 | 68.6 | 73.4 | 90.8 | 84.9 | 113 | 89.7 | 74.5 | 73.4 | 69.6 | 63.5 | 61.6 | 77.5 |
| 1921–22 | 59.7 | 62.4 | 216 | 158 | 200 | 184 | 138 | 105 | 77.3 | 74.0 | 73.3 | 71.5 | 118 |
| 1922–23 | 70.5 | 101 | 145 | 109 | 108 | 101 | 96.0 | 77.9 | 75.8 | 73.5 | 71.4 | 68.3 | 91.3 |
| 1923–24 | 68.2 | 80.1 | 85.3 | 91.2 | 91.0 | 90.7 | 93.1 | 84.7 | 78.0 | 71.1 | 68.4 | 60.2 | 80.1 |
| 1924–25 | 62.8 | 64.4 | 77.4 | 75.2 | 72.8 | 78.5 | 78.2 | 66.9 | 65.6 | 63.9 | 60.7 | 56.5 | 68.6 |
| 1925–26 | 56.1 | 59.4 | 66.3 | 63.9 | 71.0 | 60.7 | 184 | 77.6 | 65.6 | 59.1 | 55.4 | 56.0 | 72.7 |
| 1926–27 | 59.0 | 60.5 | 66.4 | 63.8 | 174 | 80.9 | 77.0 | 64.8 | 63.3 | 52.5 | 49.6 | 48.2 | 71.0 |
| Average | 63.3 | 70.9 | 104 | 93.1 | 115 | 101 | 108 | 78.8 | 71.3 | 66.2 | 63.2 | 60.3 | 82.7 |

**Strawberry Creek near Arrowhead Springs**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1919–20 | | | | 2.23 | 12.7 | 22.4 | 14.5 | 7.82 | 3.88 | 2.03 | 1.35 | 0.99 | |
| 1920–21 | 2.38 | 3.31 | 3.42 | 6.53 | 4.18 | 10.9 | 4.34 | 8.66 | 4.38 | 1.99 | 1.22 | 1.08 | 4.38 |
| 1921–22 | 1.80 | 1.66 | 27.6 | 32.9 | 42.5 | 27.4 | 19.2 | 13.0 | 7.35 | 4.60 | 3.32 | 2.56 | 15.2 |
| 1922–23 | 2.86 | 4.45 | 12.2 | 5.81 | 8.55 | 5.28 | 8.18 | 4.36 | 3.38 | 2.35 | 2.05 | 1.77 | 5.08 |
| 1923–24 | 1.73 | 1.92 | 1.91 | 2.66 | 2.14 | 5.49 | 5.43 | 2.22 | 1.28 | .67 | .46 | .51 | 2.20 |
| 1924–25 | 1.10 | 2.00 | 2.61 | 1.80 | 2.54 | 3.54 | 4.51 | 2.04 | 2.48 | .57 | .33 | .34 | 1.98 |
| 1925–26 | 1.11 | 1.32 | 1.69 | 1.68 | 4.71 | 1.68 | 21.1 | 4.15 | 2.01 | 1.19 | .87 | .74 | 3.48 |
| 1926–27 | 1.09 | 1.63 | 3.13 | 2.49 | 25.7 | 10.6 | 7.85 | 4.45 | 3.13 | 1.53 | .83 | .88 | 5.13 |
| Average | 1.72 | 2.33 | 7.51 | 7.01 | 12.9 | 10.9 | 10.6 | 5.84 | 3.49 | 1.87 | 1.30 | 1.11 | 5.35 |

**Waterman Canyon Creek near Arrowhead Springs**

[Drainage area, 4.55 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | 2.28 | 2.78 | 2.35 | 1.94 | | 9.03 | 3.96 | 2.74 | 2.12 | 1.19 | 1.12 | |
| 1912–13 | 1.77 | 1.47 | 1.84 | 1.62 | 5.34 | 3.50 | 1.98 | 1.26 | 1.48 | 1.05 | .97 | 1.01 | 1.92 |
| 1913–14 | .59 | 1.49 | 2.02 | 19.9 | 31.8 | 14.7 | 10.2 | 7.90 | 5.77 | 3.52 | 2.01 | 1.74 | 8.32 |
| 1919–20 | | | | 2.23 | 12.7 | 22.4 | 14.5 | 7.82 | 3.88 | 2.03 | 1.35 | .99 | |
| 1920–21 | 1.35 | 1.66 | 1.65 | 3.06 | 2.24 | 7.51 | 2.76 | 4.54 | 2.72 | 1.42 | .98 | .44 | 2.54 |
| 1921–22 | 1.43 | 1.13 | 14.1 | 18.8 | 22.3 | 15.9 | 12.4 | 9.08 | 5.35 | 3.31 | 1.99 | 1.35 | 8.85 |
| 1922–23 | 1.70 | 2.36 | 6.65 | 4.07 | 5.50 | 4.49 | 5.11 | 2.85 | 1.75 | 1.02 | .81 | .82 | 3.08 |
| 1923–24 | .94 | 1.43 | 1.42 | 1.33 | 1.11 | 2.44 | 2.76 | .99 | .42 | .11 | .01 | .01 | 1.08 |
| 1924–25 | .29 | .78 | .96 | .88 | 1.02 | 1.12 | 1.70 | 1.16 | 1.00 | .25 | .04 | .04 | .77 |
| 1925–26 | .37 | .42 | .62 | .72 | 2.81 | .78 | 10.0 | 2.65 | .74 | .33 | .06 | .05 | 1.61 |
| 1926–27 | .12 | .39 | 1.33 | 1.35 | 12.8 | 8.19 | 4.55 | 3.32 | 1.62 | .40 | .24 | .30 | 2.82 |
| Average | .95 | 1.34 | 3.34 | 5.12 | 9.05 | 8.10 | 6.82 | 4.14 | 2.50 | 1.41 | .88 | .72 | 3.44 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**City Creek near Highland**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1919–20 | 0.22 | 1.93 | 6.55 | 1.09 | 22.0 | 50.4 | 34.0 | 9.55 | 2.26 | 0.05 | 0 | 0 | 10.6 |
| 1920–21 | 1.72 | 2.40 | 3.67 | 11.0 | 6.04 | 31.9 | 3.83 | 15.5 | 3.99 | .01 | 0 | .03 | 6.72 |
| 1921–22 | .25 | 0 | 54.3 | 65.2 | 101 | 63.7 | 41.1 | 21.8 | 5.56 | .31 | .06 | 0 | 29.0 |
| 1922–23 | .15 | 6.02 | 24.1 | 8.16 | 21.8 | 11.2 | 20.2 | 3.41 | .36 | .20 | .17 | .46 | 7.93 |
| 1923–24 | 3.02 | 5.70 | 4.45 | 4.09 | .35 | 10.4 | 19.0 | .97 | 0 | 0 | 0 | 0 | 4.00 |
| 1924–25 | .27 | 1.83 | 4.71 | .85 | 2.65 | 4.78 | 11.4 | 1.25 | 1.47 | 0 | 0 | 0 | 2.42 |
| 1925–26 | 1.53 | .38 | 1.88 | .29 | 14.2 | .18 | 148 | 11.2 | 1.27 | 0 | 0 | 0 | 14.7 |
| 1926–27 | 0 | 1.83 | 7.05 | 5.59 | 115 | 24.8 | 20.2 | 5.33 | 1.33 | .05 | 0 | 0 | 14.4 |
| Average | .90 | 2.51 | 13.3 | 12.0 | 35.4 | 24.7 | 37.2 | 8.63 | 2.03 | .08 | .03 | .06 | 11.2 |

**City Creek Water Co.'s canal near Highland**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1923–24 | | | | | | | | | 3.19 | 1.65 | 1.22 | 1.27 | |
| 1924–25 | 1.58 | 1.83 | 1.51 | 3.89 | 2.86 | 4.15 | 2.88 | 4.56 | 3.25 | 1.68 | .91 | 1.09 | 2.52 |
| 1925–26 | 1.10 | 2.57 | 1.57 | 2.88 | .67 | 3.84 | .52 | 4.27 | 7.31 | 4.41 | 2.69 | 2.00 | 2.83 |
| 1926–27 | 2.13 | 2.20 | 0 | .01 | .04 | 0 | .35 | 5.95 | 7.64 | 4.62 | 2.70 | 2.37 | 2.34 |

**Devil Canyon Creek near San Bernardino**

[Drainage area, 6.16 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | 2.35 | | 2.37 | 2.24 | | 7.10 | 3.08 | 1.55 | 0.42 | 0.32 | 0.63 | |
| 1913–14 | 0.34 | 1.52 | 1.76 | 16.3 | 25.4 | 12.0 | 9.03 | 9.48 | 4.92 | 1.72 | .77 | .81 | 6.81 |
| 1919–20 | | | | 1.38 | 6.88 | 14.8 | 10.8 | 5.63 | 2.68 | 1.32 | .93 | .98 | |
| 1920–21 | 1.37 | 1.80 | 1.78 | 3.84 | 2.82 | 7.34 | 2.80 | 5.35 | 2.21 | .11 | .10 | .08 | 2.47 |
| 1921–22 | .13 | .33 | 8.97 | 19.0 | 29.2 | 21.8 | 15.9 | 9.44 | 5.19 | 3.14 | 2.03 | 1.40 | 9.60 |
| 1922–23 | 1.89 | 3.98 | 9.25 | 4.22 | 5.91 | 4.68 | 4.68 | 2.67 | 1.89 | .47 | .34 | .52 | 3.36 |
| 1923–24 | .52 | .74 | .85 | 1.04 | 1.10 | 2.95 | 4.24 | 1.01 | .27 | .05 | .06 | 0 | 1.07 |
| 1924–25 | .20 | 1.04 | 1.15 | 1.00 | 1.54 | 1.51 | 2.26 | .26 | .27 | .18 | 0 | 0 | .78 |
| 1925–26 | 0 | 0 | 0 | 0 | 3.20 | .24 | 14.4 | .75 | .22 | 0 | 0 | 0 | 1.53 |
| 1926–27 | 0 | .07 | .95 | .87 | 16.5 | 8.71 | 5.95 | 2.02 | .17 | .10 | .10 | .10 | 2.87 |
| Average | .56 | 1.31 | 3.09 | 5.00 | 9.48 | 8.23 | 7.72 | 3.97 | 1.94 | .75 | .46 | .45 | 3.56 |

**Lytle Creek near San Bernardino**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1904–5 | 7.93 | 8.71 | 9.88 | 14.3 | | | 42.2 | 37.0 | 31.1 | 26.6 | 30.0 | 36.3 | |
| 1905–6 | 38.2 | 39.5 | 34.5 | 27.9 | 24.0 | | | 58.7 | 48.9 | 52.3 | 49.4 | 45.0 | |
| 1906–7 | 40.2 | 37.8 | | | | | | | | | | | |
| 1907–8 | 60.2 | 53.5 | 44.7 | | | 54.0 | 50.0 | 44.8 | | | | 20.3 | |
| 1908–9 | 22.2 | 22.0 | 24.7 | | | | 43.0 | 43.0 | 37.2 | 30.2 | 32.5 | 35.7 | |
| 1909–10 | 33.5 | 34.1 | | | 61.0 | 37.4 | 32.7 | 30.9 | 29.6 | 30.0 | 29.2 | | |
| 1910–11 | 26.0 | 23.6 | 21.8 | | | | | | 64.5 | 39.5 | 32.4 | 32.5 | |
| 1911–12 | 37.0 | 31.2 | 29.6 | 25.8 | 22.8 | | 38.3 | 35.6 | 24.6 | 20.6 | 18.1 | 17.4 | |
| 1912–13 | 20.6 | 21.7 | 20.5 | 21.9 | | 25.9 | 22.0 | 20.0 | 15.6 | 11.5 | 8.71 | 8.53 | |
| 1913–14 | 9.16 | 13.5 | 14.8 | | | 150 | 52.2 | 55.7 | 50.4 | 46.8 | 48.1 | 42.6 | |
| 1914–15 | 36 | 33.7 | 34.3 | 43.5 | 103 | 56.8 | 44.2 | 42.8 | 42.0 | 43.8 | 45.0 | 43.9 | 47.0 |
| 1915–16 | 35.7 | 32.0 | 32.2 | 650 | 133 | 113 | 119 | 61.9 | 43.6 | 37.5 | 35.2 | 30.4 | 111 |
| 1916–17 | 50.4 | 33.4 | 41.5 | 39.1 | 43.1 | 36.4 | 32.4 | 30.5 | 24.5 | 19.5 | 20.0 | 21.9 | 32.7 |
| 1917–18 | 22.2 | 22.7 | 21.6 | 21.7 | 22.6 | 135 | 60.1 | 34.0 | 32.0 | 29.0 | 28.6 | 28.6 | 38.3 |
| Average | 31.4 | 29.1 | 27.5 | 106 | 58.5 | 76.1 | 48.7 | 41.2 | 37.0 | 32.8 | 31.4 | 30.3 | 57.2 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Lytle Creek near Fontana**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1919–20 | 0 | 0 | 0.99 | 0 | 4.31 | 25.3 | 1.39 | 0 | 0 | 0 | 0 | 0 | 2.68 |
| 1925–26 | 0 | 0 | 0 | 0 | .90 | 0 | 15.8 | 0 | 0 | 0 | 0 | 0 | 1.37 |
| 1926–27 | 0 | 0 | .03 | 0 | 106 | 16.6 | 3.03 | 0 | 0 | 0 | 0 | 0 | 9.81 |

**Lytle Creek and Fontana pipe line near Fontana**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1919–20 | 20.1 | 18.5 | 19.9 | 13.8 | 28.7 | 75.7 | 59.3 | 45.7 | 37.7 | 32.9 | 42.4 | 43.6 | 36.5 |
| 1926–27 | 25.6 | 26.3 | 25.0 | 21.5 | 142 | 66.0 | 47.9 | 38.0 | 40.7 | 49.7 | 46.6 | 39.6 | 46.8 |

**Lytle Creek at head gates of Rialto Canals**

[Drainage area, 52 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900–1901 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | 15.8 | 12.6 | ------ | 10.4 | 9.8 | ------ |

