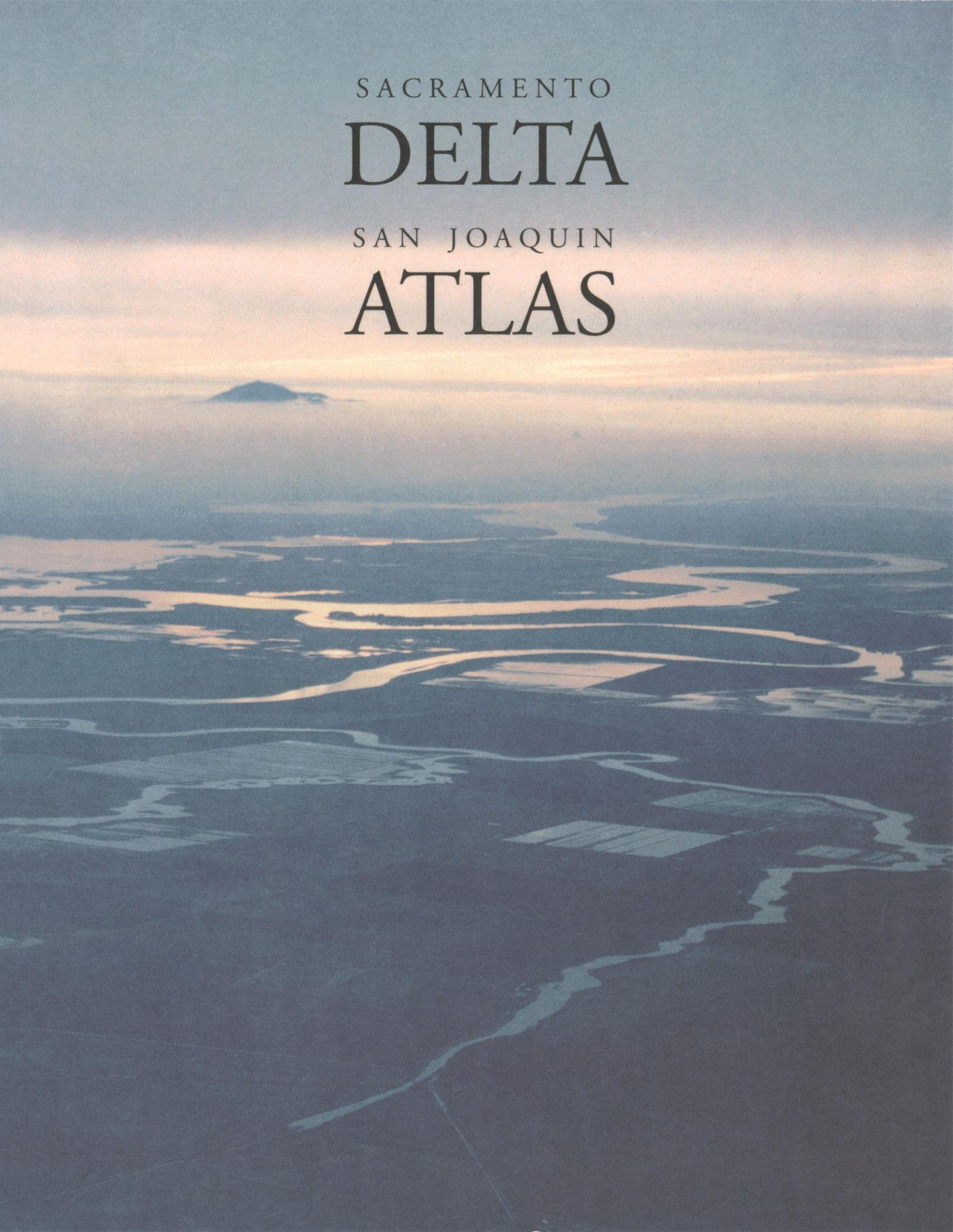
