

SWRCB Workshop Southern Delta Salinity Objectives

January 16 and 19, 2007



Department of Water Resources

Introduction

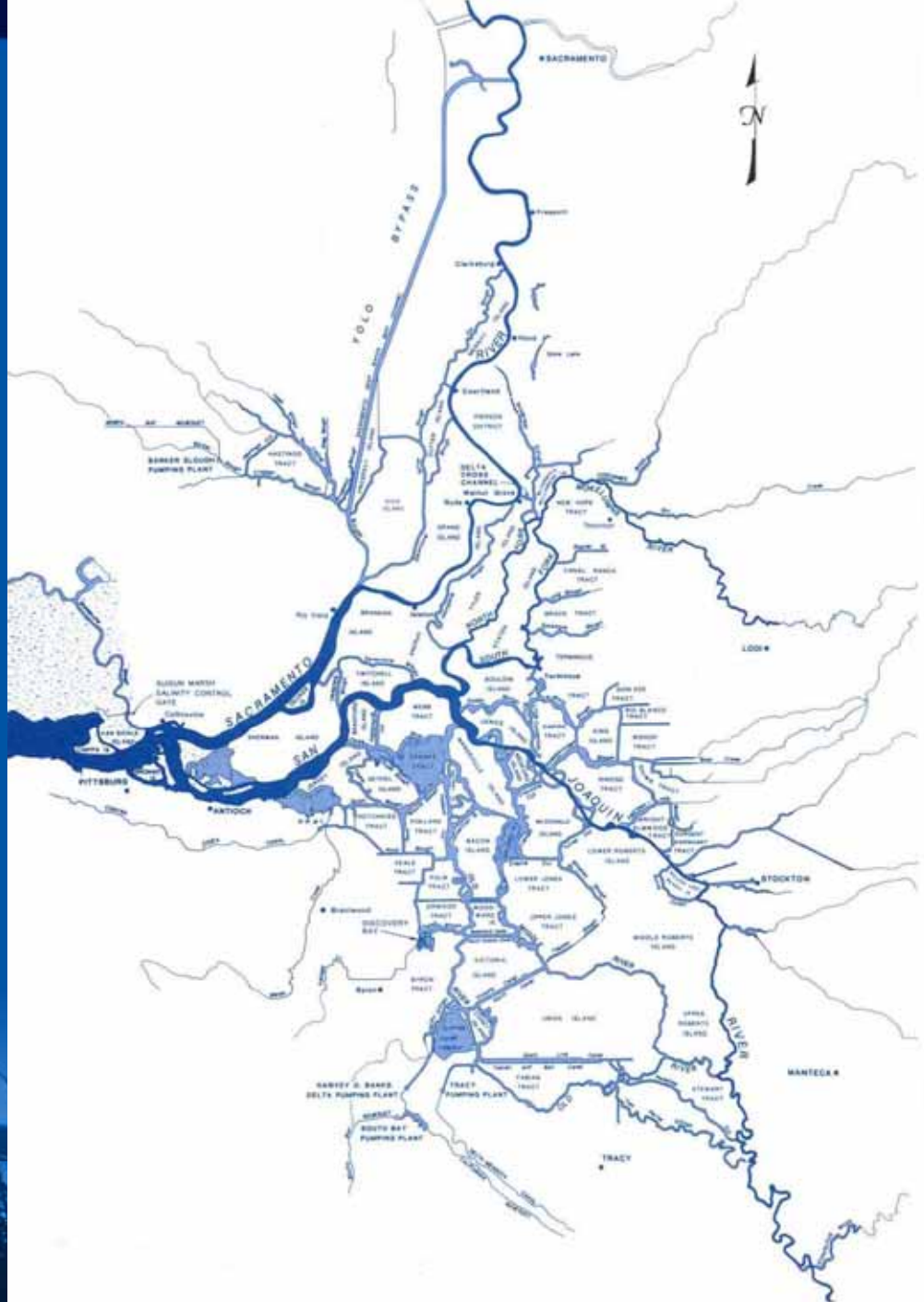
- Overview of SWP and CVP Facilities
- Historical Salinity Levels in the Delta
- Effects on Salinity in the Southern Delta
 - Delta Simulation Model 2
 - Particle Tracking Model Animations
- Discharges in the Southern Delta
- Crops and Irrigation Intakes in South Delta
- Temporary Barriers and Permanent Gates
- Future Study Needs
- Implementation Methods