**Lytle Creek Canals at intake**

[Drainage area, 54 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1898–99 | ------ | ------ | ------ | 11.90 | 11.74 | 12.23 | 10.83 | 9.81 | 8.14 | 7.06 | 11.76 | 14.30 | ------ |
| 1899–1900 | 13.30 | 11.20 | 11.30 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ |

**Fontana pipe line near Fontana**

| Year | Oct. | Nov. | Dec. | Jan, | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1918–19 | 40.0 | 32.7 | 29.4 | 26.5 | 23.0 | 24.5 | 28.3 | 24.6 | 19.4 | 15.9 | 15.6 | 15.6 | 24.6 |
| 1919–20 | 20.1 | 18.5 | 18.9 | 13.8 | 24.4 | 50.4 | 57.9 | 45.7 | 37.7 | 32.9 | 42.4 | 43.6 | 33.9 |
| 1920–21 | 35.7 | 24.2 | 26.2 | 26.9 | 28.0 | 33.0 | 32.2 | 33.4 | 34.6 | 27.6 | 23.8 | 22.4 | 29.0 |
| 1922–23 | 51.3 | 43.4 | 41.3 | 36.6 | 36.1 | 32.1 | 34.1 | 32.2 | 26.8 | 27.0 | 25.5 | 27.6 | 34.5 |
| 1923–24 | 27.4 | 25.5 | 24.5 | 20.8 | 21.9 | 24.7 | 24.3 | 24.5 | 20.5 | 16.9 | 14.6 | 13.6 | 21.6 |
| 1924–25 | 13.1 | 13.9 | 13.7 | 14.9 | 14.8 | 15.2 | 18.2 | 17.5 | 16.9 | 14.2 | 12.3 | 11.6 | 14.7 |
| 1925–26 | 11.1 | 12.5 | 12.5 | 13.4 | 22.9 | 14.7 | 39.3 | 34.0 | 23.9 | 21.5 | 19.2 | 19.6 | 20.3 |
| 1926–27 | 25.6 | 26.3 | 25.0 | 21.5 | 36.2 | 49.5 | 44.8 | 38.0 | 40.7 | 49.7 | 46.6 | 39.6 | 37.0 |
| Average | 28.0 | 24.6 | 23.9 | 21.8 | 25.9 | 30.5 | 34.9 | 31.2 | 27.6 | 25.7 | 25.0 | 24.2 | 27.0 |

**Cajon Creek near Keenbrook**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1919–20 | ------ | ------ | ------ | 3.45 | 11.0 | 27.5 | 10.7 | 5.68 | 4.56 | 2.74 | 2.31 | 2.37 | ------ |
| 1920–21 | 2.72 | 2.67 | 3.00 | 7.16 | 4.01 | 10.2 | 3.86 | 8.91 | 4.10 | 2.15 | 1.37 | 1.47 | 4.32 |
| 1921–22 | 2.11 | 2.33 | 110 | 27.4 | 158 | 35.1 | 19.0 | 10.6 | 7.58 | 5.84 | 4.05 | 4.08 | 31.4 |
| 1922–23 | 4.90 | 7.48 | 11.3 | 7.29 | 9.79 | 7.26 | 7.08 | 4.75 | 4.32 | 3.89 | 3.65 | 5.20 | 6.39 |
| 1923–24 | 3.44 | 3.65 | 4.35 | 4.23 | 4.50 | 7.43 | 6.62 | 3.59 | 2.95 | 2.27 | 1.97 | 2.65 | 3.97 |
| 1924–25 | 2.88 | 2.65 | 3.30 | 3.36 | 3.35 | 3.57 | 5.68 | 2.59 | 2.35 | 1.74 | 1.66 | 1.77 | 2.90 |
| 1925–26 | 2.24 | 2.49 | 2.65 | 3.01 | 9.79 | 3.44 | 21.5 | 4.77 | 2.89 | 1.80 | 1.75 | 1.63 | 4.76 |
| 1926–27 | 1.77 | 2.53 | 4.88 | 2.78 | 42.7 | 12.5 | 8.66 | 3.95 | 2.90 | 1.84 | 1.73 | 1.55 | 7.06 |
| Average | 2.87 | 3.40 | 19.9 | 7.34 | 30.4 | 13.4 | 10.4 | 5.60 | 3.96 | 2.78 | 2.31 | 2.59 | 8.69 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Lone Pine Creek near Keenbrook**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1919-20 | | | | 0.62 | 1.16 | 2.52 | 0.81 | 0.82 | 0.66 | 0.53 | 0.42 | 0.40 | |
| 1920-21 | 0.40 | 0.48 | 0.40 | .72 | .40 | 2.04 | .26 | .34 | .34 | .36 | .28 | .27 | 0.53 |
| 1921-22 | .50 | .47 | 13.0 | 1.67 | 17.9 | 7.79 | 5.57 | 4.28 | 4.13 | 3.32 | 2.74 | 2.81 | 5.27 |
| 1922-23 | 2.96 | 4.01 | 4.56 | 4.33 | 3.74 | 3.62 | 2.92 | 1.91 | 1.74 | 1.69 | 1.67 | 1.55 | 2.89 |
| 1923-24 | 1.35 | 1.10 | 1.27 | 1.17 | 1.18 | 1.52 | 1.42 | 1.06 | .82 | .67 | .59 | .54 | 1.06 |
| 1924-25 | .53 | .60 | .58 | .56 | .55 | .52 | .74 | .48 | .48 | .41 | .35 | .30 | .51 |
| 1925-26 | .31 | .28 | .29 | .30 | .99 | .25 | 1.53 | .31 | .26 | .20 | .18 | .11 | .41 |
| 1926-27 | .10 | .34 | .16 | .17 | 2.56 | .53 | .45 | .41 | .31 | .25 | .20 | .17 | .46 |
| Average | .88 | 1.04 | 2.89 | 1.19 | 3.56 | 2.35 | 1.71 | 1.20 | 1.09 | .93 | .80 | .77 | 1.59 |

**Meeks & Daley Canal near Colton**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1920-21 | 9.37 | 5.76 | 4.18 | 2.51 | 0.43 | 0.17 | 9.97 | 8.82 | 10.7 | 14.9 | 14.7 | 13.0 | 7.91 |
| 1921-22 | 4.90 | 6.61 | 1.88 | 0 | 0 | .13 | 4.15 | 8.45 | 11.7 | 9.64 | 9.23 | 9.26 | 5.51 |
| 1922-23 | 7.56 | .65 | 0 | 0 | 0 | 4.30 | 6.40 | 12.8 | 13.1 | 14.6 | 14.8 | 12.9 | 7.39 |
| 1923-24 | 10.6 | 6.24 | 4.43 | 4.08 | 7.26 | 3.88 | 2.80 | 16.8 | 16.3 | 17.0 | 17.4 | 15.0 | 10.2 |
| 1924-25 | 11.9 | 10.2 | 2.80 | 3.78 | 5.52 | 5.26 | 5.61 | 11.5 | 15.1 | 16.8 | 16.7 | 15.8 | 10.1 |
| 1925-26 | 7.14 | 7.07 | 3.04 | 6.44 | .20 | 6.63 | 4.84 | 7.38 | 16.2 | 17.9 | 17.5 | 16.7 | 9.31 |
| 1926-27 | 16.8 | 11.6 | 0 | 1.52 | 2.27 | 0 | .91 | 15.1 | 17.0 | 16.4 | 14.8 | 12.7 | 9.12 |
| Average | 9.75 | 6.88 | 2.33 | 2.62 | 2.24 | 2.91 | 4.95 | 11.6 | 14.3 | 15.3 | 15.0 | 13.8 | 8.51 |

**San Jacinto River near San Jacinto**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1920-21 | | 0.43 | 0.48 | 7.78 | 16.3 | 49.0 | 3.85 | 8.51 | 0.65 | 0.11 | 0.06 | 0.31 | |
| 1921-22 | 1.81 | .40 | 192 | 87.7 | 283 | 185 | 88.7 | 68.1 | 24.9 | 1.51 | .17 | 0 | 76.6 |
| 1922-23 | 0 | .46 | 31.9 | 6.13 | 37.6 | 39.2 | 63.9 | 13.9 | .21 | .04 | 0 | 0 | 15.9 |
| 1923-24 | 0 | 0 | 1.39 | 2.50 | .24 | 6.87 | 48.2 | 5.82 | .24 | 0 | 0 | 0 | 5.39 |
| 1924-25 | 0 | 0 | 3.30 | .25 | .22 | .26 | 6.77 | .70 | .70 | 1.98 | 2.29 | 0 | 1.38 |
| 1925-26 | 1.12 | .12 | .79 | .50 | 13.4 | 2.85 | 238 | 39.3 | .38 | | | | |
| 1926-27 | 0 | .55 | 27.9 | 6.60 | | | 122 | 80.9 | 39.9 | 14.6 | 6.15 | 10.4 | |

**San Jacinto River near Elsinore**

[Drainage area, 717 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1915-16 | | | | 1,300 | 482 | 270 | 87.9 | 7.55 | 0.39 | 0.15 | 3.40 | 1.11 | |
| 1916-17 | 0 | 0 | 0 | 4.80 | 19.5 | 48.5 | 14.6 | 3.60 | .51 | .358 | .019 | 0 | 7.60 |
| 1917-18 | 0 | .15 | .69 | 1.14 | 1.80 | 115 | .29 | .20 | .05 | 0 | 0 | 0 | 10.2 |
| 1918-19 | 0 | .17 | .48 | .62 | 1.32 | 1.69 | .31 | .04 | 0 | 0 | 0 | 0 | .38 |
| 1919-20 | 0 | 0 | 0 | .22 | 3.76 | 63.3 | 57.4 | .28 | 0 | 0 | 0 | 0 | 10.4 |
| 1920-21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1921-22 | 0 | 0 | 268 | 168 | 348 | 210 | 86.7 | 28.2 | .18 | 0 | 0 | 0 | 91.0 |
| 1922-23 | 0 | .09 | .45 | .41 | 1.15 | 1.10 | 5.00 | .01 | 0 | 0 | 0 | 0 | .67 |
| 1923-24 | 0 | 0 | .44 | .27 | .20 | 1.65 | .72 | .04 | 0 | 0 | 0 | 0 | .28 |
| 1924-25 | 0 | 0 | 0 | .12 | .11 | .15 | .06 | 0 | .92 | 0 | 0 | 0 | .11 |
| 1925-26 | 0 | 0 | 0 | .05 | 9.07 | .27 | 182 | .92 | .19 | 0 | 0 | 0 | 15.8 |
| 1926-27 | 0 | 0 | 1.49 | .13 | 1,250 | 153 | 69.6 | 5.66 | .03 | 0 | 0 | 0 | 116 |
| Average | 0 | .04 | 24.7 | 123 | 176 | 72.1 | 42.0 | 3.88 | .19 | .04 | .28 | .09 | 22.9 |

**Temescal Water Co.'s diversion near Elsinore**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1921-22 | 0 | 0 | 2.77 | 9.23 | 0 | 11.5 | 12.3 | 11.5 | 0.60 | 0 | 0 | 0 | 4.03 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Temescal Creek near Elsinore**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1915–16 | | | | | | | | 73.1 | 34.2 | 17.4 | 2.78 | 0.27 | |
| 1916–17 | 1.71 | 3.67 | 1.71 | 2.77 | 7.18 | 12.3 | 10.2 | 5.08 | .363 | 0 | 0 | 0 | 3.72 |

NOTE.—No flow July, 1917, to September, 1927.

**San Antonio Creek near Claremont**

[Drainage area, 16.9 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1916–17 | | | | | 3.11 | 8.42 | 21.0 | 15.0 | 4.95 | 1.24 | 0.98 | 0.87 | |
| 1917–18 | 1.00 | 0.93 | 0.82 | 0.85 | 1.95 | 75.1 | 30.1 | 15.0 | 2.71 | .84 | .77 | .77 | 11.0 |
| 1918–19 | .84 | 1.08 | 1.14 | .98 | 1.11 | .93 | .90 | .83 | .59 | .20 | .18 | .25 | .75 |
| 1919–20 | .58 | .65 | .87 | .48 | 2.53 | 32.3 | 35.9 | 22.7 | 5.31 | .63 | .36 | .36 | 8.58 |
| 1920–21 | .72 | .75 | .80 | 1.56 | 1.34 | 3.34 | 1.56 | 8.12 | 9.99 | 1.15 | .91 | .85 | 2.59 |
| 1921–22 | .90 | .86 | 127 | 146 | 116 | 68.1 | 52.6 | 61.3 | 33.3 | 10.6 | 1.25 | .89 | 51.3 |
| 1922–23 | 1.09 | 2.16 | 11.6 | 2.02 | 2.67 | 3.74 | 5.74 | 1.96 | 1.05 | .98 | .69 | .65 | 2.87 |
| 1923–24 | .82 | .90 | .85 | .81 | .80 | 1.18 | 1.93 | .71 | .39 | .29 | .26 | .26 | .77 |
| 1924–25 | .44 | .66 | .56 | .43 | .40 | .55 | 1.64 | .63 | .40 | .22 | .19 | .19 | .53 |
| 1925–26 | .24 | .29 | .36 | .51 | 3.26 | .69 | 70.1 | 26.1 | 2.55 | .87 | .61 | .60 | 8.80 |
| 1926–27 | .5 | 1.42 | 1.01 | .61 | 81.4 | 44.2 | 20.4 | 15.0 | 3.03 | 1.43 | 1.25 | 1.32 | 13.8 |
| Average | .71 | .97 | 14.5 | 15.4 | 19.5 | 21.7 | 22.0 | 15.2 | 5.84 | 1.68 | .68 | .64 | 10.1 |

