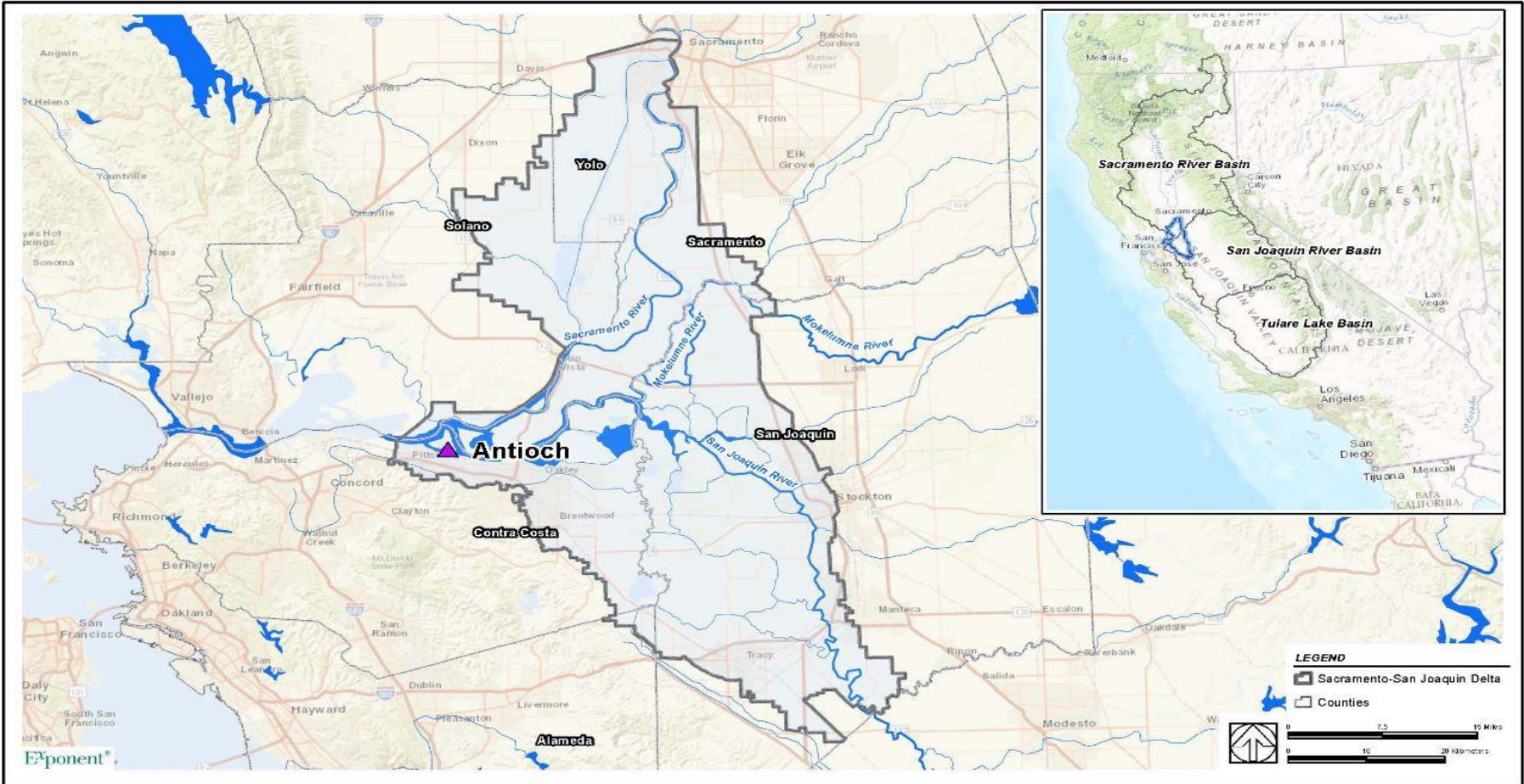


# Antioch's Water Rights, Water Supply and Operations

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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**
  - **Jersey 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.

# 2016 CCWD-DWR Agreement:

- Guarantees CCWD water up to 50,000 afa (depending on certain factors) at a quality of 30 mg/L chlorides.
- Water conveyed to CCWD either by the existing EBMUD facilities at Freeport or by way of the North Delta Diversion (delivery to CCWD at Victoria Canal in the south Delta).
- Intended to mitigate impacts of the WaterFix Project.
- DWR to pay for conveyance and many related construction costs.

# 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.

# Potential Mitigation might include:

- Increased outflows at Antioch.
- Requiring DWR/Bureau to meet D-1641 M&I standards at Antioch instead of Rock Slough with bromide levels included.
- DWR to comply with Section 10 of the 1968 Agreement.
- Physical Solution