STATE OF CALIFORNIA
DEPARTMENT OF PUBLIC WORKS

PUBLICATIONS OF THE
DIVISION OF WATER RESOURCES
EDWARD HYATT, State Engineer

BULLETIN No. 21-A

REPORT

ON

IRRIGATION DISTRICTS

IN

CALIFORNIA

For the Year 1929

1930

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FOREWORD

The information presented in this report has been gathered by the office of the state engineer, Division of Water Resources, Department of Public Works. Two earlier reports on this subject, Bulletin 2 of the State Department of Engineering and Bulletin 21 of the Department of Engineering and Irrigation, present complete information on irrigation districts and the irrigation district movement in California up to and including 1928. Perhaps no other recent Department publication has had so wide a demand as Bulletin 21. It is for the purpose of continuing up to date the historical and statistical data contained in Bulletin 21, and in addition to present any pertinent information on irrigation districts and their activities in 1929, that this report is published. It is desired to express the appreciation of this office for the cooperation of irrigation district secretaries and other district officials in responding to requests for information.

CHAPTER I

INTRODUCTION

Irrigation District Laws.

The rapid development of irrigation in California is due largely to the organization of districts under the state irrigation district law, commonly known as the Wright Act. In 1897 a new act was passed which, while it did not materially alter many of the essential features of the act of 1887, made radical changes in the provisions for the organization and financing of irrigation districts. A great many amendments to the 1897 act, as well as supplementary acts, have been passed by the legislature since 1901.* The most important of these changes are as follows:

1. Requiring petitions for the formation of irrigation districts to be referred by the board of supervisors of counties, to the state engineer for report.
2. Creating a bond certification commission, composed of the attorney general, state superintendent of banks and state engineer.
3. Permitting organization of districts to be proposed by 500 petitioners.
4. Reducing the number of votes necessary to carry the organization of a district from two-thirds to a majority of votes cast.
5. Permitting boards of directors of districts to call bond elections without petition of landowners, on the approval of the election by the bond commission.
6. Permitting the organization and financing of improvement districts within irrigation districts.
7. Permitting districts to develop hydroelectric plants and to sell and distribute the energy generated thereby.

Irrigation District Organizations.

In Bulletins Nos. 2 and 21, previously referred to in the foreword, there was presented a history of the early irrigation movement in California and of the districts organized to 1929, and reference is made to these bulletins for details up to that date. Two districts were organized in 1929. The total number of districts organized and now (January 1, 1930) existing under the California irrigation district law is 116. Ninety-four of this number maintain regular organizations and are active, while twenty-two are inactive and have apparently abandoned any useful purpose that may have existed when they

* The California irrigation district law, with related laws, is published in full in Bulletin 18, 1929 Revision, Department of Public Works, Division of Water Resources.

were organized. In only one instance has a district, after having been organized and operated under the California irrigation district law, adopted another form of organization.

Inactive Irrigation Districts.

A full history of inactive irrigation districts is given in Bulletin 21, pages 346–370. There was no change in the status of these districts in 1929. An investigation was made by the state engineer of all of these districts with a view to determining what if any value was being served by their organizations. Each district was visited and landowners interviewed as to any probable future activities of the districts. The investigation indicated that at least 15 of the 22 inactive districts made no pretense of maintaining organizations, had no directors or other district officials, and were not now serving or likely to serve any useful purpose in the future. The landowners in most of these districts would like to see them dissolved but none were sufficiently interested to initiate voluntary dissolution proceedings. Apparently most of the districts are subject to involuntary dissolution proceedings, and some of such cases were submitted to the attorney general for consideration.

Districts Organized for Irrigation or Water Conservation Other Than Irrigation Districts.

In addition to irrigation districts, the state engineer has jurisdiction in the organization of water conservation districts as provided in the water storage district act of 1921 and the water district act of 1913 as amended in 1929. Both of the latter statutes are published in full in Bulletin 18, 1929 revision of California irrigation district laws. In Bulletin 21, pages 371 to 388, will be found a fairly complete history of various water conservation districts other than irrigation districts.

There is record of the organization of two county water districts in 1929, viz: Downey county water district, Los Angeles County; Belmont county water district, San Mateo County. These were both organized primarily to provide for a domestic water supply.

No districts were organized in 1929 under the water district act of 1913.

Water Storage Districts.

Since the publication of Bulletin 21, two of the four water storage districts therein described (pages 81–85) have been dissolved. These are the San Joaquin River Water Storage District and the Kern River Water Storage District. The Tulare Lake Basin and the Buena Vista Water Storage districts remain active. The latter district voted bonds in 1929 in the principal amount of $942,731, for the acquisition and

construction of works, and it had completed the major portion of the construction work planned by January 1, 1930.

Irrigation Districts Association.

The organization of California irrigation districts into an association for their mutual benefit was the result of a meeting in 1919 of five of the larger districts for the consideration of district financing. This meeting resulted in the organization of an association which now includes nearly all of the districts operating under the California irrigation district law. Its executive committee gives careful consideration to matters affecting the welfare of districts and is especially concerned in all legislation relating to irrigation and the conservation of the waters of the state. The Irrigation Districts Association of California maintains an office at 932 Pacific Building, San Francisco, where the secretary may be addressed for information. Two meetings of the association are held annually.

The 1929 spring meeting of the association was held in Sacramento. The time of the meeting was given to the consideration of some 60 bills involving proposed legislation affecting irrigation districts and water conservation. Twenty-six of these bills were approved by the association and 23 of the approved bills were passed by the legislature.

The fall meeting was held in San Francisco and was devoted largely to the discussion of irrigation district financing and federal aid to irrigation districts. At this time a joint meeting was held with representatives of reclamation and drainage districts and plans for cooperating with these districts in securing federal aid discussed.

District Management Creditable.

Under the generally unfavorable agricultural conditions which prevailed in 1929, California irrigation districts are to be congratulated on the very favorable showing made by the organizations as a whole. Despite losses due to unusual weather conditions and low prices for most farm and orchard products, the districts met bond and interest coupon payments to the amount of $6,521,498, and reduced their other interest-bearing obligations by $378,797. The bond obligations paid represent 93.6 per cent of all such obligations due from the districts in 1929. In addition to the large capital payments met by the districts it is estimated that they were also called upon to expend from tax revenues not less than $4,600,000 for administration and for operating and maintaining their irrigation systems and for necessary new construction and extensions. The transactions of the districts also involved the expenditure of $1,017,078 from funds derived from the sale of bonds, as represented by the approvals of the bond commission in 1929. The whole represents income and expenditure transactions of nearly $24,000,000, a very large business. When it is considered

that this business was dependent on agriculture for its material income, that it was attempting to build up no surplus and to make no profits, and that it was managed by some 80 or more independent units without mutual responsibilities, the very creditable financial showing made leads to the conclusion that California irrigation districts as a whole are well managed.

Future Annual Reports.

It is planned to issue each year a report similar to this one as a further supplement to Bulletin 21, if sufficient accurate information is furnished by the districts to justify the effort and expense. Individual districts and the association are therefore urged to continue to extend their cooperation to make this plan successful.

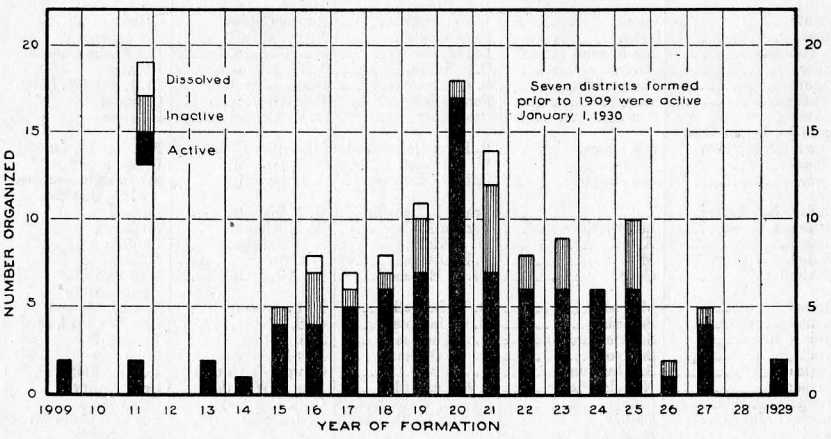
LIST OF ACTIVE CALIFORNIA IRRIGATION DISTRICTS

District	County	President	Secretary	Address
Alpaugh	Tulare	H. R. Leek	A. B. Allen	Alpaugh
Alta	Tulare, Fresno, Kings	Walter Billingslea	Elmer Sibley	Dinuba
Anderson-Cottonwood	Shasta, Tehama	S. Severtson	John Klukkert	Anderson
Banta-Carbona	San Joaquin	Henry T. Ohm	W. Schlossman	Tracy
Bard	Imperial	S. M. Colby	W. C. Ross	Ross Corner, Yuma
Baxter Creek	Lassen County	C. M. Stewart	J. A. Pardee	Susanville
Beaumont	Riverside	E. D. Norcross	W. L. Percy	Beaumont
Big Springs	Siskiyou	K. Gemmet	Roy E. Swigert	Montague
Browns Valley	Yuba	L. B. Gurney	F. E. Snell	Browns Valley
Butte Valley	Siskiyou	H. L. Nelson	M. A. Gilmer	Macdoel
Byron-Bethany	Contra Costa, San Joaquin, Alameda	W. J. Livingstone	G. A. Howard	Byron
Camp Far West	Placer, Yuba	R. H. Durst	Robert Anderson	Wheatland
Carmichael	Sacramento	E. M. Lynch	Roy W. Sullivan	R.R.5, Box 1427, Sacramento
Carpenter	Orange	L. W. Evans	D. S. Smiley	R.R. 3, Box 249, Orange
Citrus Heights	Sacramento-Placer	J. A. Gray	Floyd J. Locher	R.F.D. 1, Box 77, Roseville
Compton-Delevan	Colusa	W. H. Lovelace	C. E. Ryan	550 Montgomery St., San Francisco
Consolidated	Fresno, Tulare, Kings	W. H. Shafer	A. R. Stedman	Box 64, Selma
Corcoran	Kings	J. M. Hansen	D. I. Drown	Corcoran
Cordua	Yuba	Warren Steel	Jeannette Frank	Marysville
Crescent	Fresno, Kings	H. A. Momson	Mary Roberts	Riverdale
Deer Creek	Tehama	Charles Dicus	Vera Chambers	Box 680, Chico
East Contra Costa	Contra Costa	Robert Wallace, Jr.	Margaret Wallace	Brentwood
El Camino	Tehama	E. A. Cripe	O. R. Smith	Gerber
El Dorado	El Dorado	W. A. Rantz	Roger W. Browne	Placerville
El Nido	Merced	Andrew Escola	W. A. Wright	El Nido, Box 73
Fairoaks	Sacramento	E. C. Phoenix	Guy L. Camden	Fairoaks
Fallbrook	San Diego	Fred Myers	C. C. Cook	Fallbrook
Foothill	Fresno, Tulare	H. J. MacKenzie	Geo. H. Pettengill	Orosi
Fresno	Fresno	A. B. Tarpey	J. Allan Hall	1001-9 Griffith McKenzie Bldg., Fresno
Glenn-Colusa	Glenn, Colusa	S. S. Havenor	H. R. Allard	Willows
Grenada	Siskiyou	Claude J. Strong	Stuart Taylor	Box 53, Grenada
Hemet	Riverside	C. C. Nordal	E. O. Eggen	Hemet
Hot Spring Valley	Modoc	S. B. Kelley	A. K. Wylie	Alturas
Imperial	Imperial	Earl C. Pound	F. H. McIver	El Centro
Island No. 3	Kings	J. B. Roberts	Mrs. A. I. Scott	Rt. 1, Laton
Jacinto	Glenn	W. W. Koehler	Roscoe Caldwell	Glenn
James	Fresno	Peter Rusconi	N. D. Ingham	San Joaquin
La Canada	Los Angeles	Leo M. Harvey	Wm. H. Hays, Jr.	Box 37, La Canada
Ladera	Riverside	O. S. Smith	A. W. McGahan	Elsinore
Laguna	Fresno, Kings	L. L. Garner	Bessie L. Scutt	Rt. 1, Box 197, Laton
Lakeland	Kings	Forrest Riley	H. S. Hurlbut	Corcoran
Lakeside	San Diego	Otto Einer	G. W. Conrad	Lakeside
La Mesa, Lemon Grove and Spring Valley	San Diego	R. Bruce Carmichael	Miss Ruth C. Drew	P.O. Box 82, La Mesa
Lemoore	Kings	W. S. Winger	W. J. Garrett	Lemoore
Linden	San Joaquin	Ralph G. Houston	A. L. Cowell	912 Bank of America Bldg., Stockton
Lindsay-Strathmore	Tulare	Ernest L. Daniells	H. R. Huebert	Lindsay
Littlerock Creek	Los Angeles	Vernon A. Carr	W. J. Kling	Littlerock
Lucerne	Kings	W. L. Haag	S. E. Railsback	Hanford
Madera	Madera	T. S. Coffee	J. A. Secara	Madera
Maxwell	Colusa	Dr. C. E. Schoff	Thos. J. Hately	1710 10th St., Sacramento
Merced	Merced	D. K. Barnell	H. P. Sargent	Box L1, Merced
Modesto	Stanislaus	H. G. Jacobsen	C. S. Abbott	P.O. Box 1678, Modesto
Mojave River	San Bernardino	T. J. Thomas	J. S. Nation	Victorville
Montague	Siskiyou	G. W. Dwinnell	Roy E. Swigert	Montague
Naglee Burk	San Joaquin	V. J. Reeve	George Wadsworth	Roberts Bldg., Tracy
Nevada	Nevada, Placer	J. A. Teagarden	Mrs. B. W. Baldwin	Grass Valley
Newport Heights	Orange	Geo. A. Waterman	C. R. Van Duyn	Costa Mesa
Newport Mesa	Orange	Charles W. Te Winkle	D. J. Dodge	Box 305, Costa Mesa
Oakdale	Stanislaus, San Joaquin	H. S. Crowe	M. P. Kearney	Oakdale
Oroville-Wyandotte	Butte	Carleton Gray	W. J. Monro	Box 256, Oroville
Owens Valley	Inyo	J. L. Gish	Dell Yandell	Bishop
Palmdale	Los Angeles	F. J. Ikeler	Mrs. Doris Hossey	Palmdale
Palo Verde	Riverside, Imperial	Tony Seeley	A. E. Pettit	Blythe
Paradise	Butte	A. W. Patton	J. E. Alley	Paradise
Potter Valley	Mendocino	L. L. Grover	R. R. Ingles	Ukiah
Princeton-Codora-Glenn	Glenn, Colusa	V. D. Shaver	W. G. Poage	Princeton
Provident	Glenn, Colusa	A. E. Moutrey	L. M. Benoit	Willows
Ramona	San Diego	R. L. Jerman	Mrs. Lyda Verlaque	P.O. Box 34, Ramona
Red Rock Creek	Lassen			

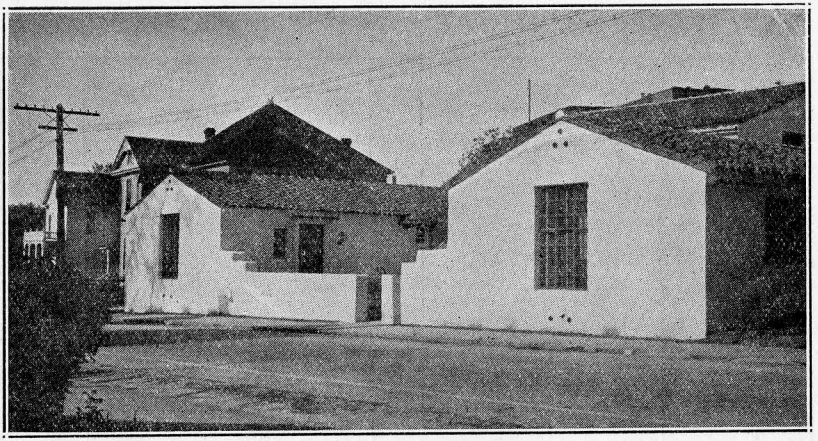
LIST OF ACTIVE CALIFORNIA IRRIGATION DISTRICTS—Continued