**San Antonio Creek and Southern California Edison Co.'s canal near Claremont**

[Drainage area, 16.9 square mile]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1916–17 | | | | | 18.0 | 29.5 | 42.0 | 36.0 | 25.0 | 18.6 | 15.2 | 12.3 | |
| 1917–18 | 11.0 | 10.1 | 9.53 | 8.87 | 10.6 | 93.1 | 49.1 | 34.1 | 22.0 | 17.4 | 14.0 | 11.7 | 24.4 |
| 1918–19 | 11.6 | 11.1 | 11.2 | 10.3 | 10.2 | 10.4 | 14.2 | 14.2 | 10.2 | 7.8 | 6.55 | 6.10 | 10.3 |
| 1919–20 | 7.05 | 7.22 | 8.24 | 7.77 | 13.6 | 54.7 | 63.1 | 54.7 | 35.8 | 20 | 15.1 | 12.6 | 25.0 |
| 1920–21 | 11.5 | 11.0 | 10.3 | 11.3 | 11.6 | 24.4 | 22.8 | 30.9 | 39.9 | 22.2 | 16.5 | 13.6 | 18.8 |
| 1921–22 | 11.9 | 10.5 | 137 | 161 | 136 | 99.9 | 84.4 | 93.3 | 65.3 | 42.6 | 26.1 | 18.1 | 73.6 |
| 1922–23 | 16.1 | 15.5 | 31.6 | 23.4 | 20.4 | 22.4 | 28.3 | 24.7 | 19.2 | 15.7 | 14.0 | 11.7 | 20.3 |
| 1923–24 | 10.4 | 10.2 | 9.77 | 9.14 | 8.84 | 9.43 | 13.9 | 17.0 | 11.6 | 8.34 | 7.05 | 6.43 | 10.2 |
| 1924–25 | 6.52 | 6.78 | 7.05 | 6.82 | 6.65 | 6.80 | 9.70 | 11.7 | 9.40 | 6.96 | 5.59 | 5.33 | 7.45 |
| 1925–26 | 5.37 | 5.41 | 5.52 | 5.61 | 10.4 | 9.16 | 90.9 | 47.8 | 25.6 | 18.2 | 14.0 | 11.2 | 20.7 |
| 1926–27 | 9.78 | 10.2 | 12.7 | 13.2 | 98.2 | 69.2 | 45.4 | 40.0 | 26.7 | 19.3 | 15.2 | 13.5 | 30.6 |
| Average | 10.1 | 9.80 | 24.3 | 25.7 | 31.3 | 39.0 | 42.2 | 36.8 | 26.4 | 17.9 | 13.6 | 11.1 | 24.1 |

**San Antonio Creek near Upland**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900–1901 | | | | | | | 8.19 | 16.7 | 15.7 | 12.4 | 9.42 | 8.11 | |
| 1901–2 | 7.22 | 6.91 | 6.23 | 6.04 | 5.90 | 7.43 | 8.60 | 10.6 | 8.07 | 6.29 | 5.45 | 4.90 | 6.98 |
| 1902–3 | 4.50 | 4.37 | 4.46 | 4.67 | 6.02 | | | 16.0 | 18.6 | 15.6 | 11.1 | 9.25 | |
| 1903–4 | 7.94 | 7.27 | 6.90 | 6.56 | 6.31 | 8.11 | 12.5 | 15.5 | 11.5 | 8.32 | 7.41 | 6.39 | 8.73 |
| 1904–5 | 5.63 | | | | | 106 | 39.8 | 33.9 | 32.4 | 24.0 | 16.6 | 12.8 | |
| 1905–6 | 11.2 | 11.3 | 11.0 | 11.1 | 13.8 | 146 | 122 | 84.5 | 88.3 | 47.4 | 28.2 | 17.3 | 49.5 |
| 1906–7 | 13.5 | 12.0 | 13.4 | 25.4 | 47.0 | 121 | 113 | 89.7 | 57.7 | 28.7 | 21.7 | 17.3 | 46.7 |
| 1907–8 | 14.8 | 13.1 | 11.2 | 11.2 | 15.5 | 18.5 | 29.7 | 26.6 | 19.4 | 13.7 | 11.7 | 9.22 | 16.2 |
| 1908–9 | 8.64 | 7.98 | 8.25 | 24.4 | 72.7 | 87.4 | 83.0 | 81.0 | 46.9 | 23.6 | 16.4 | 13.0 | 39.2 |
| 1909–10 | 11.5 | 10.9 | 16.8 | | 45.1 | 25.6 | 24.6 | 19.7 | 15.3 | 12.4 | 10 0 | 8.29 | |
| 1910–11 | 7.60 | 7.59 | 7.29 | 14.3 | 27.7 | 85.9 | 39.3 | 32.6 | 26.6 | 21.2 | 16.6 | 13.2 | 25.0 |
| 1911–12 | 11.9 | 10.1 | 9.07 | 8.23 | 7.66 | 15.1 | 21.2 | 33.1 | 27.5 | 18.7 | 12.9 | 10.3 | 15.5 |
| 1912–13 | 9.36 | 8.65 | 8.70 | 7.24 | 8.45 | 9.56 | 14.7 | 15.1 | 12.8 | 9.33 | 7.76 | 6.87 | 9.88 |
| 1913–14 | 6.54 | 6.50 | 6.52 | 19.7 | 168 | 68.6 | 34.1 | 33.8 | 30.0 | 25.5 | 19.5 | 15.4 | 35.3 |
| 1914–15 | 13.2 | 11.5 | 10.9 | 12.5 | 60.6 | 45.0 | 35.1 | 44.6 | 39.3 | 27.5 | 20.2 | 16.6 | 27.8 |
| 1915–16 | 12.7 | 11.4 | 10.5 | | 51.0 | 43.3 | 33.7 | 23.3 | 21.0 | 18.2 | 15.0 | 12.2 | |
| 1916–17 | 13.8 | 12.4 | 12.3 | 12.5 | | | | | | | | | |
| Average | 10.0 | 9.46 | 9.57 | 12.6 | 38.3 | 56.2 | 41.3 | 36.0 | 29.4 | 19.6 | 14.4 | 11.3 | 25.5 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Southern California Edison Co.'s canal near Claremont**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1916–17 | | | | 12.5 | 15.0 | 21.0 | 21.0 | 21.0 | 20.1 | 17.5 | 14.1 | 11.4 | |
| 1917–18 | 10.1 | 9.35 | 8.70 | 8.01 | 8.62 | 17.9 | 19.4 | 19.4 | 19.3 | 16.6 | 13.3 | 10 9 | 13.5 |
| 1918–19 | 10.8 | 9.94 | 10.2 | 9.43 | 9.19 | 9.41 | 13.4 | 13.3 | 9.67 | 7.55 | 6.37 | 5.94 | 9.60 |
| 1919–20 | 6.46 | 6.54 | 7.37 | 7.28 | 11.0 | 22.3 | 27.3 | 32 | 30.5 | 19.4 | 14.8 | 12.3 | 16.4 |
| 1920–21 | 10.8 | 10.3 | 9.51 | 9.72 | 10.2 | 21.1 | 21.2 | 22.7 | 29.9 | 21.2 | 15.6 | 12.7 | 16.3 |
| 1921–22 | 11.0 | 9.73 | 9.93 | 14.6 | 20.3 | 31.9 | 31.8 | 32.0 | 32.0 | 32.0 | 24.9 | 17.2 | 22.3 |
| 1922–23 | 15.0 | 13.3 | 20.0 | 21.2 | 17.8 | 18.8 | 22.6 | 22.8 | 18.2 | 14.7 | 13.3 | 11.1 | 17.4 |
| 1923–24 | 9.60 | 9.32 | 8.92 | 8.32 | 8.04 | 8.24 | 11.9 | 16.3 | 11.2 | 8.05 | 6.79 | 6.17 | 9.41 |
| 1924–25 | 6.08 | 6.11 | 6.49 | 6.39 | 6.25 | 6.25 | 8.06 | 11.1 | 9.00 | 6.74 | 5.39 | 5.15 | 6.92 |
| 1925–26 | 5.14 | 5.12 | 5.16 | 5.10 | 7.15 | 8.47 | 20.8 | 21.6 | 23.0 | 17.3 | 13.4 | 10.6 | 11.9 |
| 1926–27 | 9.28 | 8.81 | 11.7 | 12.6 | 16.8 | 25.0 | 25.0 | 25.0 | 23.8 | 17.8 | 13.9 | 12.2 | 16.8 |
| Average | 9.43 | 8.85 | 9.80 | 10.5 | 11.8 | 17.3 | 20.2 | 21.6 | 20.6 | 16.3 | 12.9 | 10.5 | 14.1 |

**Santiago Creek near Villa Park**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1919–20 | | | | | | | | | | 0 | 0 | 0 | |
| 1920–21 | 0.16 | 0.077 | 0.058 | 0.37 | 0.093 | 14.2 | 0.03 | 0.72 | 0 | 0 | .016 | 0 | 1.34 |
| 1921–22 | 0 | 0 | 81.9 | 89.6 | 200 | 115 | 29.4 | 4.51 | 0 | 0 | 0 | 0 | 42.4 |
| 1922–23 | 0 | .20 | .77 | .05 | .34 | 0 | .57 | 0 | 0 | 0 | 0 | 0 | .16 |
| 1923–24 | 0 | 0 | .31 | .16 | 0 | .29 | .12 | 0 | 0 | 0 | 0 | 0 | .07 |
| 1924–25 | 0 | 0 | 0 | 0 | 0 | 0 | .26 | 0 | 0 | 0 | 0 | 0 | .02 |
| 1925–26 | 0 | 0 | .17 | .05 | 5.52 | 0 | 121 | 4.03 | 0 | 0 | 0 | 0 | 10.7 |
| 1926–27 | 0 | 2.62 | 6.13 | 2.88 | 401 | 74.8 | 18.0 | .97 | 0 | 0 | 0 | 0 | 39.7 |
| Average | .02 | .41 | 12.8 | 13.3 | 86.7 | 29.2 | 24.2 | 1.46 | 0 | 0 | .002 | 0 | 13.5 |

**Santiago Creek and Serrano & Carpenter Canal near Villa Park**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1920–21 | 4.75 | 4.22 | 3.18 | 2.68 | 3.02 | 17.9 | 6.24 | 6.88 | 6.83 | 8.72 | 7.08 | 5.98 | 6.49 |
| 1921–22 | 5.59 | 4.10 | 83.9 | 94.0 | 202 | 118 | 36.4 | 13.5 | 10.4 | 10.5 | 8.27 | 6.10 | 48.5 |
| 1922–23 | 4.93 | 4.32 | 4.31 | 4.05 | 5.28 | 6.63 | 7.54 | 5.51 | 5.56 | 6.06 | 4.39 | 3.14 | 5.14 |
| 1923–24 | 2.78 | 2.38 | 2.03 | 1.66 | 1.51 | 1.64 | 1.68 | 1.31 | 2.31 | 3.74 | 2.58 | 2.00 | 2.14 |
| 1924–25 | 1.50 | 1.02 | 1.01 | 1.07 | .96 | .82 | 1.00 | .65 | .49 | .39 | .51 | 1.13 | .88 |
| 1925–26 | 1.23 | 1.22 | 1.28 | 1.06 | 6.95 | 1.93 | 123 | 11.7 | 6.53 | 7.42 | 6.66 | 5.37 | 14.4 |
| 1926–27 | 4.29 | 5.26 | 8.37 | 5.10 | 402 | 76.3 | 21.5 | 8.47 | 6.72 | 8.76 | 6.56 | 5.23 | 44.1 |
| Average | 3.58 | 3.22 | 14.9 | 15.7 | 88.8 | 31.9 | 28.2 | 6.86 | 5.55 | 6.51 | 5.15 | 4.14 | 17.4 |

**Serrano & Carpenter Canal near Villa Park**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1919–20 | | | | | | | | | | | | 5.87 | |
| 1920–21 | 4.58 | 4.14 | 3.12 | 2.30 | 2.93 | 3.74 | 6.21 | 6.16 | 6.83 | 8.72 | 7.05 | 5.98 | 5.16 |
| 1921–22 | 5.69 | 4.10 | 1.96 | 4.36 | 2.22 | 2.84 | 6.92 | 8.97 | 10.4 | 10.5 | 8.27 | 6.10 | 6.04 |
| 1922–23 | 4.93 | 4.09 | 3.55 | 4.00 | 4.95 | 6.63 | 6.98 | 5.51 | 5.56 | 6.06 | 4.39 | 3.14 | 4.98 |
| 1923–24 | 2.78 | 2.38 | 1.72 | 1.50 | 1.51 | 1.35 | 1.56 | 1.31 | 2.31 | 3.74 | 2.58 | 2.00 | 2.07 |
| 1924–25 | 1.50 | 1.02 | 1.01 | 1.07 | .96 | .82 | .73 | .65 | .49 | .39 | .51 | 1.13 | .86 |
| 1925–26 | 1.23 | 1.22 | 1.11 | 1.00 | 1.44 | 1.93 | 2.14 | 7.74 | 6.53 | 7.42 | 6.66 | 5.37 | 3.67 |
| 1926–27 | 4.29 | 2.63 | 2.28 | 2.23 | 1.32 | 1.48 | 3.47 | 7.60 | 6.72 | 8.76 | 6.56 | 5.23 | 4.40 |
| Average | 3.57 | 2.80 | 2.11 | 2.35 | 2.19 | 2.68 | 4.00 | 5.42 | 5.55 | 6.51 | 5.15 | 4.35 | 3.88 |

**San Gabriel River at headworks, near Azusa**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1912–13 | | | 28.4 | 46.2 | 196 | 176 | 120 | 77.4 | 47.6 | 28.0 | 17.9 | 17.2 | |
| 1913–14 | 17.0 | 42.5 | 36.8 | | | | | | | | | | |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**San Gabriel River near Azusa**

