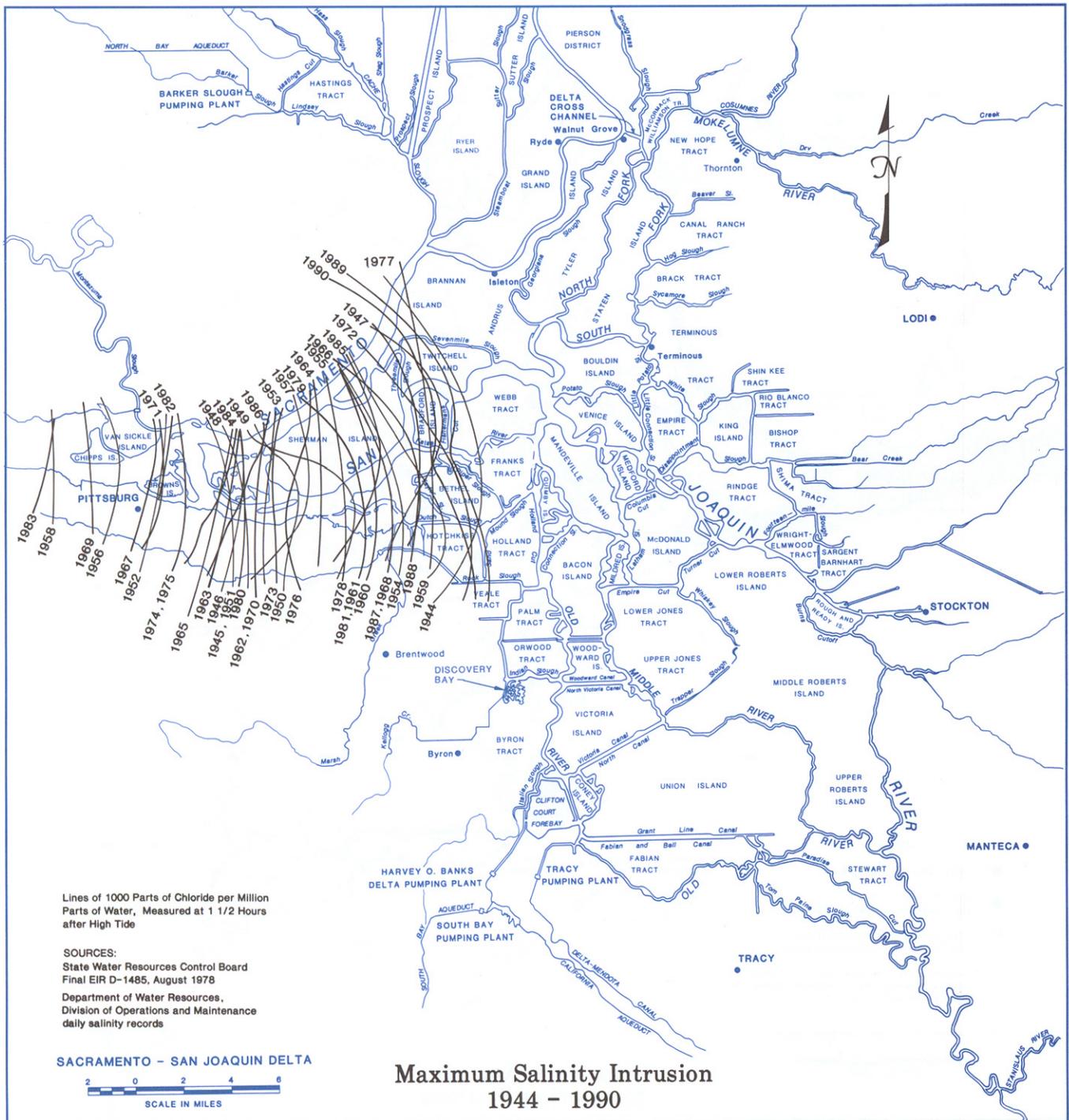


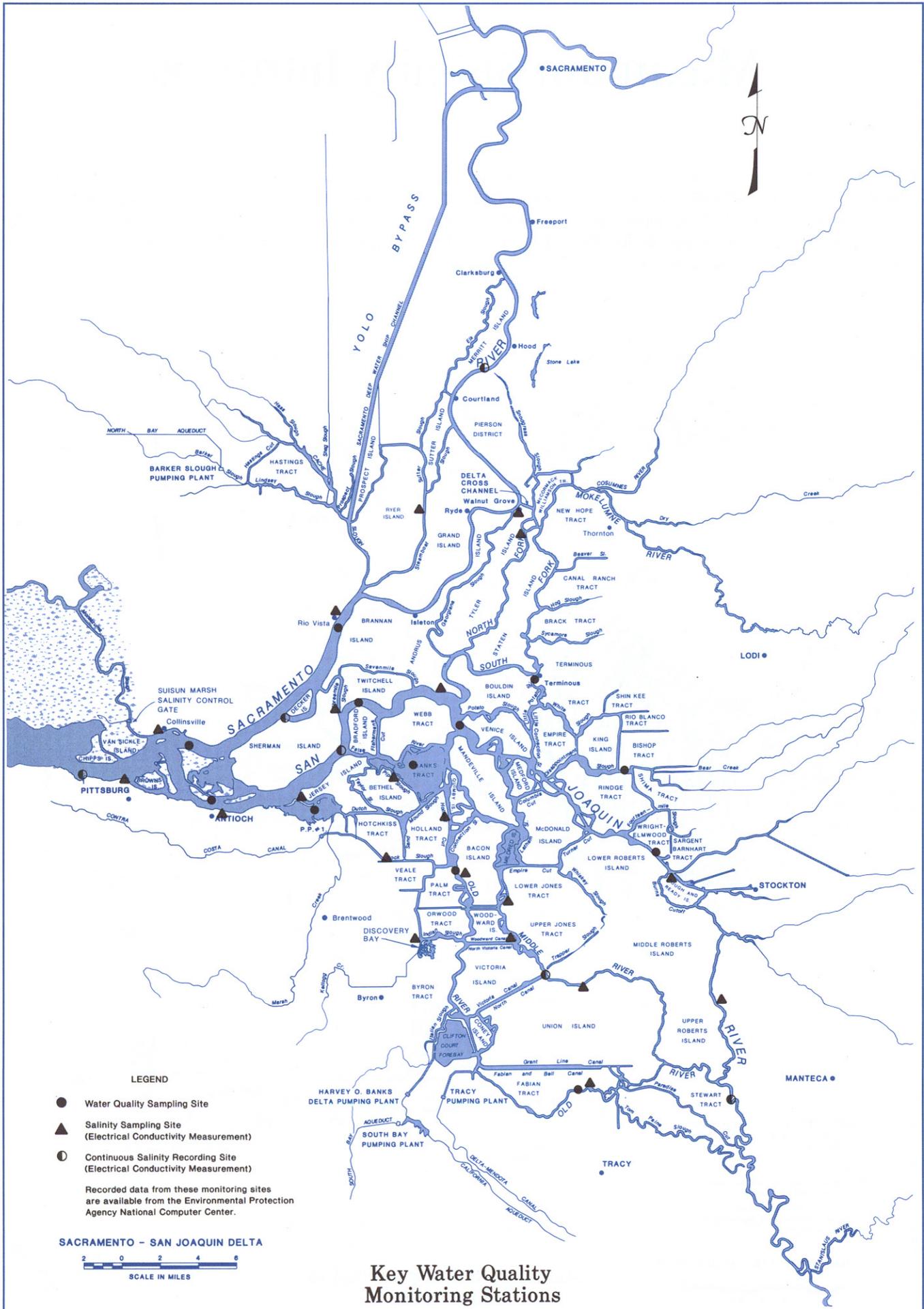


# Maximum Salinity Intrusion

Tidal action and Delta outflow work to create a long and gradual salinity gradient from the Pacific Ocean into the Delta. Before Shasta Dam was built in 1943, the upper edge of this gradient (about 5 percent sea water) pushed far into the Delta in drier years. As shown on the map at left, salinity reached as far as

Stockton on the San Joaquin River and to beyond Courtland on the Sacramento River in 1931. Today Shasta, Folsom, and Oroville reservoirs help control salinity intrusion by providing fresh water releases during the drier parts of the year as shown on the map below.





**LEGEND**

- Water Quality Sampling Site
- ▲ Salinity Sampling Site (Electrical Conductivity Measurement)
- ⊕ Continuous Salinity Recording Site (Electrical Conductivity Measurement)

Recorded data from these monitoring sites are available from the Environmental Protection Agency National Computer Center.