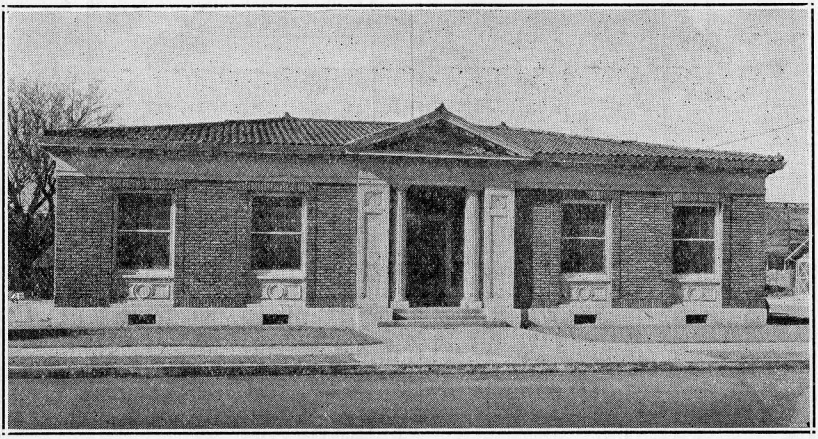
District	County	President	Secretary	Address
Riverdale	Fresno	R. M. Cushman	Tina Z. Cushman	Riverdale
San Dieguito	San Diego	Chas. H. Webster	G. E. Thrailkill	Encinitas
Santa Fe	San Diego	C. A. Shaffer	W. O. Boettiger	Rancho Santa Fe
San Ysidro	San Diego	J. Caplin	L. Judd	San Ysidro
Scott Valley	Siskiyou	C. F. Bryan	H. G. Reynolds	Fort Jones
Serrano	Orange	Willard Smith	F. H. Collins	R.D. 1, Box 168, Orange
South Montebello	Los Angeles	J. H. Dutcher	Mrs. Sarah F. Becker	1210 Spruce St., South Pasadena
South San Joaquin	San Joaquin	D. O. Castle	S. L. Steele	Manteca
Stinson	Fresno	B. W. Kilby	R. M. Bostwick	Fresno
Table Mountain	Butte	R. W. Campbell	John Brereton, Jr.	Feather Ave., Oroville
Terra Bella	Tulare	D. M. Stanley	E. H. Robinson	Terra Bella
Thermalito	Butte	Mark Hodgson	Raymond A. Leonard	Oroville
Tia Juana River	San Diego	A. L. Boyce	Mrs. Minnie B. Sniff	San Ysidro
Tracy-Clover	San Joaquin	R. R. Mehring	George Wadsworth	Roberts Bldg., Tracy
Tranquillity	Fresno	J. A. Benkert	J. E. Cuttle	Tranquillity
Tulare	Tulare	R. H. Beaver	Glenn L. Moran	P.O. Box 477, Tulare
Tule	Lassen	F. C. Farwell	J. A. Pardee	Susanville
Turlock	Stanislaus, Merced	D. C. Thornburg	Anna Sorenson	117 W. Main St., Turlock
Vandalia	Tulare	F. F. Heydenfeldt	H. C. Pegram	Box 1026, Porterville
Vista	San Diego	C. M. Stokes	W. C. Witman	Vista
Walnut	Los Angeles	L. R. Paxton	Laura E. Paxton	R.D. Box 670, Rivera
Waterford	Stanislaus	A. E. Ketcham	C. W. Quinley	Waterford
West Side	San Joaquin	Samuel A. Shearer	John C. Chrisman	Box 607, Tracy
West Stanislaus	Stanislaus, Merced	W. W. Cox	Elbridge Smith	Westley
Woodbridge	San Joaquin	W. J. Robinson, Jr.	Mrs. Olla L. Strother	Woodbridge
Buena Vista Water Storage	Kern	Leroy J. Nichel	J. E. Wcolley	Buttonwillow
Tulare Lake Basin Water Storage	Kings	Harry Lee Martin	Dan Hadsell	Hanford

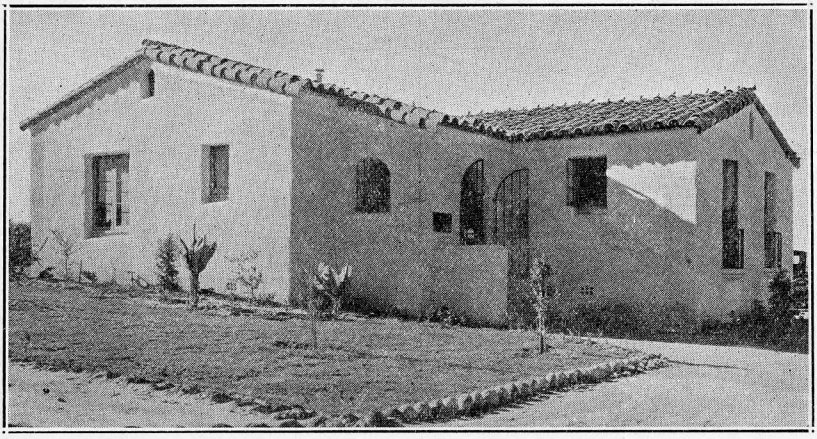
PLATE I



Rate of Organization of Irrigation Districts in California, 1909–1929.

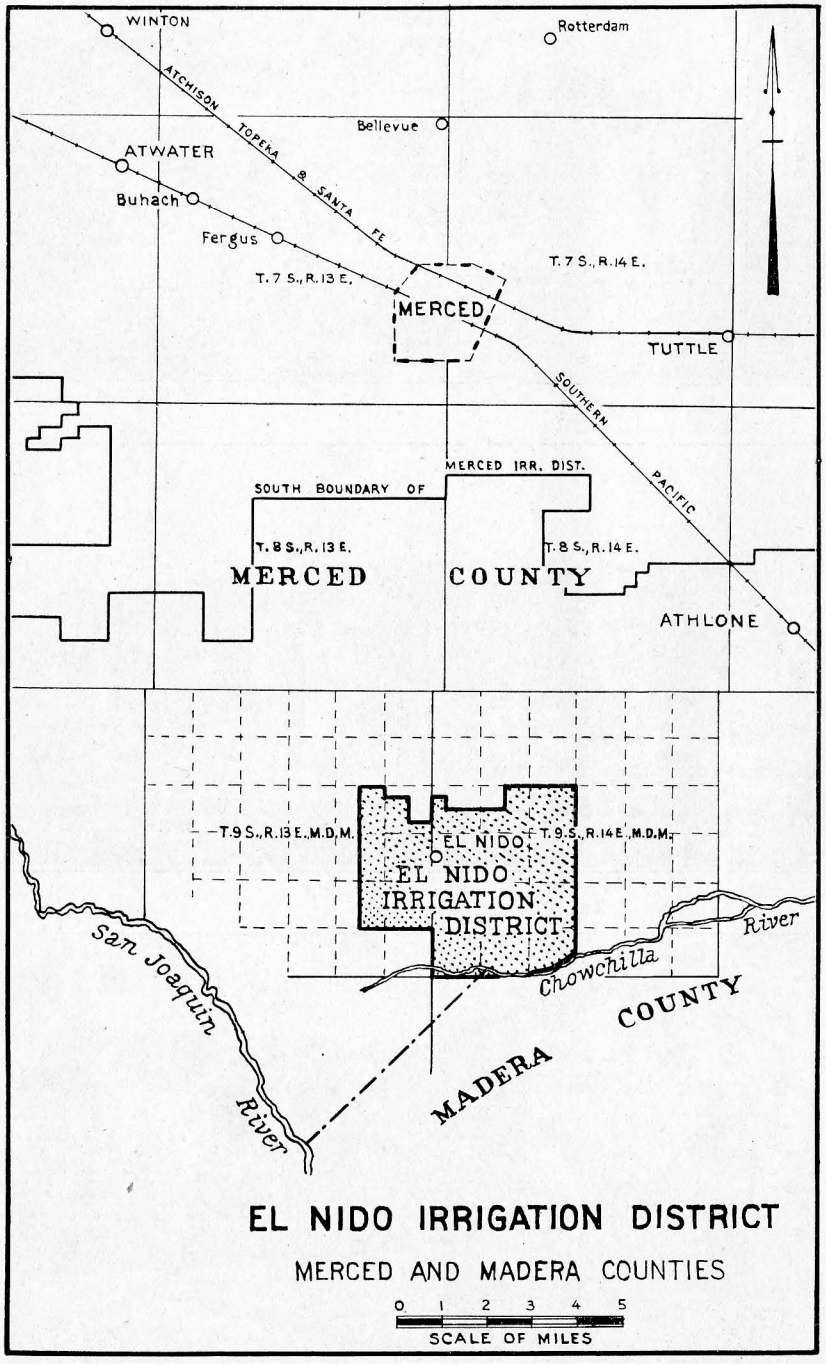






A group of irrigation district office buildings.

PLATE II


WINTON
Rotterdam
ATCHISON TOPEKA & SANTA FE
Bellevue
ATWATER
Buhach
Fergus
T. 7 S., R. 13 E.
T. 7 S., R. 14 E.
MERCED
TUTTLE
SOUTHERN PACIFIC
MERCED IRR. DIST.
SOUTH BOUNDARY OF
T. 8 S., R. 13 E.
T. 8 S., R. 14 E.
MERCED COUNTY
ATHLONE
T. 9 S., R. 13 E., M. D. M.
EL NIDO
T. 9 S., R. 14 E., M. D. M.
EL NIDO IRRIGATION DISTRICT
San Joaquin River
Chowchilla River
MADERA COUNTY
EL NIDO IRRIGATION DISTRICT
MERCED AND MADERA COUNTIES
0 1 2 3 4 5
SCALE OF MILES

CHAPTER II

DISTRICTS ORGANIZED IN 1929

In 1929 three districts petitioned for organization, viz: El Nido, Merced County; Linden, San Joaquin County, and Dixon, Solano County. El Nido and Linden were favorably reported upon, but on account of lack of evidence that the plan presented by the Dixon district would prove feasible in obtaining an adequate water supply the state engineer reported unfavorably and the project was abandoned.

EL NIDO IRRIGATION DISTRICT

Location: Township 9 South, Ranges 13 and 14 East, Merced County.
Date of organization election: April 22, 1929.
Gross area: 9,400 acres.
Principal town: El Nido.
Post office: El Nido.
Transportation: Paved highway, 12 miles to Southern Pacific and Santa Fe railroads at Merced.

History and development.—The lands in this district were dry farmed to grain until a comparatively recent date. About 1913 a portion of the area now included in the project was subdivided into small holdings and water was developed for irrigation from individually owned and operated wells. The district now contains one hundred eleven separate holdings. Seventy-four of these contain 80 acres or less. The district has a population of 375 and the county assessment roll for 1929 shows a valuation of $571,510. There are over 4,000 acres now under irrigation in the district, most of which is devoted to alfalfa. The principal industry is dairying.

Soils and topography.—The soils are all classed as Hanford sandy loams, with the exception of 700 or 800 acres in the south and west parts of the district which are classed as Fresno silty clay loam. As a whole these soils are light and readily tillable. The soil map indicates, as also does field inspection, that there are scattered areas affected with alkali in sufficient concentration to be detrimental to crop growth. Apparently no single area of this character is large. The elevation of the district ranges from 125 to 160 feet, and the land has a fairly uniform slope to the west of about 7 feet per mile, and is not to any great extent cut up by sloughs and depressions. No drainage difficulties are anticipated.

Water supply.—At the time of the organization of the district all water for irrigation was drawn from individually owned wells. There had been, particularly during a period of 5 or 6 years prior to time of organization, a decided recession in the ground water supply and it

became evident that some supplemental source of supply must be found to protect the investment made by the landowners in the development of their farms. Investigation indicated that there was sufficient waste and surplus water available from the Merced Irrigation District to meet the El Nido deficit and an agreement was entered into with the Merced district for the purchase of such surplus.

Works.—It is proposed to build a main canal about 8 miles in length with a capacity of 80 second-feet from Duck Slough in the Merced district to supply laterals to be constructed in the El Nido district. The work involves about 25 miles of canal and laterals. These with appurtenant structures are estimated to cost $135,000.

LINDEN IRRIGATION DISTRICT

Location: Townships 2 and 3 North, Ranges 7, 8 and 9 East, San Joaquin County, about 12 miles easterly from Stockton.
Date of organization election: October 3, 1929.
Gross area: 13,700 acres.
Principal town: Linden.
Post office: Linden.
Transportation: Southern Pacific branch line and paved highway to Stockton, head of navigation on the San Joaquin River.

History and development.—The area included in the Linden district was practically all dry farmed to grain until about 1914. Irrigation in this territory appears to have been initiated by a group of farmers who attempted to utilize water from the Calaveras River by diverting the flow a short distance above Bellota into North Slough and thence into the old Calaveras channel, from which it was diverted to the land. The dam was washed out by floods, but the results obtained demonstrated the value of irrigation and a number of irrigation wells were constructed and equipped with pumping plants. Underground water development continued until at the time of organization 7,700 acres were under irrigation. Six thousand two hundred acres of the irrigated land is in fruit trees and nuts. There are 260 separate holdings in the district and the average holding contains about 50 acres. The population of the district, including the village of Linden, is estimated at 500. The county assessed valuation of the land, 1928 roll, is $1,021,600.

Soils and topography.—The lands of the district are practically all composed of two types of soil, Stockton loam and Stockton silt loam. Of the first named there are about 3,000 acres, and of the latter 10,700 acres. The Stockton loam has a depth of 6 or more feet, is of medium texture and is friable and easily cultivated under proper moisture conditions. It is well adapted to the growth of all fruits and vegetables suitable to Central California climate. The Stockton silt loam is also of good depth but of a somewhat finer texture than the Stockton loam.