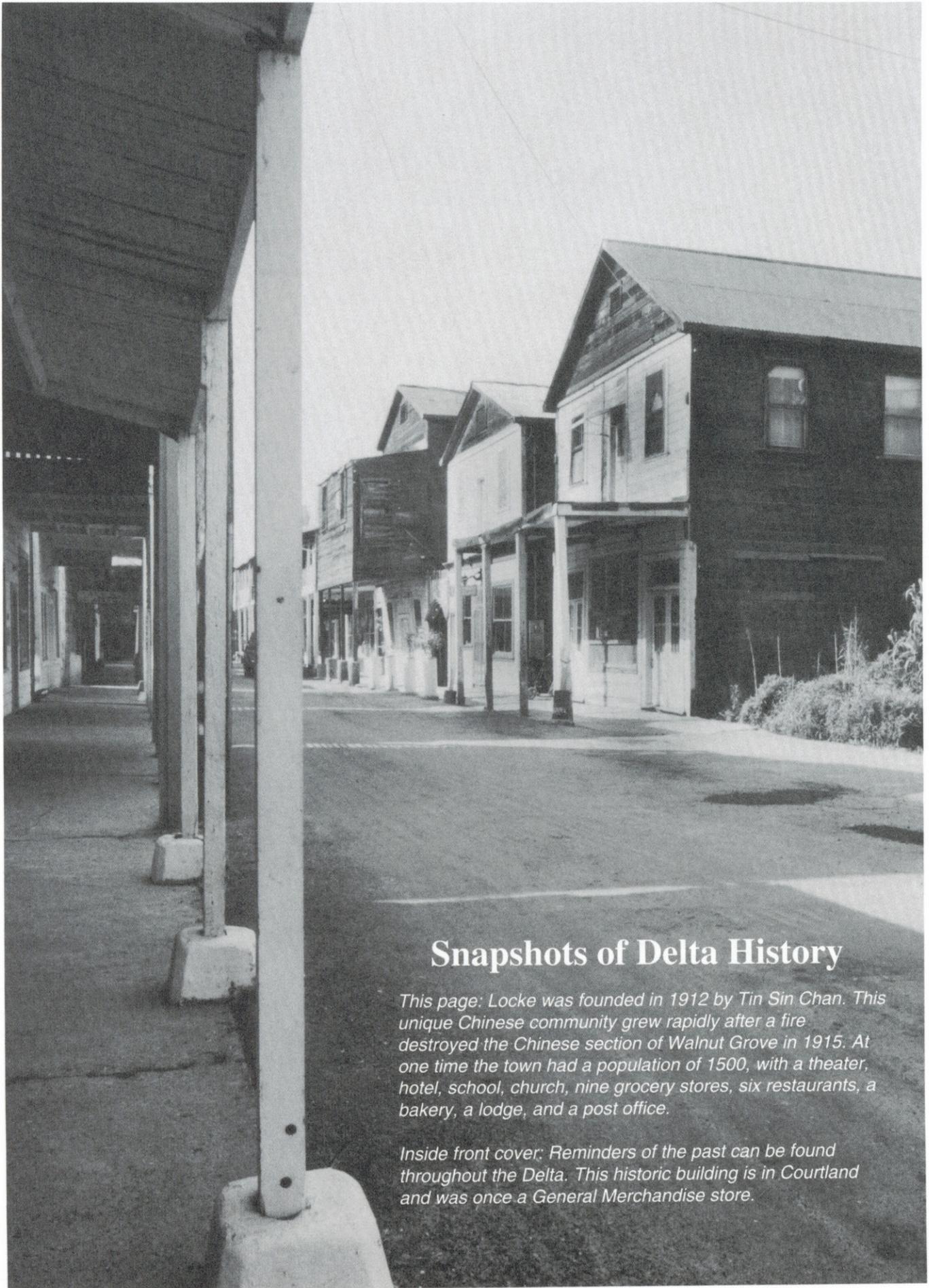