[Drainage area, 214 square miles •]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1895–96 | ------ | ------ | ------ | 10.6 | 11.7 | 74.6 | 11.1 | 0 | 0 | 0 | 0 | 0 | ------ |
| 1896–97 | 12 | 3 | 2 | 40 | 329 | 434 | 259 | 82 | 5 | 0 | 0 | 0 | ------ |
| 1897–98 | 72 | 8 | 4 | 14 | 11 | .03 | ------ | ------ | ------ | ------ | ------ | ------ | ------ |
| 1898–99 | 0 | 0 | 0 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.1 |
| 1899–1900 | .42 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | .37 |
| 1900–1901 | 0 | 172 | 0 | 111 | 630 | 158 | 43 | 55 | 7 | 0 | 0 | 0 | ------ |
| 1901–2 | 3 | 0 | 0 | 0 | 3 | 38 | 7 | 0 | 0 | 0 | 0 | 0 | 4.25 |
| 1902–3 | 0 | .60 | 0 | 118 | 32.7 | 186 | 741 | 148 | 20.7 | 0 | 0 | 0 | 104 |
| 1903–4 | 0 | 0 | 0 | 0 | 17.0 | 60.2 | 24.3 | 9.69 | 0 | 0 | 0 | 0 | 9.26 |
| 1904–5 | 0 | 0 | 0 | 1.32 | 398 | 1,150 | 249 | 199 | 61.9 | 8.79 | 0 | 0 | 172 |
| 1905–6 | 0 | 0 | 0 | 20.6 | 14.9 | 2,030 | 508 | 267 | 188 | 75.6 | 2.48 | 0 | 262 |
| 1906–7 | 0 | 0 | 0 | 873 | 772 | 1,810 | 906 | 274 | 178 | 60.2 | 11.7 | .6 | 406 |
| 1907–8 | 2.58 | .13 | ------ | 119 | 184 | 131 | 80.0 | 42.4 | 1.27 | 1.81 | .74 | 0 | 46.4 |
| 1908–9 | 0 | 0 | 0 | 358 | 1,000 | 361 | 406 | 214 | 79.1 | 14.8 | 0 | 0 | 197 |
| 1909–10 | 0 | .33 | 270 | 1,060 | 135 | 83.3 | 66.5 | 11.0 | 0 | 0 | 0 | 0 | 137 |
| 1910–11 | 0 | 0 | 0 | 546 | 724 | 1,910 | 401 | 201 | 55.1 | 14.4 | 0 | 2.6 | 321 |
| 1911–12 | .2 | 0 | 0 | 0 | 0 | 301 | 249 | 104 | 9.7 | 0 | 0 | 0 | 55.5 |
| 1912–13 | 0 | 0 | 0 | 6.4 | 174 | 90.5 | 42.7 | 7.6 | 0 | 0 | 0 | 0 | 25.8 |
| 1913–14 | 0 | 1.5 | 0 | 960 | 2,140 | 761 | 296 | 196 | 81.1 | 10.6 | 0 | 0 | 359 |
| 1914–15 | 0 | 0 | 7.1 | 55.2 | 464 | 267 | 202 | 243 | 73.7 | 9.23 | 0 | 0 | 108 |
| 1915–16 | 0 | 0 | 0 | 2,330 | 605 | 486 | 253 | 82.2 | 7.89 | 0 | 0 | 0 | 315 |
| 1916–17 | 27.2 | 0 | 149 | 62.7 | 148 | 131 | 55.2 | 23.5 | 0 | 0 | 0 | 0 | 49.3 |
| 1917–18 | 0 | 0 | 0 | 0 | 116 | 1,000 | 209 | 34.9 | .29 | 0 | 0 | 0 | 123 |
| 1918–19 | 0 | 0 | 2.27 | 0 | 5.61 | 23.2 | 6.81 | 0 | 0 | 0 | 0 | 0 | 3.16 |
| 1919–20 | 0 | 0 | 12.5 | 0 | 161 | 533 | 336 | 88 | 7.42 | .43 | 0 | 0 | 94.6 |
| 1920–21 | 0 | 2.10 | .58 | 32.4 | 13.5 | 180 | 25.4 | 178 | 43.8 | 0 | 0 | 0 | 40.1 |
| 1921–22 | 0 | 0 | 1,890 | 968 | 1,530 | 702 | 449 | 325 | 165 | 71.7 | 8.42 | 0 | 505 |
| 1922–23 | 0 | 24.3 | 274 | 41.6 | 62.8 | 42.7 | 65.5 | 15.4 | 0 | 0 | 0 | 0 | 44.0 |
| 1923–24 | 0 | 0 | 0 | 0 | 0 | 17.7 | 24.4 | 0 | 0 | 0 | 0 | 0 | 3.50 |
| 1924–25 | 0 | 0 | .21 | 0 | 0 | 5.82 | 44.7 | .01 | 0 | 0 | 0 | 0 | 4.19 |
| 1925–26 | 0 | 0 | 0 | 2.67 | 75.9 | 5.27 | 1,150 | 126 | 14.1 | 0 | 0 | 0 | 113 |
| 1926–27 | 0 | 14.3 | 5.16 | 2.91 | 973 | 274 | 165 | 85.6 | 27.6 | .26 | 0 | 0 | 123 |
| Average | 3.79 | 7.30 | 87.2 | 242 | 335 | 414 | 235 | 97.2 | 33.1 | 8.64 | .75 | .10 | 129 |

• Previously published as 222 square miles.

**San Gabriel River and canals near Azusa**

[Drainage area, 214 square miles •]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1893–94 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | 32 | 23 | 12 | 14 | 15 | ------ |
| 1894–95 | 14 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | 32 | ------ |
| 1895–96 | 29 | 40 | 42 | 37 | 41 | 111 | 54 | 36 | 19 | 12 | 14 | 13 | 37.3 |
| 1896–97 | 24 | 19 | 22 | 57.9 | 345 | 466 | 294 | 145 | 67.8 | 38.1 | 26.4 | 20.7 | 127 |
| 1897–98 | 90.5 | 33.3 | 30.5 | 40 | 40 | 35 | 33 | 36 | 19 | 11 | 7 | 8 | 31.9 |
| 1898–99 | 9 | 10 | 14 | 23 | 22 | 26 | 21 | 14 | 10 | 4 | 5 | 4 | 13.5 |
| 1899–1900 | 11 | 14 | 20 | 32 | 20 | 20 | 17 | 37 | 15 | 6 | 4 | 4 | 16.7 |
| 1900–1901 | 5 | 186 | 40 | 169 | 680 | 221 | 110 | 121 | 63 | 30 | 20 | 17 | 138 |
| 1901–2 | 24 | 32 | 27 | 28 | 37 | 99 | 66 | 39 | 20 | 11 | 7 | 5 | 32.9 |
| 1902–3 | 7 | 19 | 32 | 148 | 102 | 257 | 792 | 217 | 95 | 43 | 29 | 25 | 147 |
| 1903–4 | 24 | 24 | 24 | 24.4 | 47.7 | 111 | 89.7 | 66.5 | 25.5 | 14.0 | 12.9 | 10.8 | 39.5 |
| 1904–5 | 12 | 12.8 | 16.9 | 36.6 | 466 | 1,220 | 329 | 278 | 139 | 83.0 | 42.8 | 31.4 | 222 |
| 1905–6 | 28.8 | 44.7 | 40.1 | 68.9 | 71.3 | 2,100 | 582 | 341 | 261 | 152 | 73.0 | 47.7 | 321 |
| 1906–7 | 39.8 | 40.4 | 188 | 949 | 848 | 1,880 | 982 | 350 | 254 | 136 | 87.7 | 60.2 | 485 |
| 1907–8 | 66.5 | 63.9 | 58.6 | 180 | 260 | 207 | 156 | 117 | 70.4 | 41.6 | 36.0 | 30.6 | 107 |
| 1908–9 | 33.6 | 32.9 | 46.7 | 414 | 1,070 | 428 | 471 | 248 | 144 | 82.0 | 50.7 | 39.0 | 255 |
| 1909–10 | 37.5 | 48.4 | 340 | 1,130 | 207 | 156 | 139 | 82.1 | 59.8 | 39.9 | 27.8 | 23.1 | 191 |
| 1910–11 | 25.4 | 31.4 | 32.8 | 605 | 797 | 1,980 | 474 | 270 | 126 | 85.1 | 58.7 | 47.6 | 378 |
| 1911–12 | 51.0 | 47.0 | 46.7 | 44.1 | 38.8 | 371 | 302 | 177 | 83.9 | 49.8 | 31.9 | 26.0 | 106 |
| 1912–13 | 29.8 | 29.0 | 28.6 | 47.4 | 237 | 166 | 120 | 80.8 | 48.6 | 27.5 | 17.4 | 15.0 | 69.4 |
| 1913–14 | 14.8 | 38.3 | 35.3 | 999 | 2,170 | 781 | 360 | 275 | 161 | 90.6 | 59.1 | 45.8 | 408 |
| 1914–15 | 45.0 | 41.0 | 69.7 | 120 | 544 | 350 | 290 | 332 | 192 | 114 | 64.8 | 54.9 | 182 |
| 1915–16 | 45.0 | 50.6 | 58.2 | 2,410 | 685 | 566 | 335 | 169 | 98.0 | 77.5 | 58.0 | 47.2 | 384 |
| 1916–17 | 114 | 69.4 | 221 | 151 | 238 | 221 | 176 | 140 | 88.6 | 51.0 | 35.7 | 25.4 | 127 |
| 1917–18 | 25.3 | 31.0 | 32.5 | 32.9 | 168 | 1,190 | 286 | 163 | 101 | 64.5 | 46.2 | 39.2 | 183 |
| 1918–19 | 47.6 | 52.8 | 71.0 | 53.7 | 74.0 | 99.3 | 101 | 62.0 | 31.8 | 21.5 | 15.2 | 17.0 | 53.8 |
| 1919–20 | 33.2 | 35.8 | 86.8 | 53.0 | 221 | 588 | 422 | 204 | 124 | 76.0 | 52.0 | 34.1 | 161 |
| 1920–21 | 32.5 | 40.0 | 36.0 | 84.0 | 90.9 | 251 | 102 | 256 | 151 | 62.3 | 39.9 | 31.0 | 97.5 |
| 1921–22 | 33.2 | 30.2 | 1,930 | 1,010 | 1,600 | 778 | 527 | 401 | 242 | 148 | 82.7 | 55.3 | 566 |
| 1922–23 | 50.5 | 89.2 | 349 | 116 | 141 | 119 | 140 | 89.2 | 62.1 | 39.3 | 32.4 | 29.4 | 105 |
| 1923–24 | 27.8 | 32.9 | 34.7 | 35.3 | 31.2 | 67.2 | 104 | 59.3 | 27.9 | 16.3 | 12.3 | 12.5 | 38.5 |
| 1924–25 | 14.2 | 20.0 | 29.0 | 27.8 | 29.2 | 40.9 | 121 | 49.6 | 31.0 | 13.4 | 10.1 | 8.27 | 32.8 |
| 1925–26 | 14.2 | 16.9 | 26.9 | 25.0 | 143 | 59.3 | 1,160 | 211 | 92.4 | 50.8 | 33.7 | 26.5 | 153 |
| 1926–27 | 24.8 | 45.2 | 66.6 | 58.0 | 1,040 | 348 | 233 | 162 | 103 | 61.2 | 40.5 | 33.2 | 178 |
| Average | 33.0 | 41.3 | 128 | 288 | 391 | 479 | 293 | 159 | 92.4 | 53.5 | 34.8 | 27.5 | 168 |

• Previously published as 222 square miles.

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Southern California Edison Co.'s canal near Azusa**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1895–96 | | | | 26 | 30 | 36 | 43 | 36 | 19 | 12 | 14 | 13 | |
| 1896–97 | 11 | 17 | 20 | 17.6 | 13.1 | 17.1 | 35.3 | 63.0 | 63.2 | 38.1 | 26.4 | 20.7 | 28.5 |
| 1897–98 | 18.0 | 23.3 | 26.8 | 26 | 29 | 35 | 33 | 32 | 19 | 11 | 7 | 8 | 22.3 |
| 1898–99 | 9 | 10 | 14 | 21.8 | 22 | 26 | 21 | 14 | 10 | 4 | 5 | 4 | 13.4 |
| 1899–1900 | 11.1 | 14.0 | 20 | 30 | 20 | 20 | 17 | 35 | 15 | 6 | 4 | 4 | 16.3 |
| 1900–1901 | 5 | 14 | 40 | 58 | 67 | 63 | 67 | 66 | 56 | 30 | 20 | 17 | 41.9 |
| 1901–2 | 21 | 32 | 27 | 28 | 34 | 61 | 59 | 39 | 20 | 11 | 7 | 5 | 28.7 |
| 1902–3 | 7.1 | 18.9 | 31.8 | 30.2 | 69.6 | 70.5 | 52.0 | 68.6 | 74.2 | 43.4 | 28.6 | 24.6 | 43.1 |
| 1903–4 | 23.7 | 23.8 | 24.3 | 24.4 | 30.7 | 50.8 | 65.7 | 56.5 | 25.5 | 14.0 | 12.9 | 10.8 | 30.2 |
| 1904–5 | 12.0 | 12.8 | 16.9 | 35.2 | 67.8 | 68.8 | 80.0 | 80.0 | 77.5 | 74.2 | 42.8 | 31.4 | 49.8 |
| 1905–6 | 28.8 | 44.7 | 40.1 | 48.3 | 56.5 | 69.8 | 74.3 | 73.8 | 73.4 | 76.0 | 70.5 | 47.7 | 58.7 |
| 1906–7 | 39.8 | 40.4 | 65.5 | 76.0 | 76.0 | 71.1 | 76.0 | 76.0 | 76.0 | 76.0 | 76.0 | 59.6 | 67.3 |
| 1907–8 | 64.0 | 63.8 | 58.6 | 61.0 | 76.0 | 76.0 | 76.0 | 74.4 | 70.4 | 39.8 | 35.3 | 30.6 | 60.4 |
| 1908–9 | 33.6 | 32.9 | 46.7 | 56.3 | 66.7 | 67.0 | 64.8 | 34.1 | 64.8 | 67.2 | 50.7 | 39.0 | 51.9 |
| 1909–10 | 37.5 | 48.0 | 70.0 | 67.5 | 72.5 | 73.0 | 72.3 | 71.1 | 59.8 | 39.9 | 27.8 | 23.1 | 55.1 |
| 1910–11 | 25.4 | 31.4 | 32.8 | 59.4 | 72.9 | 66.1 | 73.1 | 69.5 | 71.4 | 70.7 | 58.7 | 45.0 | 56.4 |
| 1911–12 | 50.8 | 47.0 | 46.7 | 44.1 | 38.8 | 70.6 | 53.1 | 73.0 | 74.2 | 49.8 | 31.9 | 26.0 | 50.6 |
| 1912–13 | 29.8 | 29.0 | 28.6 | 41.0 | 63.1 | 75.5 | 77.0 | 73.2 | 48.6 | 27.5 | 17.4 | 15.0 | 43.7 |
| 1913–14 | 14.8 | 36.8 | 35.3 | 39.0 | 33.4 | 19.7 | 63.5 | 78.5 | 80.0 | 80.0 | 59.1 | 45.8 | 48.9 |
| 1914–15 | 45.0 | 41.0 | 62.7 | 65.1 | 80.0 | 82.6 | 88.0 | 89.4 | 90.0 | 90.0 | 64.8 | 54.9 | 71.1 |
| 1915–16 | 45.0 | 50.6 | 58.2 | 73.4 | 80.0 | 80.0 | 82.3 | 87.1 | 90.0 | 77.5 | 58.0 | 47.2 | 69.1 |
| 1916–17 | 87.0 | 69.4 | 72.9 | 88.4 | 90.0 | 90.0 | 87.0 | 90.0 | 78.4 | 51.0 | 35.7 | 25.4 | 72.0 |
| 1917–18 | 25.3 | 31.0 | 32.5 | 32.9 | 51.6 | 90.0 | 49.7 | 90.0 | 88.7 | 64.5 | 46.2 | 39.2 | 53.5 |
| 1918–19 | 47.6 | 52.8 | 68.7 | 53.7 | 60.9 | 70.6 | 89.0 | 62.0 | 31.8 | 21.5 | 15.2 | 17.0 | 49.2 |
| 1919–20 | 33.2 | 35.8 | 74.3 | 53.0 | 56.0 | 52.9 | 86.5 | 91.9 | 91.9 | 75.0 | 52.0 | 34.1 | 61.4 |
| 1920–21 | 32.5 | 37.9 | 35.5 | 51.5 | 67.4 | 70.8 | 71.0 | 67.7 | 77.4 | 61.0 | 39.9 | 31.0 | 53.5 |
| 1921–22 | 33.2 | 30.2 | 44.9 | 45.7 | 67.0 | 76.0 | 77.3 | 75.5 | 76.8 | 75.9 | 74.3 | 55.3 | 61.0 |
| 1922–23 | 50.5 | 65.0 | 74.6 | 74.3 | 78.1 | 76.6 | 75.0 | 73.8 | 62.1 | 39.3 | 32.4 | 29.4 | 60.8 |
| 1923–24 | 27.8 | 32.9 | 34.7 | 35.3 | 31.2 | 49.5 | 80.0 | 59.3 | 27.9 | 16.3 | 12.3 | 12.5 | 35.0 |
| 1924–25 | 14.2 | 20.0 | 28.8 | 27.8 | 29.2 | 35.1 | 76.6 | 49.6 | 31.0 | 13.4 | 10.1 | 8.27 | 28.6 |
| 1925–26 | 14.2 | 16.9 | 26.9 | 22.4 | 67.3 | 54.1 | 15.7 | 85.2 | 78.3 | 50.8 | 33.7 | 26.5 | 40.9 |
| 1926–27 | 24.8 | 30.9 | 61.5 | 55.1 | 65.8 | 73.6 | 67.8 | 75.9 | 75.6 | 60.9 | 40.5 | 33.2 | 55.4 |
| Average | 29.8 | 34.0 | 42.6 | 45.9 | 55.1 | 60.6 | 64.0 | 66.0 | 59.3 | 45.9 | 34.7 | 27.6 | 47.7 |

