U. S. DEPARTAMENT OF AGRICULTURE. OFFICE OF EXPERIMENT STATIONS-BULLETIN 237. IRRIGATION IN CALIFORNIA

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649327690

U. S. Departament of Agriculture. Office of Experiment Stations-Bulletin 237. Irrigation in California by F. W. Roeding & A. C. True

Except for use in any review, the reproduction or utilisation of this work in whole or in part in any form by any electronic, mechanical or other means, now known or hereafter invented, including xerography, photocopying and recording, or in any information storage or retrieval system, is forbidden without the permission of the publisher, Trieste Publishing Pty Ltd, PO Box 1576 Collingwood, Victoria 3066 Australia.

All rights reserved.

Edited by Trieste Publishing Pty Ltd. Cover @ 2017

This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out, or otherwise circulated without the publisher's prior consent in any form or binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

www.triestepublishing.com

F. W. ROEDING & A. C. TRUE

U. S. DEPARTAMENT OF AGRICULTURE. OFFICE OF EXPERIMENT STATIONS-BULLETIN 237. IRRIGATION IN CALIFORNIA

Trieste

Issued May 4, 1911.

U. S. DEPARTMENT OF AGRICULTURE. OFFICE OF EXPERIMENT STATIONS-BULLETIN 287.

412

A. C. TRUE, Director.

IRRIGATION IN CALIFORNIA.

F. W. ROEDING, Irrigation Manager.

PARFARED UNDER THE DIRECTION OF SAMUEL FORTIER, Chief of Irrigation Investigation.

[The work on which this report is based was done under a cooperative agreement between the Office of Experiment Stations of the U.S. Department of Agriculture and the State of California.]



WASHINGTON: GOVERNMENT PRINTING OFFICE. 1911.

OFFICE OF EXPERIMENT STATIONS.

A. C. TRUE, Director. E. W. ALLEN, Assistant Director.

IRRIGATION INVESTIGATIONS.

SAMUEL FORTIER, Chief. B. P. TEELE, Assistant Chief.

IRRIGATION ENGINEERS AND IRRIGATION MANAGERS.

A. P. STOVEB, Irrigation Engineer, in charge of work in Oregon.
C. E. TAIT, Irrigation Engineer, in charge of work in southern California.
S. O. JAYNE, Irrigation Manager, in charge of work in Washington.
FRANK ADAMS, Irrigation Manager, in charge of work in California.

W. W. McLaughlin, Irrigation Engineer, in charge of work in Utah.

P. E. FULLES, Irrigation Engineer, in charge of work in Arizona and of power investigations.

W. L. ROCKWELL, Irrigation Manager, in charge of work in Texas.

D. H. BARK, Irrigation Engineer, in charge of work in Idaho.

MILO B. WILLIAMS, Irrigation Engineer, in charge of work in humid sections.

V. M. CONE, Irrigation Engineer, in charge of work in central California.

C. G. HASKELL, Irrigation Engineer, in charge of rice investigations.

FRED G. HARDEN, Scientific Assistant.

R. D. ROBERTSON, Assistant Irrigation Engineer.

J. W. LONGSTRETH, in charge of work in Kansas.

S. H. BECKETT, Scientific Assistant.

COLLABORATORS.

O. V. P. STOUT, University of Nebraska, in charge of work in Nebraska.

GORDON H. TRUE, University of Nevada, in charge of work in Nevada.

W. B. GREGORY, Tulane University of Louisiana, in charge of rice irrigation in Louisiana and Texas.

F. L. BIXBY, New Mexico Agricultural College, in charge of work in New Mexico.

IRBIGATION FARMERS.

JOHN H. GORDON, R. G. HEMPHILL, W. H. LAUCK, R. E. MAHONEY, and JOHN KRALL, Jr.

[Bull. 237]

(2)

LETTER OF TRANSMITTAL.

UNITED STATES DEPARTMENT OF AGRICULTURE, OFFICE OF EXPERIMENT STATIONS, Washington, D. C., January 27, 1911.

SIR: I have the honor to transmit herewith a report on irrigation in California, prepared by F. W. Roeding, irrigation manager, under the direction of Samuel Fortier, chief of irrigation investigations of this Office. This is one of a series of reports dealing with irrigation in the arid States and Territories prepared for the purpose of answering inquiries regarding conditions and the opportunities and cost of settlement which come to this Department in great numbers. The work on this report was done under a cooperative agreement between the Office of Experiment Stations and the State of California, each paying half the expenses.

It is recommended that the report be published as a bulletin of this Office.

(8)

Respectfully,

A. C. TRUE, Director.

Hon. JAS. WILSON,

Secretary of Agriculture.

[Bull. 237]

Restars 8-19-42 mg2-

- 1 $\langle \widehat{\mathbf{x}} \rangle$

CONTENTS.

	Page.
General description	9
Climate	9
Population	12
Industries	12
Assessed valuation	13
Transportation facilities	13
Water resources	14
Sacramento River drainage.	15
San Joaquin River drainage	
Other streams of importance	19
Lakes and storage facilities,	10000
Underground supply	
Lands.	
그는 그는 것은 것이 가지 않는 것이 있는 것이 같이 있는 것이 있는 것이 있는 것이 같이 있는 것이 같이 있다. 것이 같이 많은 것이 같이 많이 있는 것이 같이 있는 것이 없는 것이 같이 있는 것이 없다.	10.55
Products	
-History of irrigation development	
Water laws	
Irrigation enterprises	
Reclamation Service projects	42
Orland project	
Yuma, or Laguna, project	
Klamath project	43
Irrigation districts	43
Modesto district	43
Turlock district	45
Alta district	45
Tulare district	46
South San Joaquin and Oakdale districts	47
Private irrigation systems	48
California Development Company	
San Diego Flume Company	
Riverside Water Company and Gage Canal Company	
Kern County Land Company	
Kern Valley Irrigation Company	
Fresno and Consolidated Canals companies	
San Joaquin and Kings River Canal and Irrigation Company	
Crocker-Huffman Land and Water Company	
Butte County and Sutter County canals.	
Sacramento Valley Irrigation Company	
Area of lands under canals	
Cost of preparing land for irrigation.	
thall oper	OT
15011, 257	

(5)

jê.

7

*

ILLUSTRATIONS.

PLATE.

. .

Page. 14

PLATE I. Map of California showing streams available for irrigation	14
FIGURES.	
FIGURE 1. Orland project	42

	Orland project	42
2.	Yuma, or Laguna, project	43
3.	Klamath project	44
4.	Modesto and Turlock irrigation districts	44
5.	Alta irrigation district	45
6.	Tulare irrigation district	46
7.	South San Joaquin irrigation district	47
	Oakdale irrigation district	47
9.	California Development Company	48
	San Diego Flume Company	50
11.	Riverside Water Company and Gage Canal Company	51
12.	Kern County Land Company and Kern Valley Irrigation Company	52
13.	Freeno and Consolidated Canal companies	54
14.	San Joaquin and Kings River Canal and Irrigation Company	55
15.	Crocker-Huffman Land and Water Company	56
16.	Butte County and Sutter County Canal companies	57
17.	Sacramento Valley Irrigation Company	58
(B.11	997]	

(7)

.