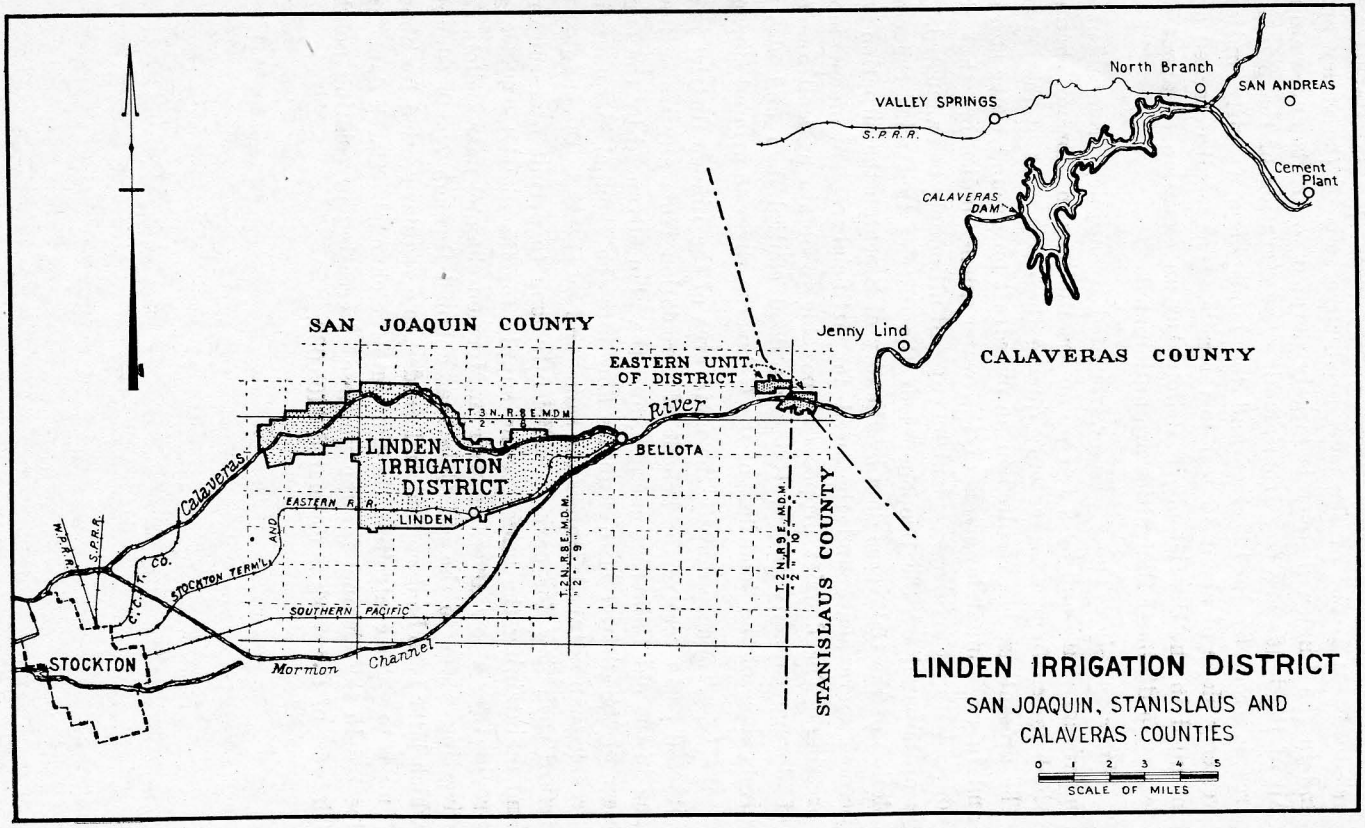

North Branch
SAN ANDREAS
VALLEY SPRINGS
S.P.R.R.
Cement Plant
CALAVERAS DAM
SAN JOAQUIN COUNTY
Jenny Lind
CALAVERAS COUNTY
EASTERN UNIT OF DISTRICT
T 3 N. R 8 E. M.D.M.
River
LINDEN IRRIGATION DISTRICT
BELLOTA
Calaveras
EASTERN R. R.
LINDEN
T 2 N. R 8 E. M.D.M.
T 2 N. R 9 E. M.D.M.
T 2 N. R 10 E. M.D.M.
STANISLAUS COUNTY
N.P.R.R.
S.P.R.R.
C.C. & A. CO.
STOCKTON TERM'L
SOUTHERN PACIFIC
STOCKTON
Mormon Channel
LINDEN IRRIGATION DISTRICT
SAN JOAQUIN, STANISLAUS AND CALAVERAS COUNTIES
0 1 2 3 4 5
SCALE OF MILES

PLATE III

It is well drained, takes water readily and is very retentive of moisture. It is one of the most productive soils of the valley areas and in the Linden district is largely devoted to fruits and walnuts. All of the lands are free from alkali. The elevation of the principal area is from 65 to 125 feet and the lands have a fairly uniform westerly slope of about 15 feet to the mile. The small detached area included in the district above Bellota has an elevation of about 300 feet. No drainage difficulties are anticipated.

Water supply.—The area now irrigated is supplied from about 40 individual wells, and by a few pump installations in Mormon channel, which latter furnish water only during the early part of the season. The present use has resulted in an overdraft on ground water storage and in an annual lowering of the water plane, indicating that this source without artificial replenishment will ultimately be exhausted. It is anticipated by the proponents of the district that with the completion of the Calaveras dam by the city of Stockton the situation will become more acute and the need for artificial replenishment more pressing. The district proposes if possible to obtain a small amount of storage capacity in the Calaveras flood control dam and also to divert some of the flood flow of the Calaveras River to ground storage.

Works.—Topographically the main area of the Linden district is so situated as to receive the benefit of percolation from any water flowing in the old Calaveras channel, and the plan advanced by the engineer of the district is to regulate flow into the channel in quantities greater than naturally enters the same, and by checks in the channel to retard such flow for periods sufficiently long to permit of recouping and maintaining the underground supply for the district. The plan provides for a low diversion weir in Mormon channel near Bellota for diverting water to the old Calaveras channel through North Slough, which later is to be deepened and graded to a regular section for about 2 miles to gates controlling the flow into the channel. Check dams are located in the channel for the purpose of creating percolating ponds. The cost of the work is estimated $105,000.

CHAPTER III

STATISTICAL INFORMATION

Following this chapter is a group of five tables summarizing information pertaining to all active California irrigation districts. A brief discussion of the contents of these tables and a summary of financial activities of districts in 1929 follow:

Crops.

Table I is a summary of the gross irrigable and irrigated areas of the 86 districts which returned a crop report for 1929. The table also shows the number of individual holdings in each district and the area held under tax deed by the districts. The 86 districts contain 3,502,962 gross and 2,906,511 irrigable acres. Of the irrigable land 2,269,981 acres were cropped, and of the cropped land 1,755,600 acres were irrigated. The irrigated area shows an increase of 121,400 acres over that reported for 1928. Seventy-two per cent of the irrigable area was cropped and 60 per cent was irrigated. The following is a summary of all crops reported:

Kind of crop	*Acres*	*Per cent of whole*
Alfalfa	452,524	25.8
Grain and grain hay	158,539	9.0
Field and truck	216,430	12.3
Cotton	99,058	5.7
Rice	33,924	1.9
Vines	213,878	12.2
Deciduous fruits and nuts	128,214	7.3
Citrus and olives	52,068	2.9
Not segregated	400,965	22.9
	1,755,600	100.0

The estimated number of holdings is 85,110 and the average farm holding 41 acres. Less than 1 per cent of the total area was held under tax deeds by the districts.

Water Diverted and Cost per Acre and per Acre-Foot.

Table II is a summary of the 66 districts reporting on the amount of water diverted in 1929, total and per acre, and the estimated cost per acre and per acre-foot diverted based on the 1929 assessment rate per acre of usual valuation plus the average toll per acre-foot diverted. The total number of acre-feet reported diverted by the 66 districts is 6,366,642. The amount of water diverted per acre irrigated ranges from a minimum of 0.27 to a maximum of 14.62 acre-feet. The estimated cost per acre varies from 83 cents to $94.21, and the cost per

acre-foot diverted from 37 cents to $117.05. The great divergence in the cost of water is due largely to high lift pumping from wells or from surface supplies.

An analysis of the data submitted by the districts indicates the following: Average amount of water diverted per acre irrigated, exclusive of districts whose principal crop is rice, 3.8 acre-feet; for districts whose principal crop is rice, 11.3 acre-feet. Average cost per acre-foot to the land irrigated in districts supplied by gravity only, $1.06; in districts supplied by both gravity and pumps, $1.76; in districts supplied by pumps only, $2.72. The average cost per acre irrigated in districts supplied respectively by gravity only, by both gravity and pumps and by pumps only, is $5.60, $7.12 and $10.97. The estimated average cost per acre for all irrigated lands reported is $6.52.

Assessments, Percentages Delinquent and Water Tolls.

Table III sets forth the principal sources and amounts of the 1929 income of California irrigation districts. This table indicates that the total assessment levies of all districts for the calendar year of 1929, computed as one-half the sum of the levies for 1928–29 and 1929–30, was $10,687,092. Add to this sum the amount of water tolls collected in 1929, amounting to $2,236,031, and the result is a grand total of estimated revenues for the year of $12,923,923. It is estimated that the total earned revenues collected in 1929 amount to approximately $12,000,000, the balance being estimated revenues not collected.

Columns 1, 2 and 3 of Table III give the amount of unredeemed tax certificates as of January 1, 1930, for the assessment years 1926–27 to 1928–29, and a subsequent column gives the total number of tax certificates sold at the date of sale in 1929. The average delinquency at the time of 1929 tax sales was about 15 per cent. This is believed to be a satisfactory showing when it is considered that included in this average are a number of districts which are in financial difficulties and show extremely high delinquencies.

Bonds and Warrants.

Table IV sets up the status of all California irrigation district bonds on January 1, 1930, showing the amount voted, canceled, sold, paid and outstanding on that date, as well as the amount of bond principal and interest in default. In addition, the last two columns show the amount of interest-bearing warrants and notes outstanding January 1, 1930, and January 1, 1929. A comparison of the totals of these columns indicates that from January 1, 1929, to January 1, 1930, there was a decrease of $378,797 in outstanding interest-bearing warrants.

Following is a summary of bond information as of January 1, 1930:

Face value of original bonds voted	$149,996,536	
Face value of refunding bonds voted	4,830,511	
		$154,827,047
Disposition of bonds voted:		
Original issues sold	$103,988,210	
Original issues unsold	44,381,976	
Refunding issues sold or exchanged	4,212,011	
Refunding issues unsold	618,500	
Canceled	1,626,350	
Disposition of bonds sold:		
Retired	$11,108,339	
Total outstanding	97,091,882	
Outstanding and in default	477,000	
Percentage of bonds voted sold	70.00%	
Percentage of bonds sold outstanding	89.73%	
Percentage of bonds sold retired	10.27%	
Percentage of bonds sold defaulted	0.49%	
Disposition of 1929 bond obligations:		
Bonds paid	$1,312,265	
Interest coupons paid	5,209,233	
		$6,521,498
Bond maturities refunded		21,500
Bond maturities defaulted	$129,000	
Interest coupons defaulted	323,789	
		$452,789

Percentage of 1929 bond and bond interest obligations defaulted, 6.4%.

Six hundred thousand dollars in bonds were voted by California irrigation districts in 1929, in the amount of $200,000 each by the following districts: Carpenter and Serrano, Orange County; Ladera, Riverside County. None of these bonds were sold. The total amount of bonds sold by districts during 1929 was $1,194,060.

Bond Obligations per Acre.

Table V shows the average bond obligation per acre for each district and the average for all districts having outstanding bonds. These figures are a general average only and they are not therefore necessarily a measure of the bond principal and interest payments required of any particular acre, as this requiremeent varies with the assessed valuation.

Plate IV, appearing on page 22, indicates graphically the combined bond obligation of California irrigation districts, showing the trend and peak of bond payments, interest payments, and combined bond and interest payments from January 1, 1930, to the maturity of the last bond and interest coupon outstanding on that date.

Expenditures Approved from Bonds in 1929.

The California irrigation district act and the bond certification commission act provide for the approval by the bond commission of all irrigation district expenditures proposed from funds derived from the

sale of bonds. Such expenditures, as represented by approvals of the bond commission in 1929, were as follows:

Big Springs	$64,186 00
El Dorado	59,042 15
La Canada	167,852 48
Nevada	64,451 26
Oroville-Wyandotte	5,000 00
Potter Valley	2,750 00
Thermalito	5,372 80
West Side	13,047 24
West Stanislaus	629,069 24
Woodbridge	6,325 00
Total	$1,017,078 17

PLATE IV

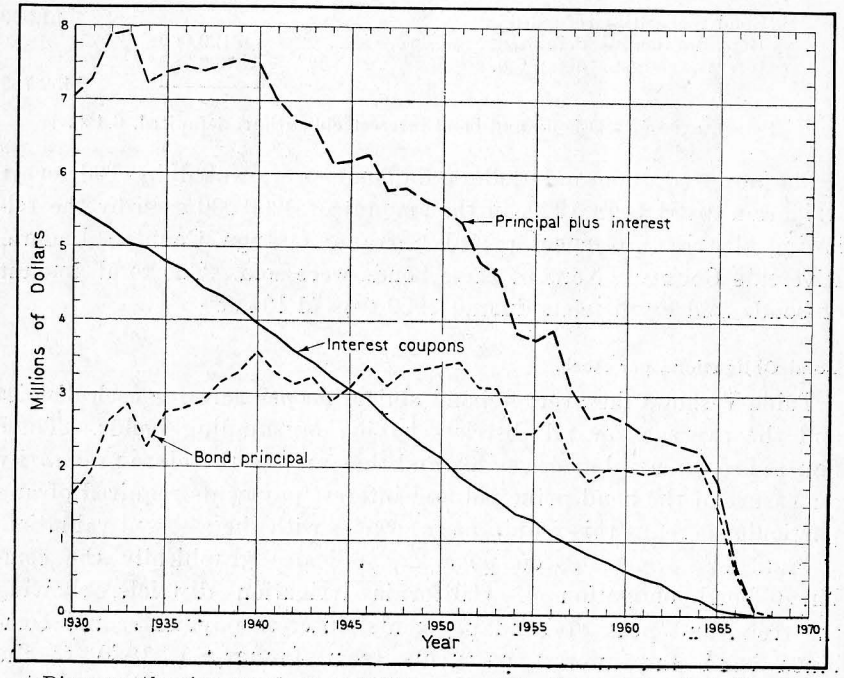


Diagram showing trend of maturities of outstanding bonds of California irrigation districts as of January 1, 1930.

TABLES OF STATISTICAL DATA

TABLE I. CALIFORNIA IRRIGATION DISTRICT CROP SUMMARY FOR 1929

District	Gross area, acres	Irrigable area, acres	Area held by districts under tax deed, acres	Estimated number of holdings	Kind and acreage of crops reported									Area cropped		
					Alfalfa	Grain and grain hay	Field and truck	Cotton	Rice	Vines	Deciduous and nuts	Citrus and olives	Not segregated	Dry farmed	Irrigated	Total
Alpaugh	8,175	8,039	730	299	400	1,920		2,720		70			510		5,620	5,620
Alta	129,300	112,600		4,600	7,500		880	2,000		49,180	8,960	930	30,550	29,300	100,000	129,300
Anderson Cottonwood	32,000	28,064	1,500	724	7,400		6,500			400	1,570		425	3,100	16,295	19,395
Banta-Carbona	14,379	14,248	62	202	5,189	2,746	5,636			101	91		313		14,076	14,076
Bard	7,000	5,914		131	908	364	27	3,566		1	56	21	152		5,095	5,095
Baxter Creek	9,336	8,636											1,500		1,500	1,500
Beaumont	4,141	3,161		1,557							1,909				1,909	1,909
Big Springs	3,570	2,546		43	2,290	30									2,320	2,320
Browns Valley	40,000	11,740		267	645	90	1,830			470	1,415	82	2,460	1,308	6,992	8,300
Butte Valley	28,686	17,500	4,663	350									5,500		5,500	5,500
Byron-Bethany	17,200	12,544		200	7,000	2,500	200				300			4,000	10,000	14,000
Camp Far West	4,089	2,658		10	100	300					2,046				2,446	2,446
Carmichael	3,138	3,038	10	300						200	1,500	250			1,950	1,950
Carpenter	1,328	1,320					65					1,035			1,100	1,100
Citrus Heights	3,077	3,066	36	210									2,850		2,850	2,850
Compton-Delevan	12,652	11,500	720	10					1,092					1,200	1,092	2,292
Consolidated	149,047	145,757		4,600									129,000		129,000	129,000
Corcoran	51,606	51,000		348	4,000			14,000							18,000	18,000
Cordua	5,461	5,421	860	24					1,500						1,500	1,500
Deer Creek	1,907	1,663		13	500		300				800		450		2,050	2,050
East Contra Costa	20,200	19,760	1,250	471	3,197	914	4,769			705	495	4,859			14,939	14,939
El Camino	7,549	7,549		300	1,184		1,185			105	1,197		329	1,172	4,000	5,172
El Dorado	30,000	19,905		980							6,000				6,000	6,000
El Nido	9,450	7 500		150	3,500	100	100	250		50					4,000	4,000
Fairoaks	3,900	3,400	3	410			15			50	1,800	688			2,553	2,553
Fallbrook	10,217	10,200		325							7	844		1,588	851	2,439
Foothill	58,875	45,837		1,400	50			1,000		7,500	2,500	7,020		22,000	18,070	40,070
Fresno	241,300	239,080		8,796	19,517		29,836	1,951		94,230	26,115	1,024	8,090	60,539	180,763	241,302
Glenn-Colusa	121,592	118,592		479	8.223		1,588		14,608	155	200	957	14,859	21,687	40,590	62,277
Grenada	4,948	3,510	1,800	4 923	1,640										1,640	1,640