**Tunnel diversion near Azusa**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1917–18 | 0 | 0 | 0 | 0 | 0 | 0 | 26.7 | 37.8 | 11.8 | 0 | 0 | 0 | 6.37 |
| 1918–19 | 0 | 0 | 0 | 0 | 7.56 | 5.57 | 4.92 | 0 | 0 | 0 | 0 | 0 | 1.46 |
| 1919–20 | 0 | 0 | 0 | 0 | 4.96 | 2.38 | 0 | 24.3 | 24.4 | .52 | 0 | 0 | 4.69 |
| 1920–21 | 0 | 0 | 0 | 0 | 0 | 0 | 5.19 | 9.70 | 29.5 | 1.28 | 0 | 0 | 3.78 |

**Rogers Creek near Azusa**

[Drainage area, 6.4 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1917–18 | 0 | 0.138 | 0.082 | 0.110 | 2.69 | 25.1 | 4.35 | 1.94 | 0.743 | 0.118 | 0 | 0 | 2.96 |
| 1918–19 | 0 | .37 | .69 | .52 | 1.20 | 1.56 | .56 | .38 | .02 | 0 | 0 | 0 | .44 |
| 1919–20 | 0 | .26 | 1.35 | .34 | 3.36 | 12.6 | 4.40 | 1.49 | .417 | .031 | 0 | 0 | 2.02 |
| 1920–21 | 0 | .13 | .36 | 1.53 | .81 | 8.31 | .93 | 4.26 | 1.23 | .04 | 0 | 0 | 1.48 |
| 1921–22 | 0 | 0 | 27.4 | 22.8 | 55.9 | 18.1 | 9.05 | 5.32 | 2.82 | .65 | .09 | 0 | 11.6 |
| 1922–23 | .08 | 2.01 | 7.33 | 1.76 | 2.60 | 1.30 | 1.73 | .47 | .08 | 0 | 0 | 0 | 1.44 |
| 1923–24 | 0 | 0 | 0 | .03 | 0 | 1.67 | .76 | .05 | 0 | 0 | 0 | 0 | .21 |
| 1924–25 | 0 | .12 | .85 | .31 | .49 | 2.30 | 8.11 | .68 | .35 | 0 | 0 | 0 | 1.09 |
| 1925–26 | 0 | .03 | .98 | .65 | 9.61 | .40 | 50.8 | 2.54 | .88 | .36 | .15 | .10 | 5.43 |
| 1926–27 | .2 | 1.31 | 1.48 | .81 | 47.6 | 10.6 | 5.51 | 2.29 | 1.01 | .18 | 0 | 0 | 5.62 |
| Average | .03 | .44 | 4.05 | 2.89 | 12.4 | 8.19 | 8.62 | 1.94 | .76 | .14 | .02 | .01 | 3.23 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Fish Creek near Duarte**

[Drainage area, 6.5 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1915–16 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | 1.09 | 0.96 | ------ |
| 1916–17 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | .21 | .20 | ------ |
| 1917–18 | 0.23 | 0.51 | 0.53 | 0.55 | 6.20 | 33.4 | 4.28 | 1.98 | 0.85 | 0.21 | .11 | .15 | 4.10 |
| 1918–19 | .29 | .78 | 1.33 | .97 | 2.12 | 2.91 | 1.32 | .86 | .192 | .008 | .002 | .04 | .896 |
| 1919–20 | .21 | .52 | 2.10 | .77 | 4.81 | 17.5 | 6.06 | 2.40 | 1.02 | .138 | .018 | .018 | 2.96 |
| 1920–21 | .16 | .44 | .65 | 2.28 | .94 | 10.9 | 1.65 | 7.57 | 2.42 | .33 | .09 | .05 | 2.31 |
| 1921–22 | .13 | .15 | 32.8 | 25.2 | 50.1 | 18.5 | 10.8 | 7.18 | 3.74 | 1.67 | .65 | .33 | 12.4 |
| 1922–23 | .48 | 1.81 | 9.21 | 2.97 | 4.02 | 2.12 | 2.71 | .95 | .49 | .13 | .10 | .10 | 2.08 |
| 1923–24 | .15 | .24 | .37 | .48 | .40 | 2.44 | 1.19 | .35 | .05 | 0 | 0 | 0 | .47 |
| 1924–25 | .06 | .56 | 1.44 | .59 | .90 | 2.82 | 11.2 | 1.38 | .96 | .35 | .16 | .10 | 1.70 |
| 1925–26 | .27 | .37 | 1.37 | .91 | 12.2 | 2.21 | 52.4 | 3.57 | 1.67 | .73 | .53 | .41 | 6.26 |
| 1926–27 | .52 | 2.54 | 1.90 | 2.58 | 52.1 | 13.2 | 6.44 | 3.55 | 2.37 | 1.17 | .80 | .69 | 7.01 |
| Average | .25 | .79 | 5.17 | 3.73 | 13.4 | 10.6 | 9.80 | 2.98 | 1.38 | .47 | .31 | .25 | 4.02 |

**Sawpit Creek near Monrovia**

[Drainage area, 5.3 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1916–17 | ------ | ------ | 5.24 | 3.23 | 6.17 | 3.88 | 0.50 | 0 | 0 | 0 | 0 | 0 | ------ |
| 1917–18 | 0 | 0 | 0 | 0 | .721 | 11.0 | 1.02 | 0 | 0 | 0 | 0 | 0 | 1.08 |
| 1918–19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1919–20 | 0 | 0 | .197 | 0 | .32 | 3.71 | 1.45 | 0 | 0 | 0 | 0 | 0 | .473 |
| 1920–21 | 0 | 0 | 0 | .18 | 0 | 2.46 | 0 | 1.96 | .01 | 0 | 0 | 0 | .39 |
| 1921–22 | 0 | 0 | 8.44 | 8.38 | 17.7 | 6.34 | 3.06 | .14 | 0 | 0 | 0 | 0 | 3.59 |
| 1922–23 | 0 | 0 | 1.79 | .14 | .78 | .50 | .17 | 0 | 0 | 0 | 0 | 0 | .28 |
| 1923–24 | 0 | 0 | 0 | 0 | 0 | .09 | .02 | 0 | 0 | 0 | 0 | 0 | .01 |
| 1924–25 | 0 | .22 | .64 | .13 | .33 | 2.07 | 7.01 | .47 | .27 | 0 | 0 | 0 | .92 |
| 1925–26 | 0 | .04 | .79 | .46 | 6.64 | .02 | 37.8 | .44 | 0 | 0 | 0 | 0 | 3.76 |
| 1926–27 | 0 | .60 | .62 | .20 | 33.0 | 3.17 | .90 | .99 | .22 | .04 | 0 | 0 | 3.10 |
| Average | 0 | .09 | 1.61 | 1.16 | 5.97 | 3.02 | 4.72 | .36 | .05 | .004 | 0 | 0 | 1.36 |

**Sawpit Creek and Monrovia pipe line near Monrovia**

[Drainage area, 5.3 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1916–17 | ------ | 3.37 | 6.97 | 4.74 | 7.99 | 5.57 | 3.89 | 3.21 | 2.54 | 1.92 | 1.73 | 1.57 | ------ |
| 1917–18 | 1.48 | 1.60 | 1.57 | 1.51 | 2.37 | 13.1 | 3.71 | 2.45 | 1.85 | 1.44 | 1.30 | 1.28 | 2.81 |
| 1918–19 | 1.31 | 1.39 | 1.54 | 1.52 | 1.78 | 1.99 | 1.66 | 1.46 | 1.10 | .94 | .85 | .85 | 1.36 |
| 1919–20 | .96 | 1.06 | 1.62 | 1.11 | 1.76 | 5.58 | 3.22 | 1.65 | 1.25 | .928 | .820 | .900 | 1.74 |
| 1920–21 | .85 | .90 | .92 | 1.37 | 1.29 | 4.36 | 1.57 | 3.30 | 1.96 | 1.05 | .87 | .74 | 1.60 |
| 1921–22 | .78 | .73 | 9.52 | 11.2 | 19.2 | 8.65 | 6.22 | 4.86 | 3.76 | 2.94 | 2.38 | 2.14 | 5.95 |
| 1922–23 | 2.07 | 2.21 | 4.35 | 2.74 | 2.92 | 2.54 | 2.36 | 1.77 | 1.61 | 1.32 | 1.07 | 1.06 | 2.17 |
| 1923–24 | 1.12 | 1.10 | 1.10 | 1.10 | 1.09 | 1.42 | 1.69 | 1.23 | .95 | .80 | .80 | .64 | 1.09 |
| 1924–25 | .42 | 1.01 | 1.36 | 1.00 | 1.30 | 2.74 | 7.51 | 1.34 | 1.14 | .83 | .73 | .63 | 1.66 |
| 1925–26 | .64 | .76 | 1.57 | 1.24 | 7.50 | 1.19 | 38.8 | 2.13 | 1.37 | .97 | .84 | .80 | 4.73 |
| 1926–27 | .75 | 1.07 | 1.51 | 1.17 | 34.2 | 5.43 | 3.35 | 3.12 | 2.04 | 1.62 | 1.37 | 1.26 | 4.53 |
| Average | 1.04 | 1.38 | 2.91 | 2.61 | 7.40 | 4.78 | 6.73 | 2.41 | 1.78 | 1.34 | 1.16 | 1.08 | 2.76 |

**Monrovia pipe line near Monrovia**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1915–16 | ------ | ------ | ------ | ------ | ------ | ------ | ------ | ------ | 3.98 | 3.27 | 2.69 | 2.47 | ------ |
| 1916–17 | 1.91 | 1.98 | 1.72 | 1.54 | 1.76 | 1.75 | 3.39 | 3.21 | 2.54 | 1.92 | 1.73 | 1.57 | 2.08 |
| 1917–18 | 1.48 | 1.60 | 1.57 | 1.51 | 1.66 | 2.09 | 2.69 | 2.45 | 1.85 | 1.44 | 1.30 | 1.28 | 1.74 |
| 1918–19 | 1.31 | 1.39 | 1.54 | 1.52 | 1.78 | 1.99 | 1.66 | 1.46 | 1.10 | .94 | .85 | .85 | 1.36 |
| 1919–20 | .96 | 1.06 | 1.43 | 1.11 | 1.44 | 1.89 | 1.76 | 1.65 | 1.25 | .928 | .820 | .90 | 1.27 |
| 1920–21 | .85 | .90 | .92 | 1.19 | 1.29 | 1.93 | 1.57 | 1.33 | 1.96 | 1.05 | .87 | .74 | 1.21 |
| 1921–22 | .78 | .73 | 1.05 | 2.82 | 1.63 | 2.36 | 3.17 | 4.72 | 3.76 | 2.94 | 2.38 | 2.14 | 2.38 |
| 1922–23 | 2.07 | 2.21 | 2.55 | 2.61 | 2.14 | 2.04 | 2.19 | 1.77 | 1.61 | 1.32 | 1.07 | 1.06 | 1.89 |
| 1923–24 | 1.12 | 1.10 | 1.10 | 1.10 | 1.09 | 1.34 | 1.67 | 1.23 | .95 | .80 | .80 | .64 | 1.08 |
| 1924–25 | .42 | .78 | .74 | .88 | .97 | .65 | .53 | .86 | .87 | .83 | .73 | .63 | .74 |
| 1925–26 | .64 | .72 | .79 | .78 | .90 | 1.17 | 1.16 | 1.68 | 1.37 | .97 | .84 | .80 | .98 |
| 1926–27 | .75 | .48 | .89 | .97 | 1.16 | 2.25 | 2.45 | 2.13 | 1.82 | 1.58 | 1.37 | 1.26 | 1.43 |
| Average | 1.12 | 1.18 | 1.30 | 1.46 | 1.44 | 1.77 | 2.02 | 2.04 | 1.92 | 1.50 | 1.29 | 1.20 | 1.47 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**San Dimas Creek near San Dimas**