**Key Water Quality Monitoring Stations**

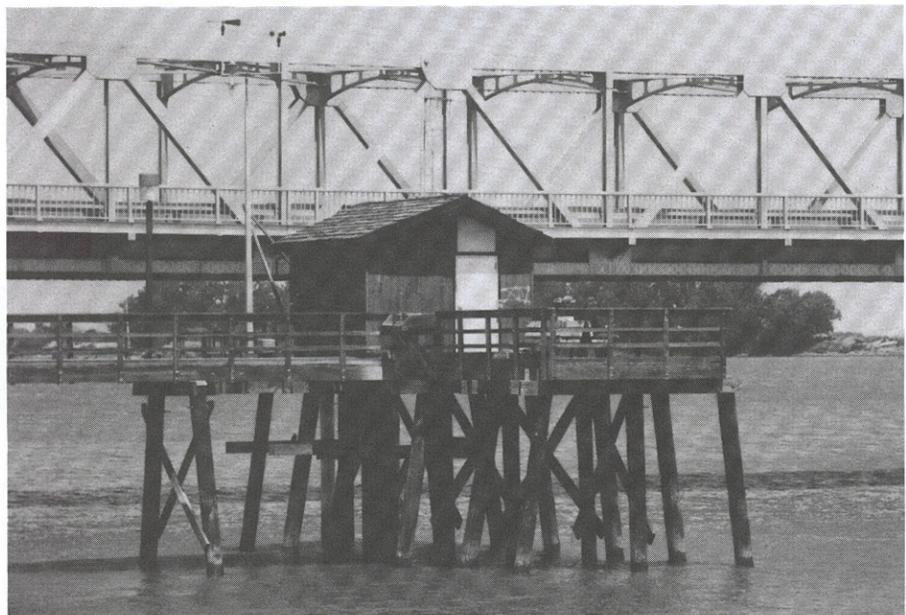
# Key Water Quality Monitoring Stations

Using modern techniques, the Department of Water Resources conducts a comprehensive monitoring program throughout the Bay-Delta estuary, collecting data from more than 35 major water quality and biological monitoring sites (see map at left). These data are needed to operate the SWP and CVP within the

water quality standards established by the State Water Resources Control Board, to provide a good base for establishing future standards, and for developing appropriate operating criteria for Delta facilities.



*The San Carlos, a floating DWR laboratory, follows the tide to collect data at sampling stations throughout the Delta.*



*Fixed monitoring station at Rio Vista continuously monitors water level, salinity, temperature, dissolved oxygen, turbidity, and pH. It also measures wind speed and duration and solar radiation. It is one of over 35 stations in the Delta.*