Hemet	9,718	9 557											9,000		9,000	9,000
Hot Spring Valley	9,497	9,497	517	35	4,379	5,118									9,497	9,497
Imperial	605,000	515,000	700	10,451	245,775	46,191	94,189	20,431		3,496	554	10,323	3,186		424,145	424,145
Island No. 3	4,620	4,120		151									3,000		3,000	3,000
Jacinto	11,554	10,300		185	1,403	302		328			761		1,361	5,943	4,155	10,098
James	26,266	18,266	1,028	11	4,700	2,700		4,000			40		200		11,640	11,640
La Canada	1,294	1,294		475									800		800	800
Ladera	1,632	1,481		358						25	150	50		455	225	680
Laguna	34,858	30,000		800									22,500		22,500	22,500
Lakeland	23,283	23,283	1,436	24									9,158		9,158	9,158
Lakeside	320	288		88									50		50	50
La Mesa, Lemon Grove and Spring Valley	18,000	13,500		4,000			756				100	2,427	648		3,931	3,931
Linden	13,700	13,000		274	500						5,272		228	7,000	6,000	13,000
Lindsay-Strathmore	15,250	14,540	2,344	500		90	192			422		8,796			9,500	9,500
Littlerock Creek	3,073	2,877		103							2,000				2,000	2,000
Lucerne	33,407	30,000											30,000		30,000	30,000
Madera	352,000	222,000		3,750									75,000	277,000	75,000	352,000
Merced	189,682	171,700	3,281	4,669	17,777	20,637	13,752	16,080	7,070	14,417	20,471		15,980		126,184	126,184
Modesto	81,183	78,759		5,000	15,712	13,175			822	10,318	10,937		15,408	7,590	66,372	73,962
Mojave River	27,665	20,000		200	250					5	400		10	20	665	685
Montague	26,117	18,531		330												
Naglee-Burk	2,871	2,846	165	54	1,700	140									1,840	1,840
Nevada	263,500	164,000	847	1,800	774		449			4	996		1,977		4,200	4,200
Newport Heights	1,503	1,503		563	20		115			5	90	40	40	40	310	350
Newport Mesa	694	400		200			400								400	400
Oakdale	74,240	66,800	552	2,758	5,037	1,652	2,642	2,354	1,374	2,990	5,640	50	1,582	19,745	23,321	43,066
Oroville-Wyandotte	24,100	22,300		600						30		2,038			2,068	2,068
Owens Valley	53,990	1,000		435	550	200	250								1,000	1,000
Palmdale	4,756	4,698		274	68	120	12			20	580		208		1,008	1,008
Palo Verde	88,693	70,000		1,150	4,843	1,287	3,083	23,120							32,333	32,333
Paradise	11,260	9,836		400			100			100	3,100				3,300	3,300
Potter Valley	5,042	4,195		130	600	160	60			10	710				1,540	1,540
Princeton Codora Glenn	13,656	12,290	20	200	715	115	20	35	1,919		1,150		217	8,000	4,171	12,171
Provident	22,805	21,000	5,000	30	68				4,326	5				500	4,399	4,899
Ramona	650	585		230	20		40								60	60
Riverdale	15,830	14,800	6	206	3,000	3,000	2,000	640							8,640	8,640
San Dieguito	3,900	3,700	70	200			1,000					683	200		1,883	1,883
Santa Fe	10,106	6,980		416							160	1,900	340		2,400	2,400
San Ysidro	502	462	20	400									130		130	130
Scott Valley	5,125	4,000		26	2,000	1,500								1,600	3,500	5,100

TABLE I. CALIFORNIA IRRIGATION DISTRICT CROP SUMMARY FOR 1929—Continued

District	Gross area, acres	Irrigable area, acres	Area held by districts under tax deed, acres	Estimated number of holdings	Kind and acreage of crops reported									Area cropped		
					Alfalfa	Grain and grain hay	Field and truck	Cotton	Rice	Vines	Deciduous and nuts	Citrus and olives	Not segregated	Dry farmed	Irrigated	Total
Serrano	1,505	1,500		160			50				35	1,165			1,250	1,250
South Montebello	910	829		300			430				20	377			827	827
South San Joaquin	71,112	66,465	20	2,980	16,430	12,102	5,164	1,305		11,255	4,057		4,027	14,394	54,340	68,734
Stinson	11,750	11,000		26	499	1,485		4,000							5,984	5,984
Table Mountain	1,955	1,780		12	75		14		151				21	430	261	691
Terra Bella	12,285	12,070	319	680						563	1,558	1,812			3,933	3,933
Thermalito	3,110	2,940		355	10	20	50			145	600	642	500		1,967	1,967
Tracy Clover	1,084	984		77	900										900	900
Tranquillity	10,750	10,190	2,000	246	1,500	2,000		100					3,100		6,700	6,700
Turlock	181,498	179,278		4,000	39,706	34,222	34,222		1,062	13,932	9,458		3,277		133,754	133,754
Vandalia	1,276	1,253		42								1,100			1,100	1,100
Vista	18,162	14,610		1,036			1,544			52	192	2,301	30	205	4,119	4,324
Walnut	911	911		64	6		65				180	654	6		911	911
Waterford	14,110	11,424		371	1,179	290	488			742	1,573		1,000		5,272	5,272
West Side	11,828	11,811		450	6,918	3,254	681				469				11,322	11,322
West Stanislaus	21,400	21,000		108	1,121	1,091	360	1,178						18,250	3,750	22,000
Woodbridge	13,851	13,330		145	1,046	849	1,371			2,125			793	7,315	6,184	13,499
Totals	3,502,962	2,906,511	29,959	85,440	452,524	158,539	216,430	99,058	33,924	213,878	128,214	52,068	400,965	514,381	1,755,600	2,269,981

TABLE II. DATA RELATING TO ASSESSED VALUATION AND ASSESSMENT RATE PER ACRE, WATER DIVERTED AND AVERAGE TOLLS PER ACRE-FOOT DIVERTED, AND ESTIMATED AVERAGE COST PER ACRE AND PER ACRE-FOOT DIVERTED FOR LAND IRRIGATED IN 1929

District	Assessed valuation per acre, 1930			Annual assessment per acre land of usual valuation		Water				
						Diverted, 1929		Average toll per acre-foot, diverted	Estimated cost to land irrigated, 1929	
	High	Low	Usual	1929	1930	Acre-feet	Acre-feet per acre		Per acre	Per acre-foot, diverted
Alpaugh	$60 00	$40 00	$50 00	$6 00	$5 00	7,600	1.35	$2 94	$9 97	$7 38
Alta	60 00	3 00	60 00	1 58	1 43	85,700	.86		1 58	1 84
Anderson-Cottonwood	75 00	20 00	50 00	4 25	4 25	117,313	7.20		4 25	59
Banta-Carbona	150 00	40 00	150 00	7 50	9 00	37,869	2.69	2 09	13 14	4 88
Bard	100 00	100 00	100 00		25	39,375	7.73	59	4 53	59
Beaumont	100 00		100 00	11 00	9 50	1,591	.83	8 67	17 90	21 57
Big Springs	200 00	1 00	200 00	1 40	5 00	9,540	4.11	89	5 08	1 24
Browns Valley	15 00	2 00	10 00			15,775	2.26	37	83	37
Butte Valley	40 00	5 00	40 00	2 60	2 60	1,500	.27		2 60	9 63
Byron-Bethany	200 00	20 00	130 00	5 33	5 53	15,970	1.60	2 17	8 80	5 50
Camp Far West	150 00	5 00	150 00	4 50	4 73	5,000	2.04		4 50	2 21
Carmichael	80 00	80 00	80 00	6 40	7 00	4,175	2.14	1 89	10 44	4 88
Citrus Heights	100 00	100 00	100 00	10 00	10 50	3,564	1.25		10 00	8 00
Compton-Delevan	75 00	10 00	75 00	3 26	3 08	7,395	6.77	1 03	10 26	1 52
Consolidated	100 00	15 00	100 00	2 20	2 20	105,400	.82		2 20	2 68
Corcoran	100 00	80 00	100 00	2 08	2 08	11,955	.66	1 23	2 90	4 39
Cordua	70 00	30 00	75 00	3 94	3 81	21,840	14.56	27	7 87	54
East Contra Costa	190 00	125 00	175 00	6 53	6 53	29,539	1.98	3 20	12 86	6 49
El Camino			125 00	6 00	6 00	8,600	1.66		6 00	3 61
El Dorado	155 00	10 00	75 00	60	49	8,100	1.35	6 54	9 43	6 99
Fairoaks	96 00	25 00	90 00	4 27	4 27	4,620	1.81	2 73	9 10	5 03
Fresno	100 00	50 00	100 00	2 50	2 50	323,633	1.79		2 50	1 40
Glenn-Colusa	44 00	30 00	40 00	2 60	2 60	339,325	8.36	31	5 16	62
Grenada	200 00	5 00	200 00	13 44	13 44	4,436	2.70	3 54	23 00	8 52
Imperial	150 00	5 00	100 00	5 00	5 00	2,807,577	6.62	03	5 20	79
Jacinto			60 00	2 85	2 85	14,409	3.47	22	3 62	1 04
James	150 00	25 00	150 00	7 05	5 60	36,000	3.09	1 86	12 81	4 15
La Canada	1,500 00	1,000 00	1,000 00	17 50	17 50	319	.40	73 52	46 82	117 05
Laguna	100 00		100 00	1 85	1 75	26,586	1.18		1 85	1 57
Lakeside			100 00	4 25	4 25	25	.50	70 52	39 51	79 02

TABLE II. DATA RELATING TO ASSESSED VALUATION AND ASSESSMENT RATE PER ACRE, WATER DIVERTED AND AVERAGE TOLLS PER ACRE-FOOT DIVERTED, AND ESTIMATED AVERAGE COST PER ACRE AND PER ACRE-FOOT DIVERTED FOR LAND IRRIGATED IN 1929—Continued

District	Assessed valuation per acre, 1930			Annual assessment per acre land of usual valuation		Water				
						Diverted, 1929		Average toll per acre-foot, diverted	Estimated cost to land irrigated, 1929	
	High	Low	Usual	1929	1930	Acre-feet	Acre-feet per acre		Per acre	Per acre-foot, diverted
La Mesa, Lemon Grove and Spring Valley	$500 00	$75 00	$350 00	$9 10	$9 10	3,410	.87	$38 44	$42 45	$48 79
Lindsay-Strathmore	175 00	1 00	140 00	19 22	19 99	15,340	1.61	10 00	35 37	21 97
Little Rock Creek	100 00	100 00	100 00	9 50	10 00	1,900	.95		9 50	10 00
Maxwell						12,799				
Merced	200 00	5 00	125 00	7 50	7 50	536,000	4.25		7 50	1 76
Modesto	150 00	40 00	80 00	4 48	4 24	329,242	4 96		4 48	90
Naglee-Burke	100 00	60 00	100 00	9 00	10 00	6,183	3.36		9 00	2 68
Nevada			45 00		27	13,053	3.11	2 38	7 40	2 38
Newport Heights	1,100 00	700 00	800 00	10 00	11 60	603	1.95	11 32	32 03	16 43
Newport Mesa	600 00	600 00	600 00	12 00	12 00	476	1.19	6 45	19 68	16 54
Oakdale	145 00	10 00	55 00	3 58	3 52	147,846	6.34		3 58	56
Oroville-Wyandotte	100 00	50 00	100 00	2 00	2 00	3,425	1.66	5 02	10 31	6 21
Palmdale			100 00	7 62	9 64	1,250	1.24		7 62	6 15
Palo Verde	100 00	40 00	90 00	15 69	15 25	205,000	6.34		15 69	2 47
Paradise	90 00	2 00	67 50	5 06	5 06	3,924	1.19		5 06	4 25
Potter Valley	60 00	3 00	60 00	1 50	2 67	2,700	1.75	1 45	4 04	2 31
Princeton-Codora-Glenn	70 00	65 00	67 50	3 04	3 04	53,078	12.72	34	7 32	58
Provident	80 00	60 00	75 00	6 38	6 38	90 977		5 26		
Ramona	50 00	40 00	50 00	3 50	4 00	138	2.30	36 08	86 48	37 60
San Dieguito	1,200 00	100 00	400 00	14 00	12 00	1,721	.91	12 68	25 59	28 12
Santa Fe	450 00	60 00	200 00	12 54	13 18	2,356	.98	14 81	27 08	27 63
San Ysidro	300 00	20 00	250 00	12 50	12 50	460	3.54	23 09	94 21	26 61
South Montebello	850 00	850 00	850 00	17 00	17 00	1,085	1.31	10 08	30 23	23 08
South San Joaquin	135 00	20 00	100 00	6 45	7 10	224,747	4.14		6 45	1 56
Stinson	50 00	50 00	50 00	4 25	4 25	16,176	2.70	1 80	9 13	3 38
Table Mountain	150 00	100 00	125 00	6 00	6 25	3,815	14.62	31	10 55	72
Terra Bella	130 00	50 00	100 00	9 50	10 00	5,919	1.50	12 00	27 56	18 37
Thermalito	150 00	120 00	150 00	10 80	11 18	3,875	1.97		10 80	5 48
Tracy-Clover	100 00	100 00	100 00	8 50	9 00	1,498	1.66		8 50	5 12
Tranquillity	150 00	150 00	150 00	3 00	4 50	11,400	1.70		3 00	1 76

Tulare	200 00	50 00	100 00		50	1,000				
Turlock	150 00	40 00	100 00	4 50	4 25	473,944	3.54		4 50	1 27
Vandalia	200 00	200 00	200 00	18 00	18 98	1,852	1.68	8 78	32 79	19 52
Vista	175 00	135 00	150 00	11 70	11 70	6,450	1.57	16 31	37 24	23 72
Walnut	1,000 00	1,000 00	1,000 00	10 00	10 00	1,626	1.78	2 76	14 93	8 39
Waterford	200 00	5 00	120 00	6 55	7 08	23,645	4.48		6 55	1 46
Westside	100 00	100 00	100 00	4 50	5 75	20,800	1.84	2 35	8 82	4 79
West Stanislaus	55 00	45 00	50 00	1 17	2 00	8,168	2.18	2 09	5 72	2 62
Woodbridge	150 00	25 00	100 00	2 00	2 00	34,030	5.50	36	4 00	72
Total diverted						6,366,642				

SUMMARY OF TOTAL ASSESSMENTS LEVIED, TAX CERTIFICATES SOLD AND UNREDEEMED, PERCENTAGES OF ASSESSMENTS DELINQUENT, AND WATER TOLLS COLLECTED IN CALIFORNIA IRRIGATION DISTRICTS