[Drainage area, 18.3 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1916–17 | ------ | ------ | ------ | 10.2 | 13.1 | 9.32 | 6.24 | 6.27 | 2.86 | 0.99 | 0.42 | 0.29 | ------ |
| 1917–18 | 0.28 | 0.81 | 1.57 | 1.74 | 4.32 | 25.4 | 4.93 | 3.05 | 1.52 | .33 | .20 | .24 | 3.71 |
| 1918–19 | .64 | 1.81 | 2.38 | 1.99 | 3.28 | 3.49 | 1.82 | 1.06 | .301 | .092 | .094 | .066 | 1.41 |
| 1919–20 | .39 | 1.35 | 2.82 | 1.55 | 6.04 | 21.7 | 8.27 | 3.55 | 1.48 | .202 | .020 | .013 | 3.95 |
| 1920–21 | .52 | .98 | 1.72 | 6.37 | 3.23 | 18.7 | 4.13 | 10.0 | 3.37 | .49 | .08 | 0 | 4.16 |
| 1921–22 | 0 | 0 | 40.2 | 27.7 | 89.8 | 28.7 | 19.4 | 10.3 | 7.87 | 4.71 | 4.45 | 3.66 | 19.3 |
| 1922–23 | 1.90 | 5.85 | 15.1 | 5.82 | 6.77 | 3.89 | 1.58 | 3.50 | 3.02 | 2.65 | .64 | .33 | 4.25 |
| 1923–24 | .57 | 1.46 | 1.53 | 1.92 | 1.54 | 1.55 | 1.09 | 2.46 | 2.14 | .99 | .05 | 0 | 1.27 |
| 1924–25 | 0 | .56 | .95 | 1.77 | 1.25 | 1.25 | 1.53 | 2.15 | .82 | .12 | 0 | 0 | .86 |
| 1925–26 | .11 | .17 | .75 | .68 | 1.08 | 1.65 | 10.1 | 3.77 | 4.86 | 4.83 | 5.87 | 7.48 | 3.44 |
| 1926–27 | 1.93 | .53 | 2.39 | 1.41 | 51.0 | 9.42 | 5.54 | 3.30 | 3.08 | .29 | .10 | .04 | 6.27 |
| Average | .63 | 1.35 | 6.94 | 5.56 | 16.5 | 11.4 | 5.88 | 4.49 | 2.85 | 1.43 | 1.08 | 1.10 | 4.86 |

NOTE.—Los Angeles County Flood Control District Reservoir, about three-quarters of a mile above station, was completed in 1923.

**Dalton Creek near Glendora**

[Drainage area, 7.5 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1919–20 | ------ | ------ | 0.60 | 0.34 | 3.26 | 11.6 | 2.82 | 1.21 | 0.697 | 0.112 | 0.002 | 0 | ------ |
| 1920–21 | 0.01 | 0.10 | .21 | 1.80 | .43 | 7.99 | .78 | 2.10 | .16 | .02 | 0 | 0 | 1.15 |
| 1921–22 | 0 | 0 | 15.5 | 13.5 | 37.4 | 12.3 | 6.67 | 2.08 | .52 | .03 | 0 | 0 | 7.14 |
| 1922–23 | 0 | .40 | 4.84 | .96 | 1.18 | .44 | .25 | .02 | 0 | 0 | 0 | 0 | .68 |
| 1923–24 | 0 | 0 | 0 | 0 | 0 | .15 | .33 | 0 | 0 | 0 | 0 | 0 | .04 |
| 1924–25 | 0 | 0 | 0 | 0 | 0 | 0 | .05 | 0 | 0 | 0 | 0 | 0 | .004 |
| 1925–26 | 0 | 0 | 0 | 0 | .78 | .18 | 12.7 | .96 | 0 | 0 | 0 | 0 | 1.20 |
| 1926–27 | 0 | 0 | 0 | 0 | 23.2 | 4.85 | 2.42 | 0 | 0 | 0 | 0 | 0 | 2.39 |
| Average | .001 | .07 | 2.64 | 2.08 | 8.28 | 4.69 | 3.25 | .80 | .17 | .02 | .0002 | 0 | 1.80 |

**Dalton diversion near Glendora**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1919–20 | ------ | ------ | ------ | ------ | ------ | ------ | 0.545 | 0.913 | 0.452 | 0.085 | 0.005 | 0 | ------ |

**Pacoima Creek near San Fernando**

[Drainage area, 27.9 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1916–17 | ------ | ------ | ------ | 14.7 | 45.6 | 30.1 | 10.2 | 6.70 | 1.82 | 0.024 | 0 | 0 | ------ |
| 1917–18 | 0 | 0 | 0 | .05 | 2.75 | 61.9 | 9.80 | 3.52 | .66 | .06 | 0 | 0 | 6.63 |
| 1918–19 | 0 | .41 | 1.45 | .45 | 5.65 | 7.03 | 3.34 | .94 | .03 | 0 | 0 | 0 | 1.58 |
| 1919–20 | .013 | .157 | 2.69 | 2.26 | 11.8 | 88.5 | 32 | 14 | 7.25 | 2.01 | .607 | .20 | 13.4 |
| 1920–21 | .23 | .98 | 1.64 | 8.80 | 9.89 | 24.2 | 12.3 | 39.9 | 17.8 | 3.87 | .79 | .21 | 10.1 |
| 1921–22 | .38 | .48 | 173 | 121 | 178 | 83.9 | 47.1 | 25.5 | 13.6 | 4.85 | 1.02 | .40 | 5.35 |
| 1922–23 | .56 | 3.66 | 42 | 13.2 | 24.2 | 17.8 | 18.6 | 7.95 | 2.94 | .39 | 0 | 0 | 10.9 |
| 1923–24 | .18 | .24 | .40 | .45 | .49 | 3.24 | 3.32 | .56 | .01 | 0 | 0 | 0 | .74 |
| 1924–25 | 0 | 0 | .16 | .18 | .10 | .23 | 11.6 | 2.20 | 1.18 | 0 | 0 | 0 | 1.30 |
| 1925–26 | 0 | .12 | .10 | .17 | 19.4 | 3.57 | 95.0 | 10.9 | 2.0 | .5 | 0 | 0 | 10.8 |
| 1926–27 | 0 | .15 | 2.47 | .86 | 56.0 | 27.1 | 8.39 | 2.45 | 1.27 | 0 | 0 | 0 | 7.90 |
| Average | .14 | .62 | 22.4 | 14.7 | 32.2 | 31.6 | 22.9 | 10.4 | 4.41 | 1.06 | .22 | .07 | 6.87 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Tujunga Creek near Sunland**

[Drainage area, 106 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1916–17 | ------ | 13.0 | 32.8 | 35.3 | 65.2 | 49.3 | 25.6 | 18.0 | 8.07 | 1.99 | 0.60 | 0.49 | ------ |
| 1917–18 | 0.74 | 3.67 | 4.14 | 4.64 | 41.4 | 246 | 35.9 | 19.4 | 7.43 | 1.70 | .45 | .82 | 30.6 |
| 1918–19 | 1.78 | 6.21 | 12.3 | 7.50 | 18.2 | 25.0 | 13.7 | 7.07 | 1.33 | .53 | .40 | 1.69 | 7.92 |
| 1919–20 | .77 | 1.44 | 9.81 | 5.32 | 22.4 | 144 | 56.3 | 18.4 | 8.0 | 3.38 | 1.96 | 2.71 | 22.9 |
| 1920–21 | 3.20 | 2.99 | 8.55 | 26.4 | 16.6 | 35.8 | 13.8 | 45.0 | 15.8 | 2.68 | 1.26 | .89 | 14.4 |
| 1921–22 | 2.47 | 4.12 | 421 | 290 | 439 | 288 | 129 | 76.6 | 40.7 | 20.4 | 11.2 | 8.27 | 143 |
| 1922–23 | 10.1 | 22.9 | 65.4 | 28.7 | 38.9 | 26.8 | 27.3 | 13.2 | 7.97 | 2.41 | .60 | 1.07 | 20.4 |
| 1923–24 | 3.0 | 5.73 | 6.00 | 7.42 | 6.79 | 13.6 | 12.0 | 4.67 | 1.00 | .27 | .19 | .14 | 5.06 |
| 1924–25 | .18 | 1.52 | 4.59 | 4.97 | 6.48 | 7.87 | 25.5 | 6.35 | 3.20 | .55 | .28 | .21 | 5.10 |
| 1925–26 | .26 | .99 | 4.29 | 8.26 | 64.8 | 9.02 | 206 | 25.4 | 7.80 | 1.61 | .69 | .59 | 26.9 |
| 1926–27 | .74 | 8.94 | 9.52 | 8.21 | 200 | 70.9 | 39.4 | 18.0 | 9.87 | 2.11 | .90 | .79 | 29.6 |
| Average | 2.32 | 6.50 | 52.6 | 38.8 | 83.6 | 83.3 | 53.1 | 22.9 | 10.1 | 3.42 | 1.68 | 1.61 | 30.6 |

**Haines Creek near Tujunga**

[Drainage area, 1.2 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1916–17 | ------ | ------ | ------ | ------ | ------ | 0.336 | 0.232 | 0.167 | 0.115 | 0.070 | 0.055 | 0.042 | ------ |
| 1917–18 | 0.041 | 0.064 | 0.064 | 0.064 | 0.219 | 1.47 | .493 | .257 | .175 | .094 | .042 | .036 | 0.253 |
| 1918–19 | .037 | .048 | .078 | .098 | .151 | .132 | .112 | .079 | .034 | .015 | .011 | .010 | .067 |
| 1919–20 | .012 | .014 | .023 | .029 | .060 | .212 | .276 | .149 | .090 | .023 | .011 | .010 | .076 |
| 1920–21 | .011 | .019 | .020 | .028 | .024 | .058 | .033 | .103 | .108 | .037 | .012 | .019 | .039 |
| 1921–22 | .017 | .015 | 1.78 | 1.88 | 1.86 | 1.35 | 1.12 | 1.15 | .828 | .466 | .168 | .103 | .891 |
| 1922–23 | .100 | .138 | .251 | .264 | .256 | .215 | .187 | .143 | .097 | .052 | .032 | .020 | .146 |
| 1923–24 | .021 | .021 | .034 | .041 | .043 | .045 | .045 | .038 | .021 | .013 | .010 | .021 | .029 |
| 1924–25 | .017 | .010 | .021 | .030 | .030 | .034 | .045 | .027 | .015 | .010 | .007 | .005 | .021 |
| 1925–26 | .012 | .010 | .009 | .008 | .074 | .035 | 1.46 | .164 | .075 | .045 | .010 | .010 | .157 |
| 1926–27 | .005 | .005 | .010 | .015 | .252 | .231 | .162 | .051 | .018 | .010 | .005 | .005 | .063 |
| Average | .027 | .034 | .229 | .246 | .297 | .374 | .379 | .212 | .143 | .076 | .033 | .026 | .174 |

**Haines Creek, upper diversion, near Tujunga**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1918–19 | 0.145 | 0.097 | 0.148 | 0.075 | 0.136 | 0.133 | 0.136 | 0.126 | 0.155 | 0.131 | 0.128 | 0.124 | 0.128 |
| 1919–20 | .095 | .097 | .126 | .100 | .116 | .180 | .166 | .116 | .090 | .063 | .055 | .060 | .105 |

**Arroyo Seco near Pasadena**

[Drainage area, 16.4 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11 | ------ | ------ | 4.10 | ------ | ------ | ------ | 27.7 | 9.55 | 4.37 | 1.78 | 1.04 | 3.60 | ------ |
| 1911–12 | 2.38 | 1.86 | 1.70 | ------ | ------ | ------ | ------ | ------ | 9.94 | 2.77 | .56 | ------ | ------ |
| 1912–13 | .69 | .66 | .64 | ------ | ------ | ------ | 4.08 | 2.36 | 1.62 | .94 | .56 | .25 | ------ |
| 1913–14 | .51 | 5.12 | 4.82 | 132 | 344 | 46.8 | 16.9 | 9.18 | 5.62 | 2.23 | 1.52 | 1.77 | 45.5 |
| 1914–15 | 1.58 | .67 | 12.9 | 22.5 | 64.1 | 16.6 | 9.30 | 11.9 | 4.75 | 1.37 | .75 | .82 | 11.9 |
| 1915–16 | .76 | 1.72 | ------ | ------ | ------ | ------ | 9.73 | 6.16 | 3.07 | 1.36 | .89 | .83 | ------ |
| 1916–17 | 5.80 | 2.57 | 15.4 | 12.9 | 25.5 | 16.0 | 7.05 | 5.25 | 2.02 | .59 | .365 | .14 | 7.71 |
| 1917–18 | .213 | .54 | .89 | 1.02 | 11.6 | 62.7 | 9.08 | 3.97 | 1.71 | .561 | .284 | .403 | 7.77 |
| 1918–19 | .55 | 1.89 | 4.20 | 1.54 | 6.18 | 6.22 | 2.19 | 1.77 | .69 | .10 | .10 | .24 | 2.12 |
| 1919–20 | .64 | .91 | 4.47 | 1.52 | 6.93 | 29.2 | 10.3 | 3.66 | 1.73 | .40 | .074 | .127 | 4.99 |
| 1920–21 | .27 | .80 | 1.12 | 4.85 | 3.11 | 12.2 | 2.94 | 17.7 | 6.89 | 1.70 | .24 | .20 | 4.36 |
| 1921–22 | .33 | .43 | 132 | 74.3 | 112 | 49.8 | 28.4 | 15.2 | 7.45 | 3.34 | 1.69 | .88 | 35.1 |
| 1922–23 | 1.11 | 3.21 | 15.6 | 5.37 | 9.23 | 5.78 | 7.03 | 3.04 | 1.74 | .41 | .27 | .27 | 4.40 |
| 1923–24 | .36 | .54 | .78 | 1.00 | .93 | 4.54 | 3.91 | 1.19 | .36 | .20 | .13 | .16 | 1.18 |
| 1924–25 | .20 | .39 | .87 | .81 | 1.08 | 1.80 | 10.2 | 1.43 | .84 | .10 | 0 | 0 | 1.46 |
| 1925–26 | .17 | .25 | 1.02 | .79 | 15.6 | 1.77 | 76.3 | 5.96 | 1.76 | .75 | .08 | 0 | 8.53 |
| 1926–27 | 0 | 1.69 | 2.73 | 2.11 | 75.3 | 18.9 | 9.23 | 4.72 | 2.44 | .71 | .1 | .1 | 9.37 |
| Average | .97 | 1.45 | 12.7 | 20.1 | 52.0 | 20.9 | 14.6 | 6.44 | 3.35 | 1.14 | .51 | .61 | 11.1 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Santa Anita Creek near Sierra Madre**