SACRAMENTO
DELTA
SAN JOAQUIN
ATLAS





Snapshots of Delta History

This page: Locke was founded in 1912 by Tin Sin Chan. This unique Chinese community grew rapidly after a fire destroyed the Chinese section of Walnut Grove in 1915. At one time the town had a population of 1500, with a theater, hotel, school, church, nine grocery stores, six restaurants, a bakery, a lodge, and a post office.

Inside front cover: Reminders of the past can be found throughout the Delta. This historic building is in Courtland and was once a General Merchandise store.

S A C R A M E N T O

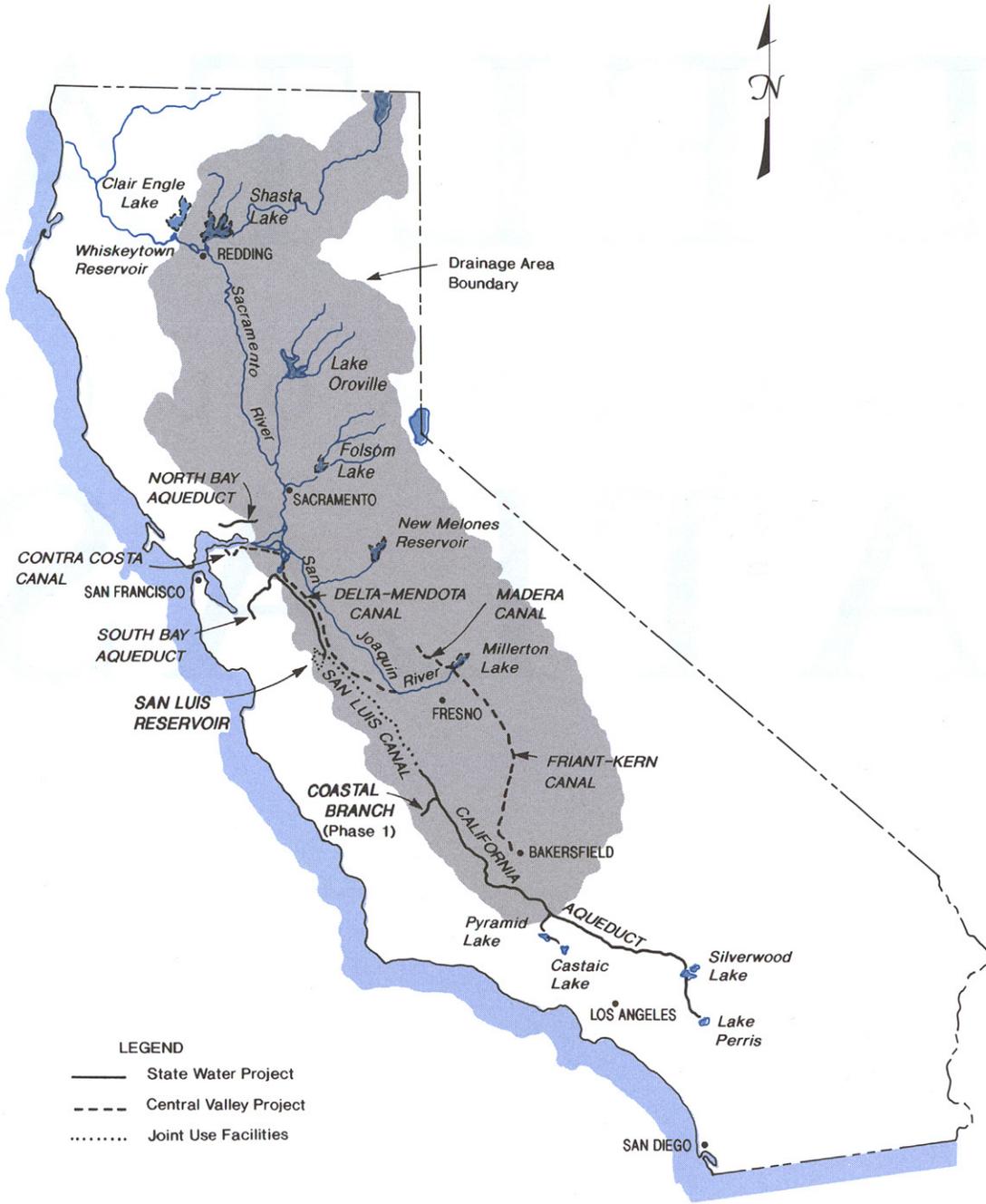
DELTA

S A N J O A Q U I N

ATLAS



California Department of Water Resources
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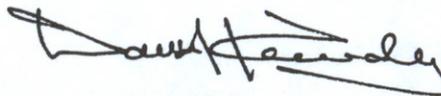
Major Features of State Water Project and Central Valley Project

FOREWORD

The Delta of the Sacramento and San Joaquin rivers is California's water supply crossroads. It is the major collection point for water that serves over 20 million people, two-thirds of our State's population.

