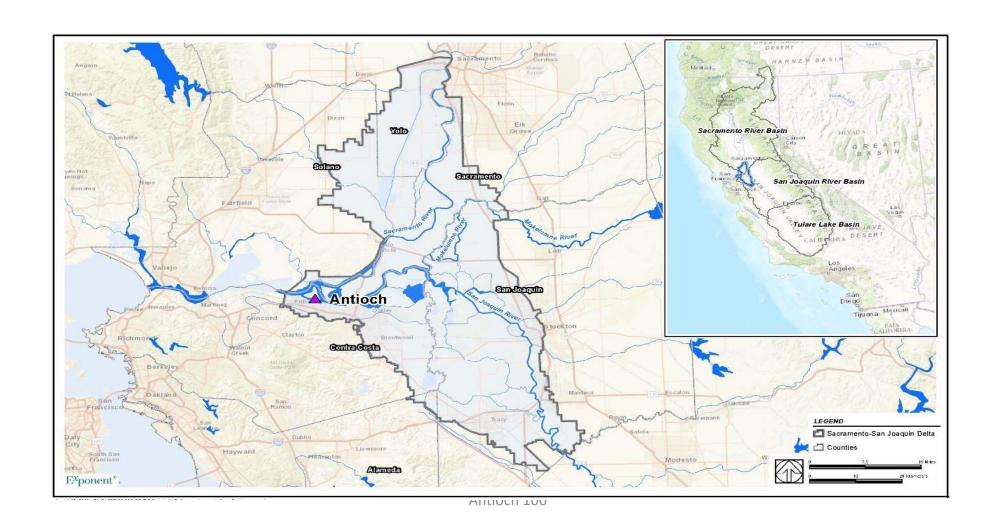
Antioch's Water Rights, Water Supply and Operations

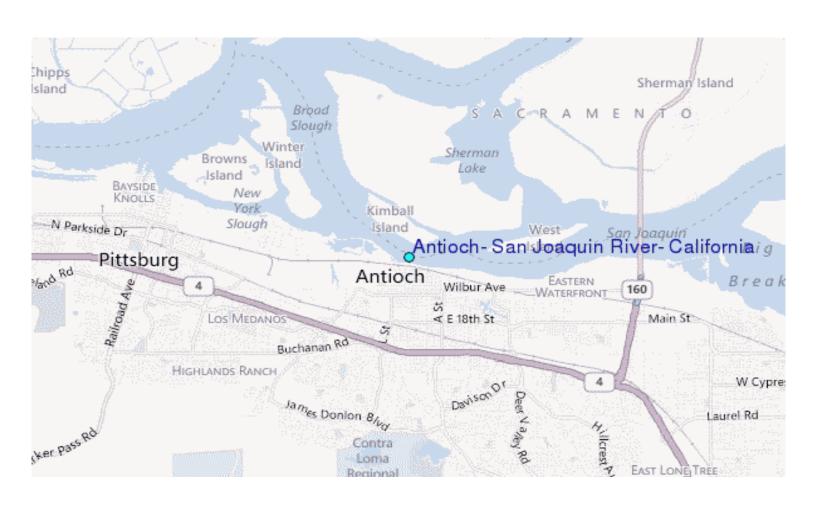
Ron Bernal

Assistant City Manager/Public Works Director/City Engineer
City of Antioch

Antioch location



Sacramento – San Joaquin Rivers at Antioch



Antioch's Location

- Antioch is located in the Western Delta and eastern Contra Costa County.
- The City is located downstream of:
 - **○Emmaton**
 - Olersey Point
 - Rock Slough

D-1641 DWR Compliance (J. Leahigh)



River Channel



Antioch's water supply demands and service:

- Serves drinking water to over 100,000 residents
- Also supplies water for irrigation, commercial and industrial use.
- Has 31,798 connections and a current population of 108,298 (2015)
- Is projected to experience significant future growth

Antioch's primary water supply:

- Comes from San Joaquin and Sacramento River flows in the San Joaquin River Channel. Much of the water is Sacramento River flow.
- Is diverted at the City's intake located within the city.
- Is pumped from the river channel at a maximum capacity of 16 million gallons per day

Antioch's Substitute Water Supply:

- Purchased from Contra Costa Water District when Antioch's primary water supply at its intake experiences chloride levels over 250 mg/L.
- Substitute water is delivered as raw water to the City by way of the Contra Costa Canal. The City has no rights to the Canal.
- Purchases of substitute water generally occur in the late summer and fall whenever chloride levels at Antioch are typically higher than during the rest of the year.

Antioch's Water Rights:

- Antioch has adjudicated pre-1914 appropriative water rights. *Town of Antioch v. Williams Irrigation District et al.* (1922) 188 Cal. 451, 455.
- Water rights include flows from both the San Joaquin and the Sacramento Rivers.
- The water is used principally for municipal and industrial uses within the City's boundaries and sphere of influence.
- The City reports its water use to the SWRCB. (S.O.D. No. #S009352)

1968 Agreement with DWR:

- Purpose is to partially mitigate the impacts of the present SWP system.
- Bureau is **not** a party to the agreement.
- DWR reimburses the City only **one-third** the cost to purchase substitute water when chlorides at Antioch exceed 250 mg/L based on specified formula.

Impacts to Antioch from the WaterFix Project:

- Increased chlorides and bromides at Antioch's intakes
- Reduced usable days of water available at Antioch's intake
- Increased treatment costs.
- Increased costs due to need to purchase substitute water more often.
- Fixed term of Antioch's 1968 Agreement ends prior to the operation of the WaterFix project.