[Drainage area, 10.5 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1915–16 | | | | | | | | | | | 2.11 | 1.75 | |
| 1916–17 | 4.92 | 2.58 | 7.54 | 7.72 | 18.2 | 12.7 | 5.51 | 4.31 | 2.32 | 1.24 | .78 | .46 | 5.62 |
| 1917–18 | .64 | .76 | .75 | .86 | 8.07 | 36.1 | 7.09 | 3.64 | 1.97 | .87 | .63 | .55 | 5.16 |
| 1918–19 | .68 | 1.21 | 1.81 | 1.20 | 2.81 | 3.12 | 1.80 | 1.21 | .55 | .20 | .10 | .21 | 1.23 |
| 1919–20 | .50 | .75 | 2.47 | 1.09 | 4.40 | 17.0 | 7.73 | 3.00 | 1.47 | .548 | .284 | .283 | 3.29 |
| 1920–21 | .45 | .67 | 1.01 | 2.78 | 2.12 | 11.8 | 2.63 | 13.3 | 4.62 | 1.69 | .75 | .35 | 3.54 |
| 1921–22 | .62 | .48 | 69.1 | 45.6 | 79.0 | 36.3 | 20.3 | 12.5 | 7.08 | 3.69 | 2.41 | 1.57 | 22.9 |
| 1922–23 | 1.54 | 3.52 | 12.3 | 4.36 | 5.41 | 3.49 | 3.93 | 2.42 | 1.66 | 1.06 | .50 | .38 | 3.38 |
| 1923–24 | .49 | .85 | .87 | 1.07 | 1.02 | 2.97 | 2.47 | 1.17 | .46 | .10 | .10 | .10 | .97 |
| 1924–25 | .28 | .62 | .98 | .81 | .97 | 1.01 | 4.24 | 1.25 | .94 | .19 | .10 | .10 | .95 |
| 1925–26 | .20 | .46 | .83 | .81 | 6.64 | 1.23 | 53.6 | 5.62 | 2.19 | .89 | .44 | .30 | 6.00 |
| 1926–27 | .31 | 1.97 | 2.53 | 2.36 | 44.6 | 17.3 | 9.63 | 4.58 | 2.92 | 1.45 | .76 | .57 | 7.15 |
| Average | .97 | 1.26 | 9.11 | 6.24 | 15.7 | 13.0 | 10.8 | 4.82 | 2.38 | 1.08 | .75 | .55 | 5.47 |

**Little Santa Anita Creek near Sierra Madre**

[Drainage area, 1.9 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1915–16 | | | | | | | | | | | | 0.275 | |
| 1916–17 | 0.648 | 0.413 | 1.28 | 1.23 | 2.71 | 2.03 | 0.950 | 0.871 | 0.577 | 0.300 | 0.203 | .110 | 0.93 |
| 1917–18 | .123 | .153 | .194 | .165 | 1.14 | 4.72 | 1.15 | .723 | .430 | .210 | .126 | .099 | .77 |
| 1918–19 | .12 | .30 | .29 | .23 | .40 | .49 | .27 | .20 | .089 | .038 | .022 | .071 | .208 |
| 1919–20 | .098 | .128 | .40 | .19 | .57 | 2.14 | 1.19 | .626 | .277 | .117 | .052 | .050 | .487 |
| 1920–21 | .089 | .18 | .19 | .35 | .26 | 1.75 | .40 | 2.87 | 1.06 | .33 | .15 | .14 | .653 |
| 1921–22 | .12 | .10 | 8.24 | 9.36 | 12.0 | 5.48 | 2.91 | 2.05 | 1.12 | .65 | .37 | .22 | 3.51 |
| 1922–23 | .24 | .48 | 1.38 | .60 | .68 | .52 | .61 | .30 | .24 | .10 | .10 | .10 | .45 |
| 1923–24 | .11 | .10 | .12 | .15 | .10 | .32 | .33 | .15 | .10 | 0 | 0 | 0 | .12 |
| 1924–25 | .01 | .13 | .15 | .10 | .12 | .12 | .54 | .20 | .13 | 0 | 0 | 0 | .12 |
| 1925–26 | 0 | .09 | .12 | .12 | .79 | .20 | | .75 | .25 | .10 | .05 | .05 | |
| 1926–27 | .05 | .24 | .35 | .26 | 8.56 | 2.34 | 1.45 | .88 | .62 | .22 | .10 | .12 | 1.21 |
| Average | .146 | .210 | 1.16 | 1.16 | 2.48 | 1.83 | .980 | .875 | .445 | .188 | .107 | .103 | .846 |

**Eaton Creek near Pasadena**

[Drainage area, 6.5 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1917–18 | | | | | | 20.9 | 1.87 | 0.055 | 0 | 0 | 0 | 0 | |
| 1918–19 | 0 | 0.179 | 0.638 | 0 | 1.14 | .484 | .004 | 0 | 0 | 0 | 0 | 0 | 0.198 |
| 1919–20 | 0 | .014 | 1.57 | 0 | 2.26 | 12.6 | 3.47 | .10 | 0 | 0 | 0 | 0 | 1.67 |
| 1920–21 | 0 | 0 | 0 | 1.27 | .22 | 5.50 | .007 | 9.81 | .80 | 0 | 0 | 0 | 1.49 |
| 1921–22 | 0 | 0 | 73.3 | 37.3 | 53.1 | 21.0 | 9.52 | 4.53 | 1.46 | .13 | 0 | 0 | 16.5 |
| 1922–23 | 0 | .84 | 5.99 | 1.23 | 2.00 | .91 | 1.02 | .02 | 0 | 0 | 0 | 0 | 1.00 |
| 1923–24 | 0 | 0 | 0 | 0 | 0 | 1.24 | .32 | 0 | 0 | 0 | 0 | 0 | .13 |
| 1924–25 | 0 | 0 | 0 | 0 | 0 | 0 | 2.04 | 0 | 0 | 0 | 0 | 0 | .17 |
| 1925–26 | 0 | 0 | 0 | .09 | 2.99 | 0 | 37.0 | .44 | 0 | 0 | 0 | 0 | 3.32 |
| 1926–27 | 0 | .85 | .39 | .02 | 27.4 | 5.52 | 2.47 | .06 | 0 | 0 | 0 | 0 | 2.88 |
| Average | 0 | .209 | 9.10 | 4.43 | 9.90 | 6.82 | 5.77 | 1.50 | .23 | .01 | 0 | 0 | 3.04 |

**Precipice Canyon Water Co.'s diversion near Pasadena**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1917–18 | | | | | | 2.40 | 2.00 | 2.80 | 1.59 | 0.82 | 0.54 | 0.51 | |

NOTE.—This diversion is above station on Eaton Creek.

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Malibu Creek near Calabasas**

[Drainage area, 97 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1902–3 | | | | 8.5 | 15.7 | 46.0 | 121 | 9.4 | 5.5 | 2.6 | | | |
| 1903–4 | | 2.0 | 4.1 | 5.0 | 5.5 | 6.9 | 3.0 | 2.2 | 1.5 | | | | |
| 1904–5 | | 1.2 | 4.9 | 5.4 | 36.1 | 484 | 14.4 | 7.3 | 3.8 | 3 | 3 | 2.1 | |
| 1905–6 | 1.1 | 3.6 | 3.7 | 1.3 | 1.8 | 223 | 22.1 | 9.1 | 7.1 | 4.8 | 4.4 | 3.6 | 23.0 |
| 1906–7 | 4.4 | 4.4 | 19.8 | | | | | | | | | | |

**Triunfo Creek near Calabasas**

[Drainage area, 72 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1902–3 | | | | 3.3 | 11.6 | 27.5 | 60.0 | 7.5 | 3.5 | 2.0 | | | |
| 1903–4 | | 0.6 | 2.0 | 3 | 4.1 | 4.8 | 1.8 | .6 | | | | | |
| 1904–5 | | | | 0 | 26.2 | 353 | 11.2 | 1.0 | 1.3 | .97 | 0 | 0 | |
| 1905–6 | 0 | 0 | 0 | .2 | 1.1 | 155 | 19.3 | 6.9 | 6.0 | 3.6 | 1.7 | 0 | 16.2 |
| 1906–7 | 0 | 1.5 | 10.8 | | | | | | | | | | |

**Santa Clara River at Fillmore**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11 | | | | | | | | | | | | 39.7 | |
| 1911–12 | 39.3 | 28.0 | 27.3 | 28.2 | 22.2 | 81.2 | 62.6 | 36.6 | 36.2 | 23.0 | 13.9 | 22.1 | |

**Piru Creek near Piru**

[Drainage area, 432 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | | | 30 | 26 | 136 | 104 | 69.0 | 32.6 | 13.6 | 8.62 | 8.11 | |
| 1912–13 | 12.1 | 20.8 | 16.1 | 67.5 | 206 | 243 | 104 | 29.4 | 32.5 | 11.2 | 23.4 | | |

**Sespe Creek near Sespe**

[Drainage area, 216 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1915–16 | 18 | 18.8 | 25.3 | 1,320 | 294 | 193 | 78.8 | 39.4 | 25.8 | 19.8 | 16.9 | 16.5 | 173 |
| 1916–17 | 32.1 | 22.6 | 105 | 144 | 319 | 114 | 65.4 | 32.1 | 14.2 | 6.61 | 4.75 | 3.81 | 70.4 |
| 1917–18 | | | | | 564 | 1,240 | 158 | 83.1 | 59.2 | 42.8 | | | |
| 1919–20 | | 6.12 | 17.8 | 11.4 | 76.9 | 239 | 93.9 | 29.5 | 11.7 | 5.33 | 3.64 | 3.74 | |
| 1920–21 | 4.39 | 7.84 | 11.2 | 61.6 | 64.1 | 98.9 | 34.9 | 75.0 | 26.9 | 6.98 | 5.02 | 4.86 | 33.4 |
| 1921–22 | 4.73 | 4.41 | 1,110 | 373 | 1,020 | 509 | 193 | 115 | 46.1 | 16.1 | 9.34 | 7.23 | 280 |
| 1922–23 | 11.9 | 25.8 | 163 | 58.4 | 70.1 | 49.4 | 55.9 | 22.5 | 12.5 | 4.70 | 3.5 | 3.5 | 40.0 |
| 1923–24 | 3.26 | 3.64 | 6.56 | 8.31 | 8.10 | 19.7 | 18.3 | 5.56 | 2.00 | 1.24 | 1.06 | 1.02 | 6.55 |
| 1924–25 | 2.05 | 2.83 | 3.30 | 4.54 | 6.93 | 11.7 | 44.4 | 8.11 | 3.92 | 2.48 | 1.86 | 1.79 | 7.77 |
| 1925–26 | 3.05 | 2.45 | 4.55 | 5.98 | 133 | 21.9 | 989 | 44.2 | 17.3 | 6.56 | 4.21 | 3.97 | 101 |
| 1926–27 | 3.54 | 57.7 | 19.2 | | | | | | | | | | |
| Average | 9.22 | 15.2 | 147 | 221 | 256 | 250 | 173 | 45.4 | 22.0 | 11.3 | 5.59 | 5.16 | 89.0 |

**Sespe Creek at Sespe**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1910–11 | | | | | | | | | | | | 8.84 | |
| 1911–12 | 10.7 | 12.2 | 18.5 | 17.0 | 9.65 | 428 | 244 | 47.1 | 8.13 | 0.59 | 0 | 0 | 66.7 |
| 1912–13 | 0 | .78 | 2.52 | 103 | 1,120 | 216 | 64.8 | 22.6 | 7.70 | .02 | 0 | 0 | 121 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Santa Paula Creek near Santa Paula**

[Drainage area, 33.4 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | | | | | | 42.8 | 16.1 | 8.50 | 5.40 | 3.50 | 3.20 | |
| 1912–13 | 2.44 | 2.52 | 2.53 | 13.4 | 98.1 | 34.2 | 17.4 | 9.29 | 6.37 | 4.13 | 2.60 | 2.00 | 15.7 |

**Ventura River near Ojai** [1]

[Drainage area, 71.2 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | | 12.2 | 14.7 | 12.9 | 11.5 | 71.3 | 45.8 | 22.0 | 12.0 | 6.48 | 4.40 | 4.18 | |
| 1912–13 | 4.18 | 4.53 | 5.23 | 17.8 | 109 | 71.4 | 25.8 | 15.9 | 10.0 | 5.97 | 4.48 | 2.95 | 22.5 |
| 1913–14 | 2.68 | 13.5 | 11.5 | | | | 88.8 | 52.2 | 29.6 | 18.8 | 13.8 | 10.0 | |
| 1914–15 | 9.18 | | | | | | | | | | | | |
| 1921–22 | | | | | | 159 | 88.2 | 46.1 | 21.5 | 14.7 | 8.56 | 6.37 | |
| 1922–23 | 8.50 | 21.6 | 107 | 40.9 | 44.0 | 31.8 | 26.6 | 12.4 | 8.18 | 4.18 | 3.10 | 3.44 | 26.0 |
| 1923–24 | 3.10 | 3.75 | 4.18 | 5.35 | 5.66 | 14.9 | 14.6 | 4.13 | 2.50 | | | | |

[1] Previously known as Nordhoff.

