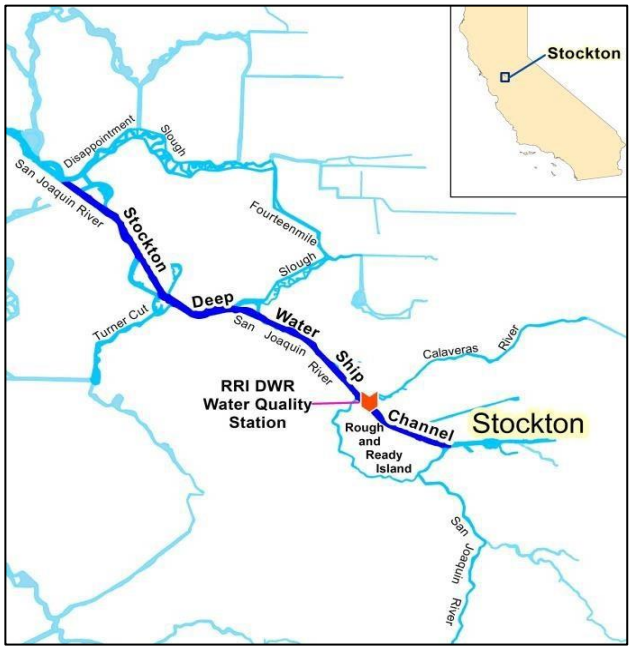
Water Quality Report Card		Dissolved Oxygen in the San Joaquin River/Stockton Deepwater Ship Channel		
Regional Water Board:	**Central Valley, Region 5**	**STATUS**	☑ **Conditions Improving** ☐ Data Inconclusive ☐ Improvement Needed ☐ Targets Achieved/Water Body Delisted	
Beneficial Uses Affected:	SPWN, COLD, WARM			
Implemented Through:	401 Certifications, NPDES Permits, MS4 Permits, WDR, ILRP	**Pollutant Type:**	☑ Point Source ☑ Nonpoint Source ☐Legacy	
Effective Date:	February 27, 2007	**Pollution Source:**	Wastewater	Hydromodification
Attainment Date:	2016		Irrigated Agriculture	Reduced Flows
			Urban Storm Water	

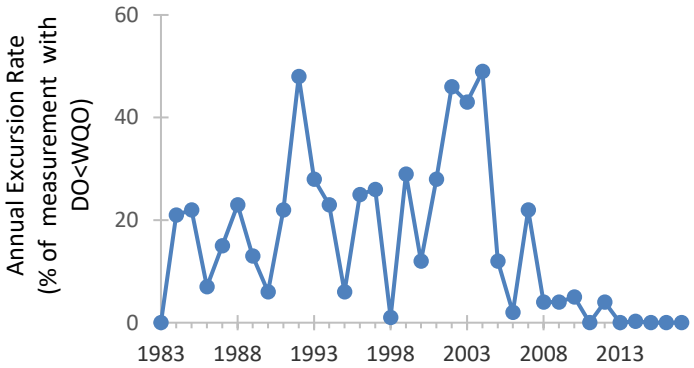
Water Quality Improvement Strategy

The Stockton Deep Water Ship Channel (DWSC) is a 41-mile stretch of the tidal San Joaquin River (SJR) in the Sacramento-San Joaquin Delta. The DWSC has historically experienced periods during the summer months, when the dissolved oxygen (DO) falls below the water quality objective (WQO) (an excursion), impacting aquatic species and Chinook salmon migrations. The WQO is 5 mg/L from Dec 1 through August 31 and 6 mg/l from September 1 through November 30. The low DO conditions resulted from loading of oxygen-demanding substances such as ammonia and organic matter, reduced flow through the channel, and channel modification. To address the impairment, Region 5 adopted a San Joaquin River Dissolved Oxygen TMDL in 2005. The TMDL requires Stockton's Regional Wastewater Control Facility (Stockton RWCF) to significantly reduce its ammonia discharges, and requires other responsible parties, including the Port of Stockton and upstream dischargers, to support aeration efforts in the DWSC. In 2006 and 2007, using funds from Proposition 13, the California Department of Water Resources (DWR) constructed an aeration facility in the DWSC. The aerator is operated and maintained by the Port of Stockton with funding support from the other responsible parties.

Watershed Map



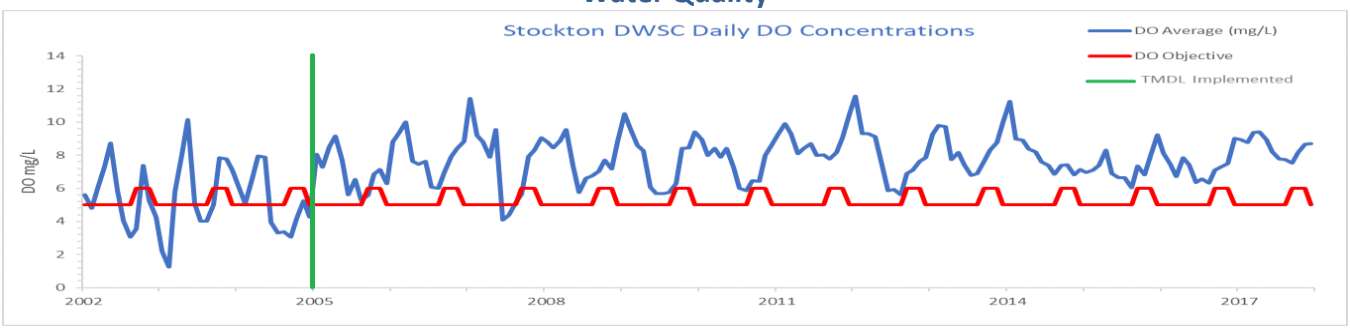
Stockton Deep Water Ship Channel DO Conditions



Water Quality Outcomes

- *The Stockton RWCF was upgraded in 2007, which significantly reduced ammonia discharges to the SJR.*
- *An aerator was installed by DWR in 2007.*
- *A funding agreement between the Port and stakeholders allows for aeration to meet WQOs.*
- *The SJR is now consistently meeting DO WQO, and will be considered for de-listing in future 303(d) list updates.*
- *Aeration will continue to be needed to attain the DO WQO during occasional periods of low DO.*

Water Quality



Prior report cards released September 2012, October 2014, Updated October 2019