TABLE III

Name of district	Unredeemed tax certificates January 1, 1930, for assessment years 1926-27 to 1928-29				Percentage of assessment remaining unpaid January 1, 1930, for assessment years 1926-27 to 1928-29				Assessment, 1928-29					Assessment, 1929-30			Water tolls collected 1928 and 1929	
	1927	1928	1929	Total	1926-1927	1927-1928	1928-1929	Total	Total assessed valuation	Rate per $100 of valuation	Total assessment levied	Tax certificates sold	Percentage of assessment delinquent on date of tax sale	Total assessed valuation	Rate per $100 of valuation	Total assessment levied	1928	1929
Alpaugh	$1,274	$2,326	$772	$4,372	2.9	5.3	1.5	3.2	$390,214	12.00	$47,353	$17,756	34.1	$426,116	10.00	$42,612	$55,742	$74,132
Alta	5,722	7,050	10,606	23,378	3.5	4.2	6.8	4.8	5,349,775	2.63	140,887	15,868	10.2	5,202,528	2.38	123,612	None	None
Anderson-Cottonwood	3,930	8,275	15,778	27,983	3.0	6.3	12.0	7.1	1,405,641	8.50	119,478	16,043	12.2	1,397,492	8.50	118,787	None	None
Banta-Carbona			1,037	1,037			0.9	0.3	2,158,036	5.00	107,901	1,975	1.7	2,137,558	6.00	128,253	75,748	79,330
Bard												2,563		600,991	.25	1,502		23,098
Baxter Creek																		
Beaumont	3,547	5,108	8,963	17,618	8.8	12.8	18.5	13.7	400,140	11.00	44,015	9,544	19.7	399,960	9.50	37,996	28,716	30,098
Big Springs	None	None	None				0.0	0.0	453,125	0.70	3,171	None	None	494,105	2.50	12,353	None	11,255
Brown's Valley	None	None	None					0.0	None	None	None	None	None	384,310	None	None	5,840	5,800
Butte Valley	8,337	22,392	22,894	53,623	15.6	40.6	52.6	35.2	602,493	6.50	39,595	4,985	11.4	638,451	6.50	41,499	None	None
Byron-Bethany	672	1,571	1,864	4,107	1.0	2.0	2.4	1.8	1,706,893	4.10	69,967	2,706	3.5	1,697,837	4.25	72,158	31,529	34,688
Camp Far West	None	None	None	None	None	None	None	None	349,625	3.00	10,488	None	0.0	349,625	3.16	10,945	None	None
Carmichael	775	792	2,610	4,177	3.5	4.1	11.9	5.6	249,262	8.00	19,940	4,089	18.6	250,512	8.75	21,920	6,000	7,871
Carpenter																		
Citrus Heights	1,007	1,288	2,030	4,325	3.0	3.8	5.8	4.2	315,796	10.00	31,579	2,796	8.0	315,257	10.50	33,102	None	None
Compton-Delevan	3,442	336	3,608	7,386	6.2	0.8	8.5	5.2	894,090	4.35	38,870	3,608	8.4	846,090	4.11	34,754	18,460	7,649
Consolidated	1,879	4,154	10,461	16,494	0.7	1.6	4.1	2.2	10,523,634	2.20	231,519	18,219	7.1	10,515,552	2.20	231,342	304	330
Corcoran	2,856	6,764	9,170	18,790	3.1	8.8	7.8	6.5	5,160,551	2.08	106,959	9,170	7.8	5,140,000	2.08	106,963	13,887	14,718
Cordua	6,842	718	694	8,254	28.0	3.1	3.1	11.7	390,779	5.25	20,515	694	3.1	390,854	5.08	19,855	None	None
Crescent									479,960									
Crooks Canyon																		
Deer Creek	None	None	None	None					177,713	4.30	6,495	None	None	177,713	3.30	5,865	None	None
East Contra Costa	None	None	5,050	5,050			3.4	1.1	3,626,201	3.73	135,102	5,050	3.4	3,603,979	3.73	134,428	82,366	94,540
El Camino	None	292	19	311		0.5		0.3	943,480	4.80	45,287	19	0.0	943,384	4.80	45,282	None	None
El Dorado	123	390	812	1,325	0.6	2.2	4.6	2.4	2,103,731	0.80	16,109	1,093	6.1	2,036,291	0.65	13,236	5,472	59,100
El Nido														571,510	1.70	9,714		
Fairoaks	955	1,108	2,724	4,787	4.9	6.2	15.3	8.7	339,815	4.75	16,141	3,721	20.9	340,981	4.75	16,197	22,015	21,984
Fallbrook	63	45	788	896	0.5	0.8	4.7	2.6	919,733	1.65	15,175	842	5.0	920,866	1.20	11,050	None	None
Foothill			15,060	15,060			20.6	20.6	2,849,999	2.25	66,483	16,017	21.9	2,715,408	1.00	27,154	None	None
Fresno	4,994	15,138	18,646	38,778	1.0	3.0	3.7	2.6	18,424,164	2.50	460,604	18,646	3.7	18,429,985	2.50	460,750	None	None
Glenn-Colusa	58,295	53,117	85,313	196,725	14.5	13.8	23.2	17.0	5,020,906	6.50	334,280	85,313	23.2	5,041,529	6.50	327,699	134,065	139,744
Grenada	19,060	40,763	37,034	96,857	43.2	83.0	57.5	61.4	871,597	6.72	58,571	43,186	67.0	835,010	6.72	56,113	None	None
Hemet	None	None	None						1,034,795	0.90	9,313						None	None
Hot Springs Valley	1,631	3,603	4,615	9,849	7.8	17.3	22.2	15.8	188,759	10.00	18,875	4,615	22.2	191,205	10.00	19,120	None	None
Imperial	148,808	201,750	272,372	622,930	5.5	7.6	10.3	7.8	48,263,664	5.00	2,413,183	354,800	13.4	49,454,608	5.00	2,472,730	699,360	596,050
Island No. 3	None	None	71	71	None	None	None		209,489	None	None	123		208,000	0.25	520	None	None
Jacinto	473	509	3,341	4,323	1.3	1.4	9.2	4.0	687,654	4.75	32,958	3,341	9.2	686,520	4.75	32,610	2,221	3,203
James	106,661	181,439	175,179	463,279	89.3	97.7	93.8	94.2	3,612,923	4.70	169,806	175,179	93.8	3,468,305	3.73	129,377	57,692	67,036
La Canada	3	66	147	216	None	0.3	0.5	0.3	1,373,310	1.75	24,035	237	0.9	1,296,780	1.75	22,694	16,299	23,454
Ladera	2,074	384	83	2,541	49.7	4.5	3.9	17.2	778,506	0.25	1,929	83	3.9	787,934	1.25	9,849	None	None
Laguna	1,430	1,493	2,170	5,093	2.0	2.3	3.4	2.5	3,089,200	1.85	57,150	2,170	3.4	3,055,631	1.75	53,474	None	None
Lakeland	1,958	3,712	6,819	12,489	3.8	5.8	10.3	6.8	2,328,277	2.59	60,200	6,819	10.3	2,328,266	2.36	54,906	None	None
Lakeside	1,159	32	1,860	3,051	28.4	0.5	33.7	20.1	117,818	4.25	5,007	1,860	33.7	133,250	4.25	5,663	4,104	3,829
La Mesa, Lemon Grove and Spring Valley	1,924	11,832	23,571	37,327	1.2	7.0	13.4	7.5	6,159,079	2.60	159,902	23,571	13.4	6,327,566	2.60	164,517	158,749	157,457
Lemoore									None	None	None						None	None
Lindsay-Strathmore	31,687	33,873	49,789	115,349	1.5	9.5	15.2	12.9	2,165,631	13.73	297,339	53,215	16.4	2,132,055	14.28	304,457	141,989	155,848
Littlerock Creek	9,583	9,461	10,847	29,891	30.0	29.1	34.0	31.0	309,651	9.50	29,295	11,869	36.8	307,300	9.50	29,419	None	None
Lucerne									None	None	None						None	None
Madera	None	3,333	None	3,333		5.0		5.0		None	None			10,242,145	0.40	40,969	None	None
Maxwell									381,955	27.83	245,448							
Merced	24,472	42,236	83,928	150,636	1.7	3.1	6.2	3.7	20,686,900	6.00	1,241,214	130,654	9.6	20,279,175	6.00	1,216,751	None	None
Modesto	2,512	3,803	8,186	14,501	0.5	0.8	1.8	1.0	7,439,720	5.60	416,624	16,298	3.5	7,441,660	5.30	394,408	None	None
Mojave River									539,327	1.00	5,393	None		551,200	0.20	1,102	None	None
Montague	246	1,625	9,900	11,772	4.7	7.5	21.0	15.9	2,138,868	2.00	42,777	9,900	22.1	1,181,650	9.00	106,349	None	None
Naglee-Burk	825	1,741	1,783	4,349	2.9	6.2	6.8	5.3	264,705	9.00	23,823	2,654	10.1	268,124	10.00	26,812	None	63
Nevada	None	None	None	None					13,839,145	None	None			12,329,641	0.60	73,978	78,363	85,209
Newport Heights	152	431	1,538	2,121	0.9	2.3	7.8	3.9	1,428,845	1.25	17,860	1,538	7.8	1,435,220	1.45	20,811	5,691	6,972
Newport Mesa	31	308	467	806	0.3	3.3	5.0	2.9	421,751	2.00	8,435	623	6.7	422,362	2.00	8,447	2,481	3,071
Oakdale	20,136	22,619	27,463	70,218	7.6	7.3	8.9	8.0	4,300,000	6.50	279,500	27,463	8.8	4,302,470	6.40	275,358	None	734
Oroville-Wyandotte	656	622	546	1,824	1.3	1.3	1.1	1.2	2,229,485	2.00	44,589	899	1.8	2,259,893	2.00	45,198	32,332	46,443

SUMMARY OF TOTAL ASSESSMENTS LEVIED, TAX CERTIFICATES SOLD AND UNREDEEMED, PERCENTAGES OF ASSESSMENTS DELINQUENT, AND WATER TOLLS COLLECTED IN CALIFORNIA IRRIGATION DISTRICTS

TABLE III
Continued

Name of district	Unredeemed tax certificates January 1, 1930, for assessment years 1926-27 to 1928-29				Percentage of assessment remaining unpaid January 1, 1930, for assessment years 1926-27 to 1928-29				Assessment, 1928-29					Assessment, 1929-30			Water tolls collected 1928 and 1929	
	1927	1928	1929	Total	1926-1927	1927-1928	1928-1929	Total	Total assessed valuation	Rate per $100 of valuation	Total assessment levied	Tax certificates sold	Percentage of assessment delinquent on date of tax sale	Total assessed valuation	Rate per $100 of valuation	Total assessment levied	1928	1929
Owens Valley																		
Palmdale	$60,374	$25,971	$31,638	$118,483	72.3	53.2	78.7	68.3	$470,812	7.62	$36,561	$31,638	78.7	$473,854	9.64	$45,680	$3,960	$4,182
Palo Verde	171,380	255,239	256,148	682,767	30.0	37.8	30.7	32.8	4,974,780	17.34	758,365	256,148	30.7	4,908,960	16.95	731,656	None	None
Paradise	5,309	7,381	11,314	24,004	10.2	14.4	22.1	15.7	620,203	7.50	46,516	12,146	23.7	621,332	7.50	46,600	None	None
Potter Valley	None	None	None						256,585	2.50	6,414	None	None	256,116	44.5	11,397	None	3,914
Princeton-Codora-Glenn	429	1,926	3,576	5,933	0.9	4.4	7.9	4.4	939,270	4.50	40,768	4,811	10.7	939,000	4.50	42,225	17,846	17,714
Provident	32,956	54,708	49,792	117,458	20.4	22.9	32.9	25.3	1,616,520	8.50	137,404	49,830	32.9	1,616,520	8.50	137,404	57,992	40,037
Ramona									72,000	7.00	5,082	None	None	74,073	8.00	5,926	4,699	4,979
Red Rock Creek																		
Riverdale	49	249	563	861	0.1	0.6	1.5	0.7	1,121,256	3.00	33,637	780	2.1	1,126,659	3.00	33,800	None	None
San Dieguito	488	5,557	6,847	7,892	0.6	1.0	9.5	3.8	1,881,119	3.50	65,839	7,152	9.9	2,072,368	3.00	62,171	21,565	30,241
Santa Fe	None	None	593	593			0.6	0.2	1,518,200	6.27	95,191	593	0.6	1,578,000	6.59	103,990	27,539	34,900
San Ysidro	6	171	224	401	0.2	4.2	4.1	3.1	98,870	5.00	4,943	224	4.1	105,040	5.00	5,252	10,244	10,735
Scott Valley									256,135	9.00	23,052	None	None	256,235	8.00	20,499		None
Serrano										None	None				None		None	None
South Montebello	None	121	165	286	None	0.8	1.0	0.6	704,259	2.00	14,085	165	1.0	703,248	2.00	14,065	11,198	10,940
South San Joaquin	5,939	9,580	11,536	27,055	1.2	1.9	2.4	1.8	6,789,405	6.45	437,905	16,170	3.3	6,780,615	7.10	481,424	None	None
Stinson	2,509	18,881	29,498	50,888	4.8	3.6	56.5	32.4	558,341	8.50	47,458	29,498	56.5	558,341	8.50	47,387	29,496	29,193
Stratford																		
Table Mountain	None	None	140	140	None	None	1.1	0.4	240,670	4.80	11,552	140	1.1	240,670	5.00	12,034	2,868	1,907
Terra Bella	8,849	20,257	32,132	61,238	8.8	17.4	24.8	17.6	1,241,640	9.50	117,956	37,655	29.0	1,247,148	10.00	124,715	85,497	77,501
Thermalito	4,012	3,728	5,790	13,530	10.9	10.6	16.5	12.7	442,408	7.20	31,853	6,431	18.3	446,101	7.45	33,235	None	None
Tia Juana River									467,222	None	None						None	None
Tracy-Clover	614	881	1,715	3,210	6.4	9.1	17.7	11.1	103,380	8.50	8,787	2,073	21.4	103,380	9.00	9,304	None	None
Tranquillity	3,053	4,585	5,451	13,089	7.6	13.6	20.4	13.0	1,212,526	2.00	24,250	5,451	20.4	1,248,724	3.00	37,462	2,152	1,500
Tulare	402	477	593	1,472	2.4	3.7	4.6	3.5	1,978,870	0.60	11,873	593	4.6	1,869,721	0.50	9,349	500	352
Tule																		
Turlock	4,313	6,937	12,564	23,814	0.6	1.1	1.9	1.2	13,365,055	4.50	601,316	20,564	3.0	13,556,045	4.25	576,132	None	None
Vandalia	1,258	1,334	1,334	3,926	5.0	5.3	5.3	5.2	255,067	9.00	22,956	1,334	5.3	255,067	9.49	24,307	16,323	16,266
Vista	805	19,505	48,720	69,030	0.6	10.0	24.9	13.4	2,281,674	7.80	177,969	54,208	27.7	2,295,644	7.80	179,059	90,468	105,197
Walnut			None						911,000	1.00	9,110	None	None	911,454	1.00	9,115	2,799	4,494
Waterford	69	60	857	986	0.1	0.1	1.3	0.5	1,079,770	5.46	58,955	945	1.5	1,079,270	5.90	63,676	None	None
West Side	9	1,075	453	1,537	0.0	1.8	0.8	0.8	1,200,212	4.50	54,009	473	0.8	1,232,525	5.75	70,870	42,168	49,121
West Stanislaus	None	None	None						554,199	2.35	13,023	314	2.2	1,106,658	4.00	44,266	None	19,583
Williams									396,400	0.50	1,982							
Woodbridge	None	None	98	98			0.3	0.3	1,145,041	2.00	22,900	732	3.0	1,183,680	2.00	23,674	12,469	19,569
	$782,517	$1,110,133	$1,452,353	$3,346,003					$239,350,299		$10,712,850	$1,651,882		$246,741,302		$10,661,334	$2,119,210	$2,236,031

SUMMARY OF STATISTICAL DATA RELATING TO BONDS AND OUTSTANDING WARRANTS OF CALIFORNIA IRRIGATION DISTRICTS,[1] JANUARY 1, 1930

(Totals for each district are in bold face type)