SWP/CVP Facilities





Delta Inflow and Exports



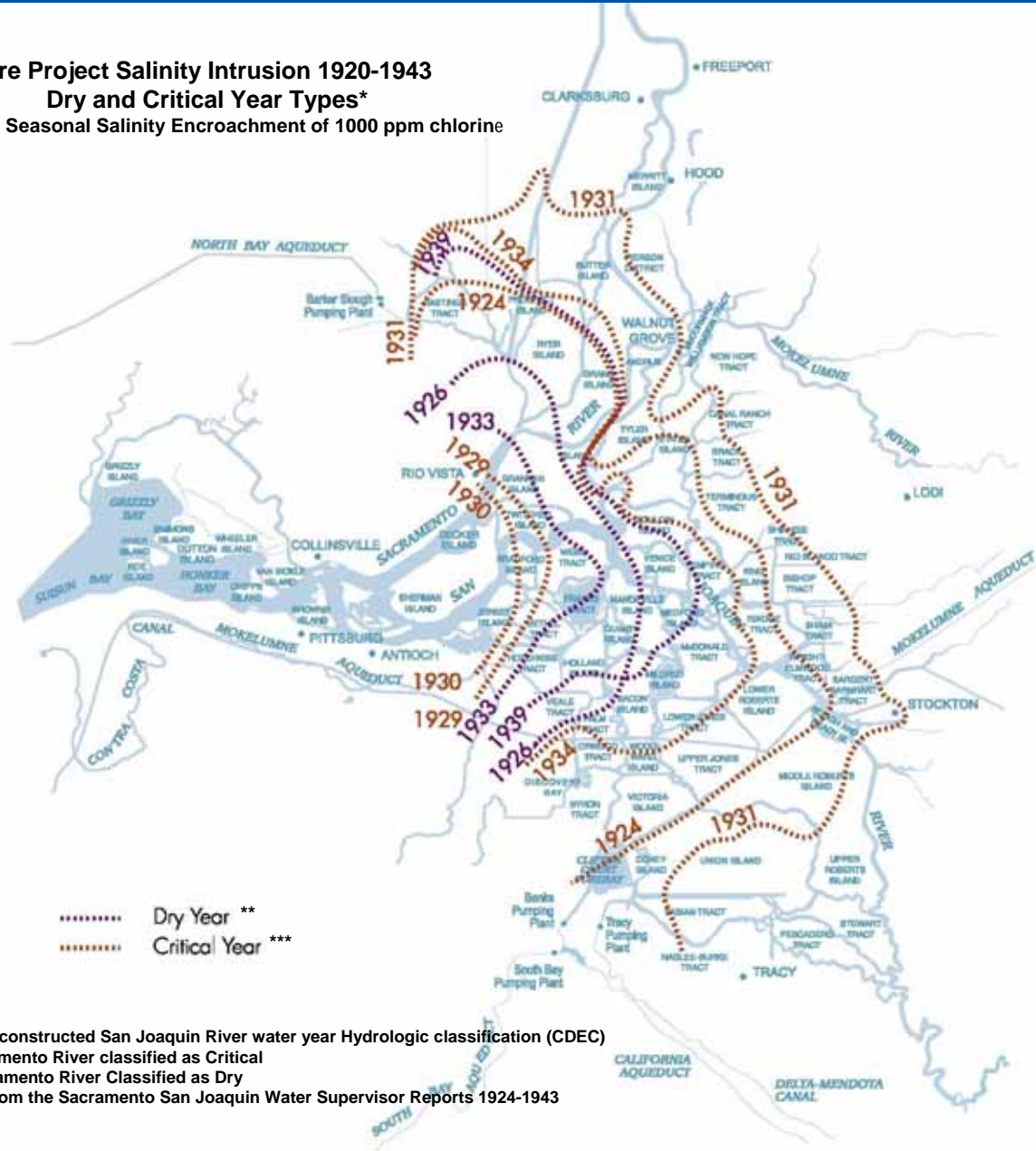


Project Export Facilities

Historic Salinity Levels in Delta

- Investigation of Delta salinity initiated in 1920's due to increasing seasonal salinity intrusion
 - Dry hydrology in 1917 and 1919
 - Increasing agricultural diversions upstream reducing inflow
- In dryer years inflow insufficient to meet Delta consumptive use demands
- 1931 Salinity intrusion well into South Delta
 - 1000 ppm chloride in Middle River near Old River
 - Significant Crop damage due to salinity throughout Delta

Pre Project Salinity Intrusion 1920-1943
Dry and Critical Year Types*
 Maximum Seasonal Salinity Encroachment of 1000 ppm chlorine



..... Dry Year **
 _____ Critical Year ***

*Based on reconstructed San Joaquin River water year Hydrologic classification (CDEC)

**1933 Sacramento River classified as Critical

***1930 Sacramento River Classified as Dry

Developed from the Sacramento San Joaquin Water Supervisor Reports 1924-1943