The maze of islands and channels lying at the confluence of these two large rivers has long been the focal point of debate surrounding a number of complicated water-related issues of statewide importance. People with a wide variety of interests—agricultural, urban, industrial, environmental, and recreational—have a vital stake in the Delta and a need to understand the physical Delta and its complex interrelationships.

This atlas provides information that we hope will be helpful in addressing the complex problems of the estuary. The atlas is a revision of the Sacramento-San Joaquin Delta Atlas that was published in 1987. It contains updates on many Delta facts and features. It also introduces new information on the Suisun Marsh and tides and hydrology in the Delta as well as in San Francisco Bay.



David N. Kennedy, Director
Department of Water Resources
The Resources Agency
State of California

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Copies of the Sacramento-San Joaquin Delta Atlas are available for \$5.00 from:
State of California
Department of Water Resources
P.O. Box 942836
Sacramento, CA 94236-0001

Make checks payable to Department of Water Resources. California residents add current sales tax.

INTRODUCTION

The Delta is a unique and valuable resource and an integral part of California's water system. It receives runoff from over 40 percent of the State's land area including flows from the Sacramento, San Joaquin, Mokelumne, Cosumnes, and Calaveras rivers. The Delta provides habitat for many species of fish, birds, mammals, and plants; supports agricultural and recreational activities; and is the focal point for water distribution throughout the State.

The development of today's Delta began in late 1850 when the Swamp and Overflow Land Act conveyed ownership of all swamp and overflow land, including Delta marshes, from the federal government to the State of California. Proceeds from the sale of swampland by the State were to go toward reclaiming the swamplands. In 1861, the State Legislature created the Board of Swamp and Overflowed Land Commissioners to manage reclamation projects. In 1866, the Board's authority was transferred to county boards of supervisors. In 1868, the Legislature removed acreage ownership limitations and by 1871 most of California's swampland was in private ownership.

Developers first thought levees 4 feet high and 12 feet at the base would protect Delta lands from tides and river overflow, but that proved inadequate for Delta peat soils. By 1869, substantial levees had been constructed on Sherman Island and Twitchell Island by Chinese laborers, and in 1870 and 1871 the owners reaped bountiful harvests of grain and row crops. Small-scale reclamation projects were started on Rough and Ready Island and Roberts Island in the 1870s, but the peat soils showed their weakness as levees. The peat soils would sink, blow away when dry, and develop deep cracks and fissures throughout the levee system. Sherman and Twitchell Islands flooded annually in the early 1870s.

By 1874, reclamation and preservation costs for Sherman Island's levees had totaled \$500,000. This is equivalent to \$6.2 million dollars today.

In the late 1870s, the developers had begun to realize that hand- and horse-powered labor could not maintain the reclaimed Delta islands. Steam-powered dredges began to be used to move the large volume of alluvial soils from the river channels to construct the large levees. These dredges were capable of moving material at about half the cost of hand labor.

The peak of Delta land reclamation was reached with the clamshell-type dredge, still commonly used. Advantages of this machine over its predecessors were versatility, ease of operation, and modest capital and operating costs.

After World War I, the number of operating dredges decreased greatly, as nearly all Delta marshland had been reclaimed. By this time, the Delta had been transformed from a large tidal marsh to the series of improved channels and leveed islands we know today.

The Delta covers 738,000 acres interlaced with hundreds of miles of waterways. Much of the land is below sea level and relies on more than 1,000 miles of levees for protection against flooding. Its land and waterways support communities, agriculture, and recreation, and provide essential habitat for fish and wildlife.

The Sacramento-San Joaquin Delta Atlas provides information for readers who wish to understand the complex interrelationships within the Delta and grasp its significance to the State.





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