**Ventura River near Ventura**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | 20.8 | 21.0 | 24.8 | 22.3 | 15.1 | 114 | 70.2 | 25.7 | 12.2 | 6.55 | 4.55 | 2.82 | 28.4 |
| 1912–13 | 4.0 | 5.0 | 4.2 | 22.6 | 281 | 83.3 | 30.7 | 17.6 | 10.5 | 12.0 | 7.8 | 5.7 | 8.7 |
| 1913–14 | 4.85 | 7.88 | 5.71 | | | | | | | | | | |

**Santa Ynez River above Mono Creek**

[Drainage area, 71 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1902–3 | | | | 19 | 14 | 20 | 84 | 17 | | | | | |

**Santa Ynez River near Santa Barbara**

[Drainage area, 218 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4 | | | | | 12 | 30.6 | 19.1 | 6.9 | 0.7 | 0.034 | 0 | 192 | |
| 1904–5 | 8.8 | 6.4 | 7.0 | 73.9 | 905 | 797 | 143 | 51.2 | 15.9 | 3.8 | 2.6 | 1.4 | 163 |
| 1905–6 | 1.0 | 2.1 | 4.0 | 14.9 | 27.4 | 1,050 | 158 | 67.4 | 23.9 | 5.8 | 1.4 | 1 | 115 |
| 1906–7 | 1 | 1.4 | 52.2 | 1,470 | 490 | 1,520 | 237 | | | | | | |
| 1907–8 | 14.4 | 2.7 | 56 | 267 | | | | | | | | | |
| 1911–12 | 5.8 | 10.4 | 13.2 | 14.9 | 11.9 | 117 | 65.7 | 27.5 | 9.30 | 2.61 | .65 | .31 | 23.4 |
| 1912–13 | .33 | .55 | .80 | 8.18 | 157 | 77.4 | 26.1 | 12.5 | 7.55 | 1.24 | 1.39 | .26 | 23.6 |
| 1913–14 | .10 | 18.0 | 7.9 | 797 | 1,030 | 296 | 98.1 | 49.5 | 24.1 | 9.52 | 3.47 | 2.03 | 190 |
| 1914–15 | 2.27 | 2.68 | 17.5 | 64.2 | 508 | 169 | | | | | | | |
| 1915–16 | | | | | | | | | 11.6 | 2.94 | 1.06 | .205 | |
| 1916–17 | 6.5 | 6.0 | 123 | 110 | 300 | 129 | 46.0 | 23.6 | 7.94 | 1.33 | .55 | .25 | 61.5 |
| 1917–18 | | | | 1.60 | 395 | 930 | 160 | 56.3 | 20.7 | 5.58 | 2.98 | 5.31 | |
| Average | 4.47 | 5.58 | 31.3 | 282 | 384 | 512 | 106 | 36.9 | 13.5 | 3.65 | 1.57 | 22.5 | 96.1 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Santa Ynez River near Lompoc**

[Drainage area, 790 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1906–7 | | | 169 | | | | | | | | | | |
| 1907–8 | 114 | 90.5 | 76.8 | 686 | 1,880 | 613 | 236 | 145 | 90 | 53.3 | 19.2 | 23.1 | 336 |
| 1908–9 | 18 | 18 | 38.5 | | | | | | | | | | |
| 1909–10 | | | | 872 | 161 | 271 | 188 | 76.7 | 39.1 | 24.0 | 21.0 | 23.1 | |
| 1910–11 | 23.0 | 29.1 | 31.0 | 1,060 | 1,000 | 5,020 | 836 | 374 | 204 | 114 | 69.1 | 44.8 | 734 |
| 1911–12 | 37.6 | 37.0 | 61.2 | 69.8 | 41.4 | 202 | 162 | 102 | 48.7 | 26.5 | 21.5 | 21.0 | 69.4 |
| 1912–13 | 21.7 | 24.1 | 27.8 | 47.6 | 365 | 164 | 63.3 | 36.3 | 23.4 | 13.7 | 12.3 | 11.0 | 65.5 |
| 1913–14 | 8.9 | 49.7 | 30.3 | 3,610 | 3,900 | 952 | 359 | 161 | 82.7 | 42.9 | 34.4 | 32.4 | 754 |
| 1914–15 | 26.9 | 30.6 | 86.7 | 345 | 4,740 | 690 | 293 | 405 | 131 | 77.9 | 46.2 | 35.6 | 547 |
| 1915–16 | 35.2 | 39.6 | 84.5 | 2,330 | 808 | 465 | 225 | 123 | 58.1 | 34.6 | 31.0 | 26.3 | 356 |
| 1916–17 | 57.0 | 39.7 | 267 | 342 | 821 | 412 | 177 | 94.6 | 48.1 | 24.5 | 22.1 | 19.0 | 190 |
| 1917–18 | 19.4 | 24.7 | 23.0 | 23.3 | 1,800 | 2,620 | 457 | 203 | 101 | 62.7 | 34.2 | 37.8 | 443 |
| 1924–25 | | | | | | | | 18.1 | 3.39 | .98 | .71 | .37 | |
| 1925–26 | 1.06 | 6.28 | 12.5 | 15.1 | 199 | 65.7 | 1,090 | 100 | 20.3 | 6.08 | 2.15 | 1.15 | 125 |
| 1926–27 | .62 | 109 | 47.5 | 50.5 | 1,520 | 372 | 162 | 51.7 | 19.3 | 4.61 | .55 | .35 | 186 |
| Average | 30.3 | 41.5 | 73.5 | 788 | 1,440 | 987 | 354 | 145 | 66.9 | 37.4 | 24.2 | 21.2 | 346 |

**Mono Creek near Santa Barbara**

[Drainage area, 126 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1902–3 | | | | 11 | 7 | 30 | 81 | 13 | | | | | |
| 1903–4 | | 0.05 | 0.05 | .04 | 11 | 6.3 | 7.1 | 2.8 | 1.1 | | | | |

**Santa Maria River near Santa Maria**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1903–4 | | 0.8 | 2.8 | 5.9 | 12.2 | 28.2 | 4.0 | 1.1 | 0.2 | | | | |
| 1904–5 | 109 | 10.7 | 17.3 | 22.5 | 361 | 574 | 14.5 | 15.5 | 5.9 | 5.0 | 2.7 | 1.6 | 95.0 |
| 1905–6 | 5.4 | 8.6 | 11.7 | | | | | | | | | | |

**Salinas River near Santa Margarita**

[Drainage area, 155 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1921–22 | | | | | | | | 11.8 | 4.0 | 1.0 | 0.5 | | |

**Salinas River near Salinas**

[Drainage area, 4,080 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1899–1900 | | | | | 105 | 73 | 22 | 17 | 16 | 8 | 7 | 6 | |
| 1900–1901 | 2 | 2,410 | 295 | 4,920 | 4,170 | 1,060 | 270 | 533 | 56 | 27 | | | |

**Nacimiento River near Bryson**

[Drainage area, 171 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900–1901 | | | | | | 184 | 99 | | | | | | |

*Monthly discharge, in second-feet, of stations in the Pacific slope basins of southern California*—Continued

**Nacimiento River near Bradley**

[Drainage area, 301 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1921–22 | | | | | | | 154 | 64.5 | 15.8 | 4.0 | 2.5 | 2.0 | |

**San Antonio River near Jolon**

[Drainage area, 161 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900–1901 | | | | 523 | 509 | 171 | 83 | | | | | | |

**San Antonio River at Pleyto**

[Drainage area, 283 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1921–22 | | | | | | | | 46.4 | 25.6 | | | | |

**San Lorenzo Creek near Kings City**

[Drainage area, 235 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900–1901 | | | | 171 | 725 | 17 | 8 | | | | | | |
| 1901–2 | | | | 6 | 69 | 81 | 4 | | | | | | |
| 1902–3 | | 85 | 7 | 34 | 52 | 89 | 69 | 4 | | | | | |

**Arroyo Seco near Soledad**

[Drainage area, 215 square miles]

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1900–1901 | | | | 888 | 931 | 246 | 195 | 95 | 58 | 22 | 15 | 8 | |
| 1901–2 | 10 | 22 | 26 | 28 | 605 | 620 | 270 | 74 | 32 | 12 | 4 | 0 | 142 |
| 1902–3 | 9 | 57 | 54 | 205 | 313 | 466 | 483 | 84 | 46 | 25 | 10 | 4 | 146 |
| 1903–4 | 17 | 40 | 33 | 18 | 181 | 394 | 214 | 62 | 16 | 3 | 0 | 8 | 82.2 |
| 1904–5 | 54 | 17 | 42 | 160 | 556 | 586 | 202 | 246 | 75.6 | 22.8 | 8.6 | 2.3 | 164 |
| 1905–6 | 6.1 | 22.4 | 36.5 | 556 | 302 | 1,360 | 558 | 297 | 178 | 50.8 | 17.3 | 7.1 | 283 |
| 1906–7 | 14.1 | 31.8 | 492 | 1,150 | 568 | 1,910 | 529 | 188 | 94.3 | 40.3 | 18.3 | 18.3 | 421 |
| 1907–8 | 39.0 | 38.1 | 99.6 | 228 | 416 | 187 | 77.3 | 46.0 | 23.9 | 4.2 | .9 | .4 | 96.7 |
| 1908–9 | 6.2 | 14.7 | 35.2 | 1,390 | 1,590 | 444 | 334 | 117 | 54.4 | 23.7 | 13.1 | 10.8 | 336 |
| 1909–10 | 18.3 | 27.7 | 217 | 357 | 142 | 362 | 180 | 59.0 | 22.3 | 6.28 | 1.75 | 2.69 | 116 |
| 1910–11 | 7.24 | 15.1 | 26.3 | 1,160 | 702 | 2,330 | 310 | 141 | 71.5 | 28.5 | 14.6 | 13.0 | 402 |
| 1911–12 | 16.1 | 22.7 | 33.9 | 67.0 | 37.3 | 173 | 142 | 70.7 | 34.1 | 9.65 | 1.84 | 2.09 | 51.0 |
| 1912–13 | 2.16 | 7.53 | 11.8 | 99.5 | 31.9 | 39.5 | 28.1 | 12.0 | 3.18 | .24 | 0 | 0 | 19.7 |
| 1913–14 | 0 | 30.6 | 293 | 2,420 | 830 | 380 | 201 | 99.4 | 46.5 | 18.7 | 9.1 | 9.2 | 361 |
| 1914–15 | 11.8 | 13.4 | 153 | 389 | 1,610 | 565 | 308 | 313 | 111 | 53.3 | 22.6 | 19.3 | 289 |
| 1915–16 | 24.1 | 29.0 | 135 | 2,080 | 885 | 641 | 236 | 128 | 72.5 | 24.6 | 11.5 | 12.2 | 356 |
| 1916–17 | 34.2 | 42.7 | 503 | 131 | 1,800 | 362 | 130 | 73.8 | 34.9 | 9.15 | 5.98 | 5.25 | 251 |
| 1917–18 | 8.21 | 14.5 | 23.4 | 27.2 | 251 | 722 | 113 | 55.8 | 19.7 | 1.84 | .84 | 23.7 | 105 |
| 1918–19 | 19.8 | 63.1 | 87.2 | 73.1 | 518 | 271 | 92.0 | 31.1 | 11.2 | 2.15 | .33 | .08 | 94.6 |
| 1919–20 | .64 | 6.26 | 205 | 27.5 | 68.5 | 251 | 226 | 62.4 | 17.5 | 6.73 | .98 | .35 | 72.8 |
| 1920–21 | 5.76 | 43.7 | 104 | 653 | 272 | 202 | 62.1 | 32.0 | 15.6 | 3.60 | .27 | .32 | 116 |
| 1921–22 | 2.53 | 5.69 | 581 | 172 | 2,250 | 436 | 195 | 85.1 | 34.2 | 12.8 | 6.29 | 3.50 | 302 |
| 1922–23 | 10.3 | 283 | 395 | 297 | 199 | 86.5 | 691 | 106 | 28.6 | 8.24 | 2.92 | 2.77 | 175 |
| 1923–24 | 5.34 | 7.75 | 11.8 | 59.3 | 26.3 | 79.0 | 75.0 | 8.45 | .66 | 0 | 0 | 0 | 22.8 |
| 1924–25 | 0 | 59.4 | 43.8 | 95.2 | 302 | 82.5 | 158 | 125 | 32.1 | 6.73 | 1.20 | 1.68 | 73.9 |
| 1925–26 | 6.65 | 10.4 | 14.5 | 65.3 | 1,540 | 175 | 869 | 79.1 | 16.0 | 2.70 | .32 | 0 | 221 |
| 1926–27 | | | 28.4 | 67.5 | 1,610 | 334 | 282 | 103 | 42.9 | 17.1 | 1.86 | 2.0 | |
| Average | 13.1 | 37.0 | 142 | 476 | 687 | 508 | 265 | 103 | 44.2 | 15.4 | 6.28 | 5.82 | 188 |

*Monthly discharge, in second-feet, at stations in the Pacific slope basins of southern California*—Continued

**Pajaro River at Watsonville**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1911–12 | 19.5 | 33.9 | 36.5 | 62.8 | 40.6 | 82.5 | 74.0 | 16.9 | 3.06 | 0.55 | 0 | 0 | 30.8 |
| 1912–13 | 4.3 | 11.5 | 14.1 | 58.8 | 27.6 | 26.3 | 17.6 | 2.81 | .168 | .079 | .018 | 0 | 13.6 |

**San Benito River at Hernandez**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1922–23 | ------ | ------ | 53.6 | 42.8 | 32.1 | 15.7 | 40.3 | ------ | ------ | ------ | ------ | ------ | ------ |

**San Benito River near Tres Pinos**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1922–23 | ------ | ------ | ------ | 43.1 | 19.6 | 15.7 | 24.9 | ------ | ------ | ------ | ------ | ------ | ------ |

**McCoy Creek near Hernandez**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1922–23 | ------ | ------ | 2.55 | 1.88 | 0.67 | 0.51 | 0.64 | ------ | ------ | ------ | ------ | ------ | ------ |

**Tres Pinos Creek near Tres Pinos**

| Year | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Mean |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1922–23 | ------ | ------ | ------ | 13.1 | 16.3 | 4.63 | 15.2 | ------ | ------ | ------ | ------ | ------ | ------ |