TABLE IV

Name of district	Number of bond issues	Dates of bonds	Face value of bonds voted including refunding issues	Range of maturities	Coupon rates per cent	Status of bond issues, January 1, 1930							Interest bearing warrants outstanding January 1, 1930	
						Disposition of bonds			Disposition of bonds sold		Bond payments in default[2]			
						Cancelled	Unsold	Sold	Retired	Outstanding	Principal	Interest	1930	1929
Alpaugh	1	July 1, 1916	**$283,000**	July 1, 1927–1946	6	**None**	**None**	**$283,000**	**$19,810**	**$263,190**	**None**	**None**	**$21,433**	**$33,177**
Alta			**1,175,000**			**None**	**$140,000**	**1,035,000**	**763,000**	**272,000**	**None**	**None**	**None**	**None**
	1	Feb. 15, 1889	675,000		6		132,000	543,000	542,500	500				
	1-Ref.	Feb. 4, 1902	500,000	Jan. 1, 1923–1943	5		8,000	492,000	220,500	271,500				
Anderson-Cottonwood			**1,255,000**			**None**	**None**	**1,255,000**	**85,000**	**1,170,000**	**None**	**None**	**None**	**None**
	1	Jan. 1, 1916	480,000	Jan. 1, 1937–1956	6			480,000		480,000				
	2	July 1, 1917	575,000	July 1, 1938–1957	6			575,000		575,000				
	3	July 1, 1920	200,000	July 1, 1925–1934	6			200,000	85,000	115,000				
Banta-Carbona			**1,164,000**			**None**	**32,940**	**1,131,060**	**None**	**1,131,060**	**None**	**None**	**42,588**	**42,000**
	1	Aug. 1, 1924	705,000	July 1, 1940–1964	6			705,000		705,000				
	2	Dec. 1, 1925	125,000	July 1, 1941–1965	6			125,000		125,000				
	3	Jan. 1, 1927	334,000	Jan. 1, 1948–1967	6		32,940	301,060		301,060				
Bard			**None**			**None**	**None**	**None**	**None**	**None**	**None**	**None**	[10]**None**	[10]**None**
Baxter Creek[1]	1	July 1, 1921	**511,000**	Jan. 1, 1926–1943	6	**None**	**None**	**511,000**	**None**	**511,000**	**$63,000**	**$130,350**	**None**	**None**
Beaumont			**300,000**			**None**	**None**	**300,000**	**36,800**	**263,200**	**None**	**None**	**3,826**	**4,443**
	1	Nov. 1, 1920	230,000	Jan. 1, 1926–1944	6			230,000	36,800	193,200				
	2	July 1, 1926	70,000	July 1, 1931–1950	6			70,000		70,000				
Big Springs	1	July 1, 1928	**69,000**	Jan. 1, 1930–1946	6	**None**	**2,000**	**67,000**	**3,000**	**64,000**	**None**	**None**	**None**	**1,483**
Browns Valley	1		**140,000**			**None**	**None**	**140,000**	**140,000**	**None**	**None**	**None**	**1,454**	**None**
Butte Valley	1	Sept. 1, 1923	**594,000**	Jan. 1, 1944–1963	6	**None**	**None**	**594,000**	**None**	**594,000**	**None**	[8]**87,600**	**None**	**None**
Byron-Bethany			**650,000**			**None**	**None**	**650,000**	**43,000**	**607,000**	**None**	**None**	**None**	**5,000**
	1	Nov. 1, 1920	550,000	Jan. 1, 1924–1952	6			550,000	43,000	507,000				
	2	Sept. 1, 1923	100,000	July 1, 1933–1955	6			100,000		100,000				
Camp Far West	1	July 1, 1927	**200,000**	July 1, 1937–1956	6	**None**	**21 000**	**179,000**	**None**	**179,000**	**None**	**None**	**None**	**None**
Carmichael			**120,000**			**None**	**None**	**120,000**	**19,800**	**100,200**	**None**	**None**	**None**	**None**
	1	July 1, 1916	90,000	July 1, 1923–1942	6			90,000	19,800	70,200				
	2	Jan. 1, 1926	30,000	Jan. 1, 1933–1945	6			30,000		30,000				
Carpenter[1]	1	July 1, 1929	**200,000**	July 1, 1934–1953	6	**None**	**200,000**	**None**	**None**	**None**	**None**	**None**	**None**	**None**
Citrus Heights	1	Aug. 1, 1921	**262,000**	July 1, 1926–1945	6	**None**	**47,000**	**215,000**	**24,000**	**191,000**	**None**	**None**	**None**	**None**
Compton-Delevan			**959,000**			**52,000**	**126,000**	**781,000**	**397,000**	**384,000**	**None**	**None**	**None**	**None**
	1	Dec. 1, 1921	575,000	Jan. 1, 1922–1936	6	52,000		523,000	397,000	126,000				
	1-Ref.	Jan. 1, 1927	384,000	Jan. 1, 1937–1950	6		126,000	258,000		258,000				
Consolidated			**850,000**			**None**	**None**	**850,000**	**505,000**	**345,000**	**None**	**None**	**None**	**None**
	1	July 1, 1922	775,000	Jan. 1, 1924–1933	5½			775,000	459,000	316,000				
	2	July 1, 1922	75,000	Jan. 1, 1924–1933	5½			75,000	46,000	29,000				
Corcoran	1	Jan. 1, 1920	**760,000**	Jan. 1, 1931–1955	6	**None**	**None**	**760,000**	**None**	**760,000**	**None**	**None**	**35,000**	**70,000**
Cordua			**454,000**			**None**	**111,000**	**343,000**	**85,000**	**258,000**	**None**	**None**	**None**	**None**
	1	June 1, 1920	192,000	July 1, 1925–1940	6			192,000	60,000	132,000				
	2	June 1, 1921	75,000	July 1, 1925–1940	6		10,000	65,000	25,000	40,000				
	3-Ref.	June 1, 1925	187,000	July 1, 1941–1951	6		101,000	86,000		86,000				
Crescent[1]			**None**			**None**	**None**	**None**	**None**	**None**	**None**	**None**	**None**	**None**
Crooks Canyon[1]			**80,000**			**80,000**	**None**	**None**	**None**	**None**	**None**	**None**	**None**	**None**
Deer Creek	1	Sept. 1, 1927	**25,000**	July 1, 1929–1938	6	**None**	**None**	**25,000**	**2,500**	**22,500**	**None**	**None**	**None**	**None**
East Contra Costa[4]			**1,324,000**			**23,000**	**None**	**1,301,000**	**45,000**	**1,256,000**	**None**	**None**	**None**	**None**
Brentwood	1	Jan. 1, 1924	514,000	Jan. 1, 1935–1954	6			514,000		514,000				
Knightsen	1	July 1, 1921	650,000	July 1, 1927–1946	6			650,000	45,000	605,000				
Lone Tree	1	Mar. 1, 1922	160,000	Jan. 1, 1928–1947	6	23,000		137,000		137,000				
El Camino	1	Nov. 1, 1926	**430,000**	Jan. 1, 1937–1956		**None**	**7,000**	**423,000**	**None**	**423,000**	**None**	**None**	**None**	**None**
	1st Div.			Jan. 1, 1937–1956	6			275,000		275,000				
	2d Div.			Jan. 1, 1940–1952	6			28,000		28,000				
	3d Div.			Jan. 1, 1940–1956	6			120,000		120,000				

SUMMARY OF STATISTICAL DATA RELATING TO BONDS AND OUTSTANDING WARRANTS OF CALIFORNIA IRRIGATION DISTRICTS,[1] JANUARY 1, 1930

TABLE IV
Continued

(Totals for each district are in bold face type)

Name of district	Number of bond issues	Dates of bonds	Face value of bonds voted including refunding issues	Range of maturities	Coupon rates per cent	Status of bond issues, January 1, 1930							Interest bearing warrants outstanding January 1, 1930	
						Disposition of bonds			Disposition of bonds sold		Bond payments in default			
						Cancelled	Unsold	Sold	Retired	Outstanding	Principal	Interest[2]	1930	1929
El Dorado	1	Mar. 1, 1927	$1,300,000	Jan. 1, 1948–1967	6	None	$700,000	$600,000	None	$600,000	None	None	None	None
El Nido			None			None	None	None	None	None	None	None	$3,272	None
Fairoaks	1	Oct. 1, 1918	200,000	July 1, 1924–1943	6	None	40,000	160,000	$36,000	124,000	None	None	None	None
Fallbrook										None			3,537	$4,829
Foothill	1	Sept. 1, 1927	2,270,000	July 1, 1948–1967	6	None	2,270,000	None	None	None	None	None	10,618	17,630
Fresno			2,000,000			None	None	2,000,000	1,500,000	500,000	None	None	None	None
	1	Mar. 18, 1921	1,750,000	Jan. 1, 1923–1932	6			1,750,000	1,314,000	436,000				
	2	Mar. 18, 1921	250,000	Jan. 1, 1923–1932	6			250,000	186,000	64,000				
Glenn-Colusa[5]			2,887,000			$182,850	15,000	2,689,150	1,030,300	1,658,850	None	None	91,190	67,800
	1	Oct. 1, 1920	2,587,000	Jan. 1, 1922–1941	6	182,850		2,404,150	1,030,300	1,373,850				
	1-Ref.	Nov. 1, 1924	300,000	Jan. 1, 1935–1941	6		15,000	285,000		285,000				
Grenada	1	July 1, 1921	240,000	July 1, 1926–1940	6	None	None	240,000	None	240,000	64,000	$51,960	22,564	15,024
Hemet			None			None	None	None	None	None	None	None	6,320	4,409
Hot Spring Valley			160,000			None	None	160,000	58,000	102,000	None	None	10,000	6,400
	1	May 1, 1920	100,000	Jan. 1, 1923–1936	6			100,000	52,000	48,000				
	2	Oct. 15, 1921	60,000	Jan. 1, 1927–1939	6			60,000	6,000	54,000				
Imperial			16,000,000			None	None	16,000,000	900,000	15,100,000	None	None	176,036	225,614
	1	Jan. 1, 1915	3,500,000	Jan. 1, 1936–1955	5			3,500,000		3,500,000				
	2	July 1, 1917	2,500,000	July 1, 1938–1957	5			2,500,000		2,500,000				
	3	Oct. 1, 1919	2,500,000	July 1, 1925–1934	5½			2,500,000	900,000	1,600,000				
	4	July 1, 1922	7,500,000	July 1, 1935–1956	6			7,500,000		7,500,000				
Island No. 3			None			None	None	None	None	None	None	None	None	None
Jacinto	1	Dec. 1, 1920	238,000	Jan. 1, 1923–1942	6	None	None	238,000	60,000	178,000	None	None	None	None
James	1	May 15, 1920	1,000,000	Jan. 1, 1928–1947	6	None	None	1,000,000	5,000	995,000	145,000	205,350	120	2,100
La Canada			328,000			None	None	328,000	None	328,000	None	None	None	None
	1	July 1, 1925	154,000	July 1, 1936–1960	5			154,000		154,000				
	2	July 1, 1928	174,000	July 1, 1949–1968	5			174,000		174,000				
Ladera			200,000			None	200,000	None	None	None	None	None	None	None
Laguna	1	July 1, 1921	265,000	July 1, 1923–1932	6	None	None	265,000	185,500	79,500	None	None	None	None
Lakeland[1]			None			None	None	None	None	None	None	None	None	None
Lakeside	1	Feb. 1, 1925	35,000	Jan. 1, 1946–1965	6	None	None	35,000	None	35,000	None	None	12,081	13,398
La Mesa, Lemon Grove and Spring Valley			3,732,500			1,166,500	500,000	2,066,000	10,000	2,056,000	None	None	None	None
	1	July 1, 1914	1,232,500	June 30, 1935–1939	6	1,166,500		66,000	10,000	56,000				
	2	Jan. 1, 1925	2,500,000	Jan. 1, 1946–1965	6		500,000	2,000,000		2,000,000				
Lemoore[1]			None			None	None	None	None	None	None	None	None	None
Linden														
Lindsay-Strathmore			1,650,000			None	None	1,650,000	58,500	1,591,500	None	None	112,057	74,482
	1	July 1, 1916	1,400,000	July 1, 1927–1946	6			1,400,000	56,000	1,344,000				
	2	Oct. 1, 1918	250,000	Oct. 1, 1929–1948	6			250,000	2,500	247,500				
Littlerock Creek			368,000			None	None	368,000	8,000	360,000	2,000	None	None	4,212
	3	July 1, 1914	60,000	Jan. 1, 1934–1954	5			60,000		60,000				
	4	Jan. 16, 1920	200,000	Jan. 1, 1941–1960	6			200,000		200,000				
	5	May 1, 1921	48,000	Jan. 1, 1925–1942	6			48,000	8,000	40,000	2,000			
	6	Jan. 1, 1925	60,000	Jan. 1, 1941–1960	6			60,000		60,000				
Lucerne[1]			None			None	None	None	None	None	None	None	None	None
Madera	1		28,000,000			None	27,800,000	200,000	200,000	None	None	None	1	None
	1st Div.	Oct. 1, 1921		July 1, 1927–1928	6			200,000	200,000					

SUMMARY OF STATISTICAL DATA RELATING TO BONDS AND OUTSTANDING WARRANTS OF CALIFORNIA IRRIGATION DISTRICTS,[1] JANUARY 1, 1930

TABLE IV
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(Totals for each district are in bold face type)

Name of district	Number of bond issues	Dates of bonds	Face value of bonds voted including refunding issues	Range of maturities	Coupon rates per cent	Status of bond issues, January 1, 1930							Interest bearing warrants outstanding January 1, 1930	
						Disposition of bonds			Disposition of bonds sold		Bond payments in default			
						Cancelled	Unsold	Sold	Retired	Outstanding	Principal	Interest[2]	1930	1929
Maxwell	1	Sept. 15, 1918	**$260,000**	Jan. 1, 1922–1941	6	**None**	**None**	**$260,000**	**$26,000**	**[4]$234,000**	**$78,000**	**$54,570**	**$436**	**$44,190**
Merced			**16,250,000**			**None**	**None**	**16,250,000**	**None**	**16,250,000**	**None**	**None**	**None**	**None**
	1 1st Div.	Jan. 1, 1922	3,120,000	Jan. 1, 1933–1950	6			3,120,000		3,120,000				
	1 2d Div.	Jan. 1, 1922	1,800,000	Jan. 1, 1951–1953	5½			1,800,000		1,800,000				
	1 3d Div.	Jan. 1, 1922	1,420,000	Jan. 1, 1954–1955	5½			1,420,000		1,420,000				
	1 4th Div.	Jan. 1, 1922	5,660,000	Jan. 1, 1956–1962	6			5,660,000		5,660,000				
	2	May 1, 1924	3,250,000	Jan. 1, 1937–1964	6			3,250,000		3,250,000				
	3	April 1, 1926	1,000,000	Jan. 1, 1965–1966	5½			1,000,000		1,000,000				
Modesto			**5,137,511**			**$46,000**	**$236,000**	**4,855,511**	**590,204**	**4,265,307**	**None**	**None**	**None**	**None**
	1-Ref.	May 1, 1902	1,056,511	Jan. 1, 1923–1942	5	46,000		1,010,511	447,604	562,907				
	2	Jan. 1, 1903	18,000	Jan. 1, 1914–1923	6			18,000	18,000					
	2-Ref.	Jan. 5, 1904	332,000	Jan. 1, 1925–1944	5			332,000	103,600	228,400				
	3	July 1, 1909	200,000	July 1, 1930–1939	5			200,000	12,000	188,000				
	4	Jan. 1, 1911	50,000	Jan. 1, 1932–1941	5			50,000	1,000	49,000				
	5	July 1, 1914	500,000	July 1, 1935–1954	6			500,000		500,000				
	6	July 1, 1914	110,000	July 1, 1935–1954	6			110,000		110,000				
	7	July 1, 1920	1,180,000	July 1, 1931–1950	6			1,180,000		1,180,000				
	8	July 1, 1920	181,600	July 1, 1931–1950	6			181,600		181,600				
	9	July 1, 1920	150,000	July 1, 1931–1950	6			150,000		150,000				
	10	July 1, 1920	190,000	July 1, 1931–1950	6			190,000		190,000				
	11	July 1, 1920	298,400	July 1, 1931–1950	6			298,400		298,400				
	12	Oct. 1, 1923	135,000	July 1, 1934–1953	5			135,000	6,000	129,000				
	13	Jan. 1, 1924	500,000	July 1, 1944–1953	5			500,000	2,000	498,000				
	14	Jan. 1, 1927	236,000	Jan. 1, 1942–1951	5		236,000							
Mojave River[1]	1		**5,600,000**			**None**	**5,600,000**	**None**	**None**	**None**	**None**	**None**	**None**	**2,625**
	1st Div.	Aug. 15, 1922		Jan. 1, 1933–	6		25,000							
	2d Div.	Jan. 1, 1924		Jan. 1, 1935–1954	6		2,150,000							
Montague[7]	1	Jan. 1, 1926	**1,395,000**	Jan. 1, 1947–1966	6			**1,395,000**	**None**	**1,395,000**	**None**	**27,350**	**None**	**None**
Naglee-Burk			**392,000**			**None**	**196,500**	**195,500**	**9,500**	**186,000**	**21,000**	**None**	**8,303**	**8,802**
	1	Oct. 1, 1921	200,000	July 1, 1926–1940	6		5,000	195,000	9,500	185,500	21,000			
	1-Ref.	July 1, 1927	192,000	July 1, 1933–1967	6		191,500	500		500				
Nevada			**9,842,000**			**None**	**1,898,000**	**7,944,000**	**None**	**7,944,000**	**None**	**None**	**40,578**	**442,506**
	1 1st Div.	July 1, 1925	6,000,000	July 1, 1936–1965	5½			6,000,000		6,000,000				
	1 2d Div.	July 1, 1926	1,250,000	July 1, 1933–1965	5½			1,250,000		1,250,000				
	2	July 1, 1928	2,592,000	July 1, 1949–1962	5½		1,898,000	694,000		694,000				
Newport Heights	1	Jan. 1, 1920	**160,000**	Jan. 1, 1941–1960	6	**None**	**None**	**160,000**	**None**	**160,000**	**None**	**None**	**None**	**None**
Newport Mesa	1	June 1, 1919	**50,000**	July 1, 1940–1959	6	**None**	**None**	**50,000**	**None**	**50,000**	**None**	**None**	**None**	**None**
Oakdale			**3,675,000**			**None**	**None**	**3,675,000**	**185,000**	**3,490,000**	**None**	**None**	**87,577**	**77,677**
	1	July 1, 1910	1,600,000	July 1, 1931–1940	5			1,600,000		1,600,000				
	2	Jan. 1, 1913	400,000	Jan. 1, 1934–1943	5			400,000		400,000				
	3	July 1, 1915	400,000	July 1, 1936–1955	6			400,000		400,000				
	4	Jan. 1, 1924	175,000	Jan. 1, 1925–1931	5½			175,000	150,000	25,000				
	5	June 21, 1925	1,100,000	Jan. 1, 1927–1965	5			1,100,000	35,000	1,065,000				
Oroville-Wyandotte	1	Jan. 1, 1923	**2,000,000**	Jan. 1, 1944–1963	6	**None**	**941,000**	**1,059,000**	**None**	**1,059,000**	**None**	**None**	**25,879**	**19,765**
Owens Valley[1]	1	Jan. 1, 1924	**1,650,000**	Jan. 1, 1940–1959	5½	**None**	**1,178,500**	**471,500**	**None**	**471,500**	**None**	**90,764**	**None**	**None**
Palmdale			**545,000**			**None**	**100,000**	**445,000**	**None**	**445,000**	**None**	**120,150**	**27,249**	**15,296**
	1	May 16, 1920	382,000	Jan. 1, 1941–1960	6			382,000						
	2	May 1, 1921	63,000	Jan. 1, 1933–1942	6			63,000						
	3	June 1, 1925	100,000	Jan. 1, 1941–1960	6		100,000							
Palo Verde[8]			**6,507,330**			**32,000**	**1,562,000**	**4,913,330**	**653,000**	**[8]4,260,330**	**None**	**None**	**90,000**	**90,000**
Mutual Water Co.	1	Feb. 1, 1916	500,000	Feb. 1, 1922–1935	6			500,000	270,000	230,000				
Levee District	1	May 1, 1918	1,285,951	May 1, 1919–1958	6½	[9]32,000		1,253,951	320,000	933,951				
Levee District	2	Nov. 1, 1922	371,379	Nov. 1, 1923–1962	6½			371,379	63,000	308,379				
Drainage District	1	Dec. 1, 1921	850,000	Jan. 1, 1933–1942	6			850,000		850,000				
Irrigation District	1 1st Div.	Sept. 1, 1925	3,114,000	July 1, 1937–1955	6		1,464,000	1,650,000		1,650,000				
Irrigation District	1 2d Div.	Sept. 1, 1925	173,000	July 1, 1938–1955	6		98,000	75,000		75,000				
Irrigation District	2-Ref.	Sept. 1, 1925	213,000	July 1, 1937–1955	6			213,000		213,000				

