

# Interagency Ecological Program 2023 Work Plan Element Dissolved Oxygen Monitoring in Stockton Ship Channel

#### **Project Manager and Affiliation**

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## **Principal Investigator and Affiliation**

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### **Costs (thousands) and Funding Sources**

\$25 (DWR)



Figure: The Stockton Deep Water Ship Channel, where this program monitors the concentration of dissolved oxygen to ensure it meets standards set by California regulators to protect migrating fall-run Chinook salmon.

#### **Description**

Since 1968, IEP's Environmental Monitoring Program (EMP) has monitoring dissolved oxygen (DO) in the stretch of the San Joaquin River near Stockton known as the Deep Water Ship Channel. State and regional water quality boards have set DO targets to protect migrating Chinook salmon. EMP scientists have deployed telemetered water quality sondes to remotely monitor DO in the channel, and if DO levels fall below these thresholds for too long, conduct additional monitoring by boat. If a DO excursion takes place, EMP scientists communicate this data to managers at DWR, the regional and state boards, and IEP to ensure this information is known as soon as possible.

#### Need

This project is mandated by State Water Resources Control Board's Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (2018) and the Central Valley Regional Water Quality Control Board's Basin Plan (2018).

#### **Objectives**

- Continuously monitor DO in the Deep Water Ship Channel at fixed stations.
- Conduct additional monitoring by boat during DO excursions below established threshold concentrations.
- Report findings to managers.
- Make long-term dataset available for status-and-trends reporting in the estuary.

#### **Schedule of Milestones**

Daily: make real-time DO data available through the California Data Exchange (CDEC)

Yearly: Update long-term dataset with new data collected during any boat sampling

As required: Submit reports to DWR managers, state and regional water quality boards, USBR, and IEP