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TABLE IV
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(Totals for each district are in bold face type)

Name of district	Number of bond issues	Dates of bonds	Face value of bonds voted including refunding issues	Range of maturities	Coupon rates per cent	Status of bond issues, January 1, 1930							Interest bearing warrants outstanding January 1, 1930	
						Disposition of bonds			Disposition of bonds sold		Bond payments in default			
						Cancelled	Unsold	Sold	Retired	Outstanding	Principal	Interest[2]	1930	1929
Paradise			**$490,000**			None	None	**$490,000**	**$6,000**	**$484,000**	None	None	None	None
	1	May 1, 1917	350,000	May 1, 1938–1957	6			350,000		350,000				
	2	July 1, 1920	140,000	July 1, 1925–1956	6			140,000	6,000	134,000				
Potter Valley	1	July 1, 1928	**100,000**	July 1, 1933–1952	5½	None	**$3.000**	**97,000**	None	**97,000**	None	None	None	None
Princeton-Codora-Glenn	1	July 1, 1918	**175,000**	July 1, 1939–1958	6	None	None	**175,000**	None	**175,000**	None	None	**$3,900**	**$8,491**
Provident			**1,190,000**			None	None	**1,190,000**	**170,000**	**1,020,000**	None	**$11,000**	None	None
	1	Aug. 15, 1918	1,000,000	Aug. 15, 1930–1949	6			1,000,000		1,000,000		11,000		
	2	Aug. 9, 1921	190,000	July 1, 1922–1933	6			190,000	170,000	20,000				
Ramona	1	July 1, 1926	**91,000**	July 1, 1947–1966	6	None	None	**91,000**	None	**91,000**	None	None	**5,727**	**10,015**
Red Rock Creek[1]			**442,160**			None	**442,160**	None	None	None	None	None	None	**12,000**
	1 1st Div.	Jan. 1, 1926	175,000	Jan. 1, 1947–1966	6		175,000							
	1		267,160				267,160							
Riverdale	1	Oct. 1, 1922	**123,000**	July 1, 1925–1933	6	None	None	**123,000**	**58,000**	**65,000**	None	None	None	None
San Dieguito	1	April 1, 1923	**400,000**	Jan. 1, 1931–1950	6	None	None	**400,000**	None	**400,000**	None	None	None	None
Santa Fe	1	Nov. 1, 1923	**700,000**	July 1, 1933–1952	6	None	None	**700,000**	None	**700,000**	None	None	None	None
San Ysidro	1	Jan. 1, 1913	**25,000**	Jan. 1, 1934–1943	5	None	None	**25,000**	None	**25.000**	None	None	**28,796**	**32,485**
Scott Valley	1	July 1, 1920	**125,000**	July 1, 1923–1937	6	None	None	**125,000**	**47,000**	**78,000**	None	None	None	**5,000**
Serrano	1	July 1, 1929	**200,000**	July 1, 1934–1953	6	None	**200,000**	None	None	None	None	None	None	None
South Montebello	1	June 30, 1923	**125,000**	Jan. 1, 1926–1945	6	None	None	**125,000**	**31,000**	**94,000**	None	None	None	None
South San Joaquin			**5,985,000**			None	None	**5,985,000**	**35,000**	**5,950,000**	None	None	**108,057**	None
	1	July 1, 1910	1,875,000	July 1, 1931–1940	5			1,875,000		1,875,000				
	2	April 18, 1913	1,170,000	April 18, 1934–1942	5			1,170,000		1,170,000				
	3	July 1, 1913	790,000	July 1, 1934–1943	5			790,000		790,000				
	4	Sept. 1, 1919	500,000	July 1, 1940–1959	5½			500,000		500,000				
	5	Nov. 6, 1923	550,000	July 1, 1944–1963	5½			550,000		550,000				
	6	June 21, 1925	1,100,000	Jan. 1, 1927–1965	5			1,100,000	35,000	1,065,000				
Stinson	1	April 1, 1923	**360,000**	Jan. 1, 1931–1950	6	None	None	**360,000**	None	**360,000**	None	**16,086**	**33,688**	**22,772**
Table Mountain			**187,000**			None	None	**187,000**	None	**187,000**	None	None	**882**	None
	1	July 1, 1923	125,000	July 1, 1944–1963	6			125,000		125,000				
	2	Mar. 1, 1927	62,000	Jan. 1, 1948–1967	6			62,000		62,000				
Terra Bella	1	Nov. 1, 1916	**1,000,000**	Nov. 1, 1927–1946	6	None	None	**1,000,000**	**107,000**	**893,000**	None	None	None	None
Thermalito			**320,000**			None	None	**320,000**	None	**320,000**	None	None	**3,563**	**2,236**
	1	Mar. 1, 1923	270,000	Jan. 1, 1934–1953	6			270,000		270,000				
	2	May 1, 1926	50,000	Jan. 1, 1947–1966	6			50,000		50,000				
Tia Juana River			None					None		None	None	None	None	None
Tracy-Clover	1	May 1, 1923	**52,170**	Jan. 1, 1939–1963	6	None	None	**52,170**	None	**52,170**	None	None	None	None
Tranquillity	1	Jan. 1, 1920	**260,000**	Jan. 1, 1924–1955	5½	None	None	**260,000**	**10,000**	**250,000**	None	None	**11,627**	**2,000**
Tulare	1		**500,000**			None	None	**500,000**	**500,000**	None	None	None	None	None
Tule[1]	1	July 1, 1921	**806,000**	Jan. 1, 1926–1943	6	None	None	**806,000**	None	**806,000**	**$94,000**	**215,208**		
Turlock			**9,114,000**			**$44,000**	None	**9,070,000**	**2,010,000**	**7,059,900**	None	None	None	None
	Original		1,200,000					1,200,000	1,200,000					
	1-Ref.	July 1, 1902	1,200,000	Jan. 1, 1922–1942	5	44,000		1,156,000	540,000	616,000				
	1	Jan. 1, 1905	200,000	Jan. 1, 1926–1935	5			200,000	70,100	129,900				
	2	July 1, 1910	100,000	July 1, 1931–1940	5			100,000		100,000				
	3	Jan. 1, 1911	1,206,000	Jan. 1, 1932–1941	5			1,206,000		1,206,000				
	4	July 1, 1920	2,570,000	July 1, 1936–1951	6			2,570,000		2,570,000				
	5	July 1, 1920	1,028,000	July 1, 1936–1951	6			1,028,000		1,028,000				
	6	July 1, 1920	510,000	July 1, 1941–1960	5½			510,000		510,000				
	7	Jan. 1, 1924	500,000	Jan. 1, 1927–1936	5			500,000	200,000	300,000				
	8	Dec. 31, 1926	600,000	July 1, 1932–1946	5			600,000		600,000				

SUMMARY OF STATISTICAL DATA RELATING TO BONDS AND OUTSTANDING WARRANTS OF CALIFORNIA IRRIGATION DISTRICTS, JANUARY 1, 1930

TABLE IV
Continued

(Totals for each district are in bold face type)

Name of district	Number of bond issue	Date of bond issue	Status of bond issues, January 1, 1930												Interest bearing warrants outstanding January 1, 1930	
			Amount of bonds issued	Amount of bonds unissued	Description of bonds						Rate of interest	Date value of bonds voted by initial election	Bonds payments in default			
					Original	Current	Sold	Refund.	Optional	Principal	Interest					
Turlock	1	May 1, 1917	$4,980,000	None	None	$4,980,000	$4,980,000	$4,980,000	None	None	None	1917	None	None	None	None
	2	May 1, 1917	820,000			820,000	820,000	820,000								
	3	July 1, 1920	180,000			180,000	180,000	180,000								
Potter Valley	1	July 1, 1928	180,000	None	None	180,000	52,000	52,000	None	None	None	1928	None	None	None	None
Modesto-Ceres-Turlock	1	July 1, 1928	125,000	None	None	125,000	125,000	125,000	None	None	None	1928	None	None	52,000	52,891
Provident	1	July 1, 1929	1,180,000	None	None	1,180,000	None	None	None	None	None	1929	None	None	None	None
	2	Aug. 1, 1929	1,000,000			1,000,000										
	3	July 1, 1929	180,000			180,000										
Hanford	1	July 1, 1929	91,000	None	None	91,000	None	None	None	None	None	1929	None	None	5,727	10,015
Red Rock Creek	1	Feb. 1, 1930	412,160	None	None	None	None	None	None	None	None	1930	None	None	None	12,000
	1	Jan. 1, 1930	178,000													
	1		207,160													
Riverside	1	Oct. 1, 1928	722,000	None	None	722,000	722,000	722,000	None	None	None	1928	None	None	None	None
San Dieguito	1	April 1, 1928	400,000	None	None	400,000	400,000	400,000	None	None	None	1928	None	None	None	None
Delta #1	1	Nov. 1, 1924	700,000	None	None	700,000	700,000	700,000	None	None	None	1924	None	None	None	None
San Ysidro	1	Jan. 1, 1928	25,000	None	None	25,000	25,000	25,000	None	None	None	1928	None	None	28,798	82,485
Scott Valley	1	July 1, 1929	125,000	None	None	125,000	125,000	47,000	None	None	None	1929	None	None	None	6,000
Newman	1	July 1, 1929	200,000	None	None	None	None	None	None	None	None	1929	None	None	None	None
South Montebello	1	June 30, 1923	122,000	None	None	122,000	123,000	37,000	None	None	None	1923	None	None	None	None
South San Joaquin	1	July 1, 1910	8,895,000	None	None	8,895,000	23,000	5,350,000	None	None	None	1910	None	None	108,057	None
	1	Jan. 1, 1911	1,875,000			1,875,000										
	2	April 15, 1912	170,000			170,000										
	3	July 1, 1918	700,000			700,000										
	4	Sept. 1, 1919	600,000			600,000										
	5	Nov. 1, 1922	850,000			850,000										
	6	June 21, 1923	1,100,000			1,100,000										
Stinson	1	April 1, 1922	380,000	None	None	380,000	None	380,000	None	None	None	1922	None	None	32,688	22,272
Tracy Metropolis	1	July 1, 1924	187,000	None	None	187,000	None	None	None	None	None	1924	None	None	852	None
	1	July 1, 1924	125,000			125,000										
	2	June 1, 1927	62,000			62,000										
Tracy Hills	1	May 1, 1918	1,000,000	None	None	1,000,000	107,000	232,000	None	None	None	1918	None	None	None	None
Thermalito	1	May 1, 1923	220,000	None	None	220,000	None	220,000	None	None	None	1923	None	None	8,852	2,258
	1	May 1, 1923	270,000			270,000										
	2	May 1, 1929	80,000			80,000										
Tia Juana River			None			None										
Tracy Cities	1	May 1, 1928	82,170	None	None	82,170	None	82,170	None	None	None	1928	None	None	None	None
Tranquillity	1	Jan. 1, 1930	200,000	None	None	200,000	None	200,000	None	None	None	1930	None	None	41,827	2,009
Turlock	1		800,000	None	None	800,000	None	800,000	None	None	None	1929	None	None	None	None
Vista	1	July 1, 1923	805,000	None	None	805,000	None	805,000	None	None	None	1923	None	None	54,200	215,298
Ventura	1		8,114,000	None	None	8,114,000	844,000	8,070,000	None	None	None	1929	None	None	None	None
	1		1,200,000			1,200,000		1,200,000								
	1	July 1, 1929	1,709,000	None	None	1,709,000	14,000	1,709,000	None	None	None	1929	None	None	70,109	
	2		2,270,000			2,270,000		2,270,000								
	3		100,000			100,000		100,000								
	4		2,270,000			2,270,000		2,270,000								
	5		810,000			810,000		810,000								
	6		800,000			800,000		800,000								
	7		800,000			800,000		800,000								

SUMMARY OF STATISTICAL DATA RELATING TO BONDS AND OUTSTANDING WARRANTS OF CALIFORNIA IRRIGATION DISTRICTS,[1] JANUARY 1, 1930

TABLE IV
Continued

(Totals for each district are in bold face type)

Name of district	Number of bond issues	Dates of bonds	Face value of bonds voted including refunding issues	Range of maturities	Coupon rates per cent	Status of bond issues, January 1, 1930							Interest bearing warrants outstanding January 1, 1930	
						Disposition of bonds			Disposition of bonds sold		Bond payments in default			
						Cancelled	Unsold	Sold	Retired	Outstanding	Principal	Interest[2]	1930	1929
Vandalia	1	April 1, 1924	**$210,000**	Jan. 1, 1928–1947	6	**None**	**None**	**$210,000**	**$16,800**	**$193,200**	**None**	**None**	**None**	**None**
Vista	1	Jan. 1, 1925	**1,700,000**	Jan. 1, 1946–1965	6	**None**	**None**	**1,700,000**	**None**	**1,700,000**	**None**	**None**	**None**	**None**
Walnut			**None**			**None**	**None**	**None**	**None**	**None**	**None**	**None**	**$32,000**	**$38,000**
Waterford			**670,000**			**None**	**None**	**670,000**	**18,525**	**651,475**	**None**	**None**	**6,265**	**None**
	1	Oct. 1, 1916	465,000	Oct. 1, 1927–1946	6			465,000	9,300	455,700				
	2	July 1, 1919	205,000	July 1, 1927–1946	5½			205,000	9,225	195,775				
West Side			**595,000**			**None**	**$39,000**	**556,000**	**15,000**	**541,000**	**None**	**None**	**49,268**	**64,389**
	1	Jan. 1, 1917	295,000	Jan. 1, 1938–1957	6			295,000		295,000				
	2	July 1, 1918	100,000	July 1, 1939–1958	6			100,000		100,000				
	3	Jan. 1, 1920	150,000	Jan. 1, 1930–1939	6			150,000	15,000	135,000				
	4	Feb. 1, 1929	50,000	Jan. 1, 1950–1969	6		39,000	11,000		11,000				
West Stanislaus	1	July 1, 1927	**1,216,376**	July 1, 1932–1957	6	**None**	**141,376**	**1,075,000**	**None**	**1,075,000**	**None**	**None**	**None**	**None**
Williams[5]			**1,198,000**			**None**	**234,000**	**964,000**	**395,000**	**569,000**	**$10,000**	**$122,370**	**41,598**	**41,597**
	1	July 1, 1921	600,000	Jan. 1, 1923–1937	6		147,000	453,000	395,000	58,000				
	2 1st Div. Ref.	Jan. 1, 1924	466,000	Jan. 1, 1942–1959	6		87,000	379,000		379,000				
	2 2d Div.	Jan. 1, 1924	115,000	Jan. 1, 1959–1961	6			115,000		115,000				
	3	June 1, 1924	17,000	Jan. 1, 1945–1961	6			17,000		17,000				
Woodbridge	1	Mar. 1, 1928	**325,000**	Jan. 1, 1930–1954	5½	**None**	**17,000**	**308,000**	**5,000**	**303,000**	**None**	**None**	**None**	**None**
			$154,627,047			**$1,626,350**	**$45,000,476**	**$108,200,221**	**$11,108,339**	**$97,091,882**	**$477,000**	**$1,132,758**	**$1,157,490**	**$1,536,287**

[1] Summary contains data on Crooks Canyon, Owens Valley, Red Rock Creek, Crescent, Lakeland, Lemoore, Lucerne, Mojave River, Tule and Baxter Creek districts which are considered as inactive or partially active.
[2] Does not include interest on bonds after date of maturity.
[3] Interest payments due from July 1, 1927, to January 1, 1932, inclusive, deferred by agreement made with bondholders.
[4] East Contra Costa district formed in 1926 by consolidation of Brentwood, Knightsen and Lone Tree irrigation districts.
[5] By agreement, bonds of Williams Irrigation District, now consolidated with Glenn-Colusa district, are an obligation against lands in Williams district only.
[6] Negotiations are being carried on relative to compromise of Maxwell indebtedness.
[7] Organized as an irrigation district, but name changed to Montague Water Conservation District, September, 1926.
[8] Includes Levee district, Drainage district and Mutual Water Co. bonds which were assumed by Palo Verde irrigation district.
[9] Bonds matured prior to date of sale.
[10] Construction charges Bureau of Reclamation not considered.

TABLE V. BOND OBLIGATIONS OF ACTIVE CALIFORNIA IRRIGATION DISTRICTS JANUARY 1, 1930

District	Year formed	Estimated area		Bonds outstanding, total	Bonds outstanding per acre	
		Gross acres	Irrigable acres		Gross area	Irrigable area
Alpaugh	1915	8,175	8,039	$263,190	$32 19	$32 74
Alta	1888	129,300	112,600	272,000	2 10	2 41
Anderson-Cottonwood	1914	32,000	28,064	1,170,000	36 56	41 69
Banta-Carbona	1921	14,379	14,248	1,131,060	78 66	79 38
Baxter Creek	1917	9,336	8,636	511,000	54 73	59 17
Beaumont	1919	4,141	3,161	263,200	63 56	83 26
Big Springs	1927	3,570	2,546	64,000	17 93	25 14
Butte Valley	1920	28,686	17,500	594,000	20 71	33 94
Byron-Bethany	1919	17,200	12,544	607,000	35 29	48 39
Camp Far West	1924	4,089	2,658	179,000	43 78	67 34
Carmichael	1916	3,138	3,038	100,200	31 93	32 98
Citrus Heights	1920	3,077	3,066	191,000	62 07	62 30
Compton-Delevan	1920	12,652	11,500	384,000	30 35	33 39
Consolidated	1921	149,047	145,757	345,000	2 31	2 37
Corcoran	1919	51,606	51,000	760,000	14 73	14 90
Cordua	1919	5,461	5,421	258,000	47 24	47 59
Deer Creek	1926	1,907	1,663	22,500	11 80	13 53
East Contra Costa	1926	20,200	19,760	1,256,000	62 18	63 56
El Camino	1921	7,549	7,549	423,000	56 03	56 03
El Dorado	1925	30,000	19,905	600,000	20 00	30 14
Fairoaks	1917	3,900	3,400	124,000	31 79	36 47
Fresno	1920	241,300	239,080	500,000	2 07	2 09
Glenn-Colusa	1920	121,592	118,592	1,658,850	13 64	13 99
Grenada	1921	4,948	3,510	240,000	48 50	68 38
Hot Spring Valley	1919	9,497	9,000	102,000	10 74	11 33
Imperial	1911	605,000	515,000	15,100,000	24 96	29 32
Jacinto	1917	11,554	10,300	178,000	15 41	17 28
James	1920	26,266	18,266	995,000	37 88	54 47
La Canada	1924	1,294	1,294	328,000	253 48	253 48
Laguna	1920	34,858	30,000	79,500	2 28	2 65
Lakeside	1924	320	288	35,000	109 38	121 53
La Mesa, Lemon Grove and Spring Valley	1913	18,000	13,500	2,056,000	114 22	151 85
Lindsay-Strathmore	1915	15,250	14,540	1,591,500	104 36	109 46
Littlerock Creek	1892	3,073	2,877	360,000	117 15	125 13
Maxwell	1918	8,820	6,000	234,000	26 53	39 00
Merced	1919	189,682	171,700	16,250,000	85 67	94 64
Modesto	1887	81,183	78,759	4,265,307	52 54	54 16
Montague	1925	26,117	18,531	1,395,000	53 41	75 28
Naglee Burk	1920	2,871	2,846	186,000	64 79	65 35
Nevada	1921	263,500	164,000	7,944,000	30 15	48 44
Newport Heights	1918	1,503	1,503	160,000	106 45	106 45
Newport Mesa	1918	694	400	50,000	72 05	125 00
Oakdale	1909	74,240	66,800	3,490,000	47 01	52 25
Oroville-Wyandotte	1919	24,100	22,300	1,059,000	43 94	47 49
Palmdale	1918	4,756	4,698	445,000	93 57	94 72
Palo Verde	1923	88,693	70,000	4,260,330	48 03	60 86
Paradise	1916	11,260	9,836	484,000	42 98	49 21
Potter Valley	1924	5,042	4,195	97,000	19 24	23 12
Princeton-Codora-Glenn	1916	13,656	12,290	175,000	12 81	14 24
Provident	1918	22,805	21,000	1,020,000	44 73	48 57
Ramona	1925	650	585	91,000	140 00	155 55
Riverdale	1920	15,830	14,800	65,000	4 11	4 39
San Dieguito	1922	3,900	3,700	400,000	102 56	108 11
Santa Fe	1923	10,106	6,980	700,000	69 27	100 29
San Ysidro	1911	502	462	25,000	49 80	54 11
Scott Valley	1917	5,125	4,000	78,000	15 22	19 50
South Montebello	1922	910	829	94,000	103 30	113 39
South San Joaquin	1909	71,112	66,465	5,950,000	83 67	89 52
Stinson	1921	11,750	11,000	360,000	30 64	32 73
Table Mountain	1922	1,955	1,780	187,000	95 65	105 06

TABLE V. BOND OBLIGATIONS OF ACTIVE CALIFORNIA IRRIGATION DISTRICTS JANUARY 1, 1930—Continued

District	Year formed	Estimated area		Bonds outstanding, total	Bonds outstanding per acre	
		Gross acres	Irrigable acres		Gross area	Irrigable area
Terra Bella	1915	12,285	12,070	$893,000	$72 69	$73 98
Thermalito	1922	3,110	2,940	320,000	102 89	108 84
Tracy-Clover	1922	1,084	984	52,170	48 13	53 02
Tranquillity	1918	10,750	10,190	250,000	23 26	24 53
Tule	1920	15,015	9,795	806,000	53 68	82 29
Turlock	1887	181,498	179,278	7,059,900	38 90	39 38
Vandalia	1923	1,276	1,253	193,200	151 41	154 19
Vista	1923	18,162	14,610	1,700,000	93 60	116 36
Waterford	1913	14,110	11,424	651,475	46 17	57 03
West Side	1915	11,828	11,811	541,000	45 74	45 80
West Stanislaus	1920	21,400	21,000	1,075,000	50 23	51 19
Woodbridge	1924	13,851	13,330	303,000	21 88	22 73
Totals and averages	----	2,877,496	2,512,446	$96,051,382	$33 38	$38 23

PUBLICATIONS

DIVISION OF WATER RESOURCES

PUBLICATIONS OF THE

DIVISION OF WATER RESOURCES

DEPARTMENT OF PUBLIC WORKS

STATE OF CALIFORNIA

When the Department of Public Works was created in July, 1921, the State Water Commission was succeeded by the Division of Water Rights, and the Department of Engineering was succeeded by the Division of Engineering and Irrigation in all duties except those pertaining to State Architect. Both the Division of Water Rights and the Division of Engineering and Irrigation functioned until August, 1929, when they were consolidated to form the Division of Water Resources.

STATE WATER COMMISSION

First Report, State Water Commission, March 24 to November 1, 1912.
Second Report, State Water Commission, November 1, 1912, to April 1, 1914.
*Biennial Report, State Water Commission, March 1, 1915, to December 1, 1916.
Biennial Report, State Water Commission, December 1, 1916, to September 1, 1918.
Biennial Report, State Water Commission, September 1, 1918, to September 1, 1920.

DIVISION OF WATER RIGHTS

*Bulletin No. 1—Hydrographic Investigation of San Joaquin River, 1920–1923.
*Bulletin No. 2—Kings River Investigation, Water Master's Reports, 1918–1923.
*Bulletin No. 3—Proceedings First Sacramento-San Joaquin River Problems Conference, 1924.
*Bulletin No. 4—Proceedings Second Sacramento-San Joaquin River Problems Conference, and Water Supervisor's Report, 1924.
Bulletin No. 5—San Gabriel Investigation—Basic Data, 1923–1926.
Bulletin No. 6—San Gabriel Investigation—Basic Data, 1926–1928.
Bulletin No. 7—San Gabriel Investigation—Analysis and Conclusions, 1929.
*Biennial Report, Division of Water Rights, 1920–1922.
*Biennial Report, Division of Water Rights, 1922–1924.
Biennial Report, Division of Water Rights, 1924–1926.
Biennial Report, Division of Water Rights, 1926–1928.

DEPARTMENT OF ENGINEERING

*Bulletin No. 1—Cooperative Irrigation Investigations in California, 1912–1914.
*Bulletin No. 2—Irrigation Districts in California, 1887–1915.
Bulletin No. 3—Investigations of Economic Duty of Water for Alfalfa in Sacramento Valley, California, 1915.
*Bulletin No. 4—Preliminary Report on Conservation and Control of Flood Waters in Coachella Valley, California, 1917.
*Bulletin No. 5—Report on the Utilization of Mojave River for Irrigation in Victor Valley, California, 1918.
*Bulletin No. 6—California Irrigation District Laws, 1919 (now obsolete).
Bulletin No. 7—Use of water from Kings River, California, 1918.
*Bulletin No. 8—Flood Problems of the Calaveras River, 1919.
Bulletin No. 9—Water Resources of Kern River and Adjacent Streams and Their Utilization, 1920.
*Biennial Report, Department of Engineering, 1907–1908.
*Biennial Report, Department of Engineering, 1908–1910.
*Biennial Report, Department of Engineering, 1910–1912.
*Biennial Report, Department of Engineering, 1912–1914.
*Biennial Report, Department of Engineering, 1914–1916.
*Biennial Report, Department of Engineering, 1916–1918.
*Biennial Report, Department of Engineering, 1918–1920.

* Reports and Bulletins out of print. These may be borrowed by your local library from the California State Library at Sacramento, California.

DIVISION OF WATER RESOURCES

Including Reports of the Former Division of Engineering and Irrigation

*Bulletin No. 1—California Irrigation District Laws, 1921 (now obsolete).
*Bulletin No. 2—Formation of Irrigation Districts, Issuance of Bonds, etc., 1922.
Bulletin No. 3—Water Resources of Tulare County and Their Utilization, 1922.
Bulletin No. 4—Water Resources of California, 1923.
Bulletin No. 5—Flow in California Streams, 1923.
Bulletin No. 6—Irrigation Requirements of California Lands, 1923.
*Bulletin No. 7—California Irrigation District Laws, 1923 (now obsolete).
*Bulletin No. 8—Cost of Water to Irrigators in California, 1925.
Bulletin No. 9—Supplemental Report on Water Resources of California, 1925.
*Bulletin No. 10—California Irrigation District Laws, 1925 (now obsolete).
Bulletin No. 11—Ground Water Resources of Southern San Joaquin Valley, 1927.
Bulletin No. 12—Summary Report on the Water Resources of California and a Coordinated Plan for Their Development, 1927.
Bulletin No. 13—The Development of the Upper Sacramento River, containing U. S. R. S. Cooperative Report on Iron Canyon Project, 1927.
Bulletin No. 14—The Control of Floods by Reservoirs, 1928.
*Bulletin No. 18—California Irrigation District Laws, 1927 (now obsolete).
Bulletin No. 18—California Irrigation District Laws, 1929 Revision.
Bulletin No. 19—Santa Ana Investigation, Flood Control and Conservation (with packet of maps), 1928.
Bulletin No. 20—Kennett Reservoir Development, an Analysis of Methods and Extent of Financing by Electric Power Revenue, 1929.
*Bulletin No. 21—Irrigation Districts in California, 1929.
Bulletin No. 21-A—Report on Irrigation Districts in California for the Year 1929, 1930.
Bulletin No. 22—Report on Salt Water Barrier (two volumes), 1929.
Bulletin No. 23—Report of Sacramento-San Joaquin Water Supervisor, 1924–1928.
Bulletin No. 24—A Proposed Major Development on American River, 1929.
Biennial Report, Division of Engineering and Irrigation, 1920–1922.
Biennial Report, Division of Engineering and Irrigation, 1922–1924.
Biennial Report, Division of Engineering and Irrigation, 1924–1926.

COOPERATIVE AND MISCELLANEOUS REPORTS

*Report of the Conservation Commission of California, 1912.
*Irrigation Resources of California and Their Utilization (Bul. 254, Office of Exp. Sta., U. S. D. A.), 1913.
*Report, State Water Problems Conference, November 25, 1916.
*Report on Pit River Basin, April, 1915.
*Report on Lower Pit River Project, July, 1915.
*Report on Iron Canyon Project, 1914.
*Report on Iron Canyon Project, California, May, 1920.
*Sacramento Flood Control Project (Revised Plans), 1925.
Report of Commission Appointed to Investigate Causes Leading to the Failure of St. Francis Dam, 1928.
Report of the Joint Committee of the Senate and Assembly Dealing With the Water Problems of the State, 1929.

PAMPHLETS

Rules and Regulations Governing the Supervision of Dams in California, 1929.
Water Commission Act with Latest Amendments Thereto, 1929.
Rules and Regulations Governing the Appropriation of Water in California, 1929.
Rules and Regulations Governing the Determination of Rights to Use of Water in Accordance with the Water Commission Act, 1925.
Tables of Discharge for Parshall Measuring Flumes, 1928.
General Plans, Specifications and Bills of Material for Six and Nine Inch Parshall Measuring Flumes, 1930.

* Reports and Bulletins out of print. These may be borrowed by your local library from the California State Library at Sacramento, California.

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