

An aerial photograph of a water treatment facility. In the foreground, there are several large circular aeration tanks, some of which are covered with a yellow material. To the right, a large river flows through the facility. In the background, there are several large industrial buildings with grey roofs, and a road or canal runs parallel to the river. The overall scene is a mix of industrial infrastructure and natural water bodies.

San Joaquin River Deep Water Ship Channel Dissolved Oxygen Demonstration Aeration Project

August 2007

Topics

- Project Location, What and Why
- Details and Photos
- Schedule



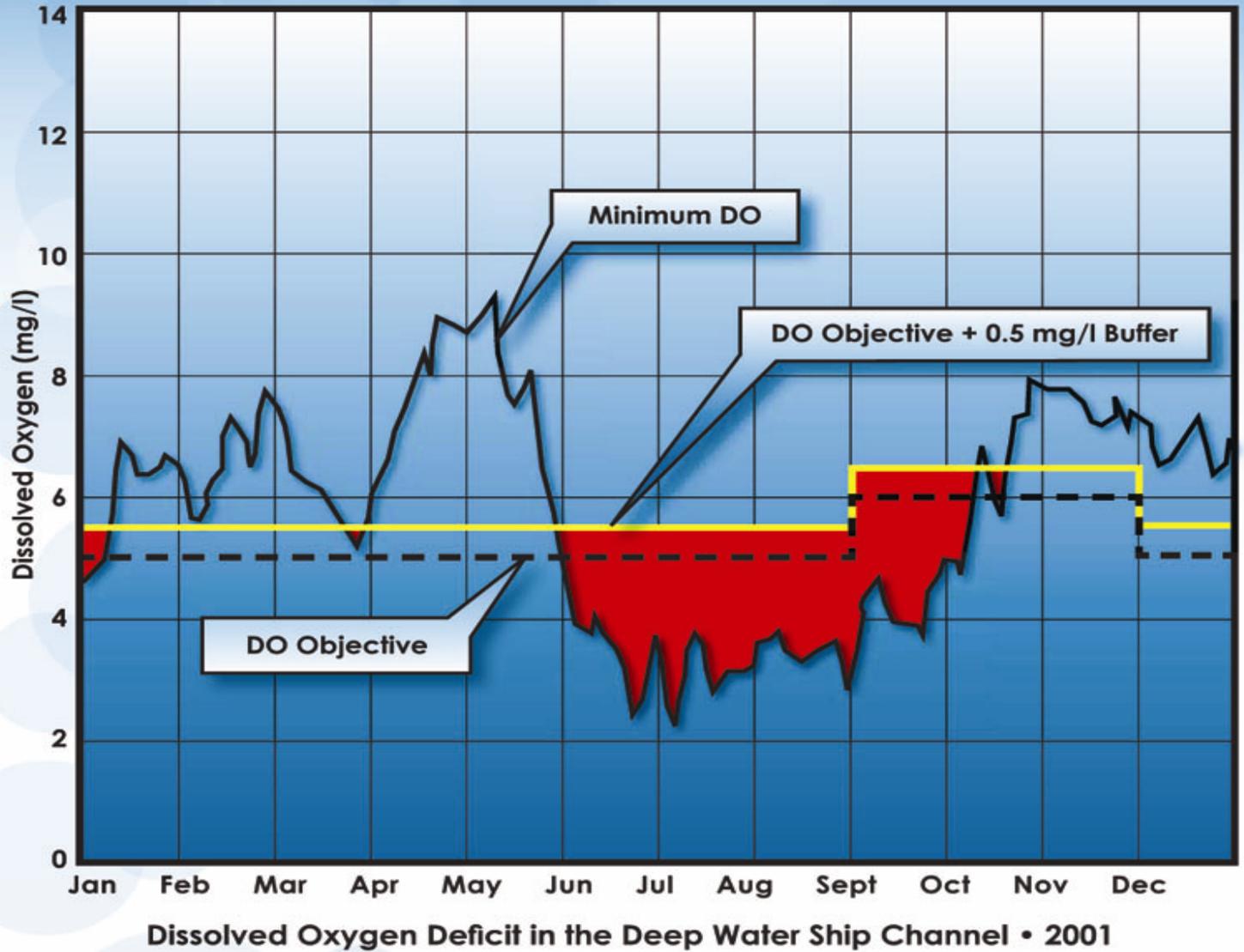
PROJECT SITE

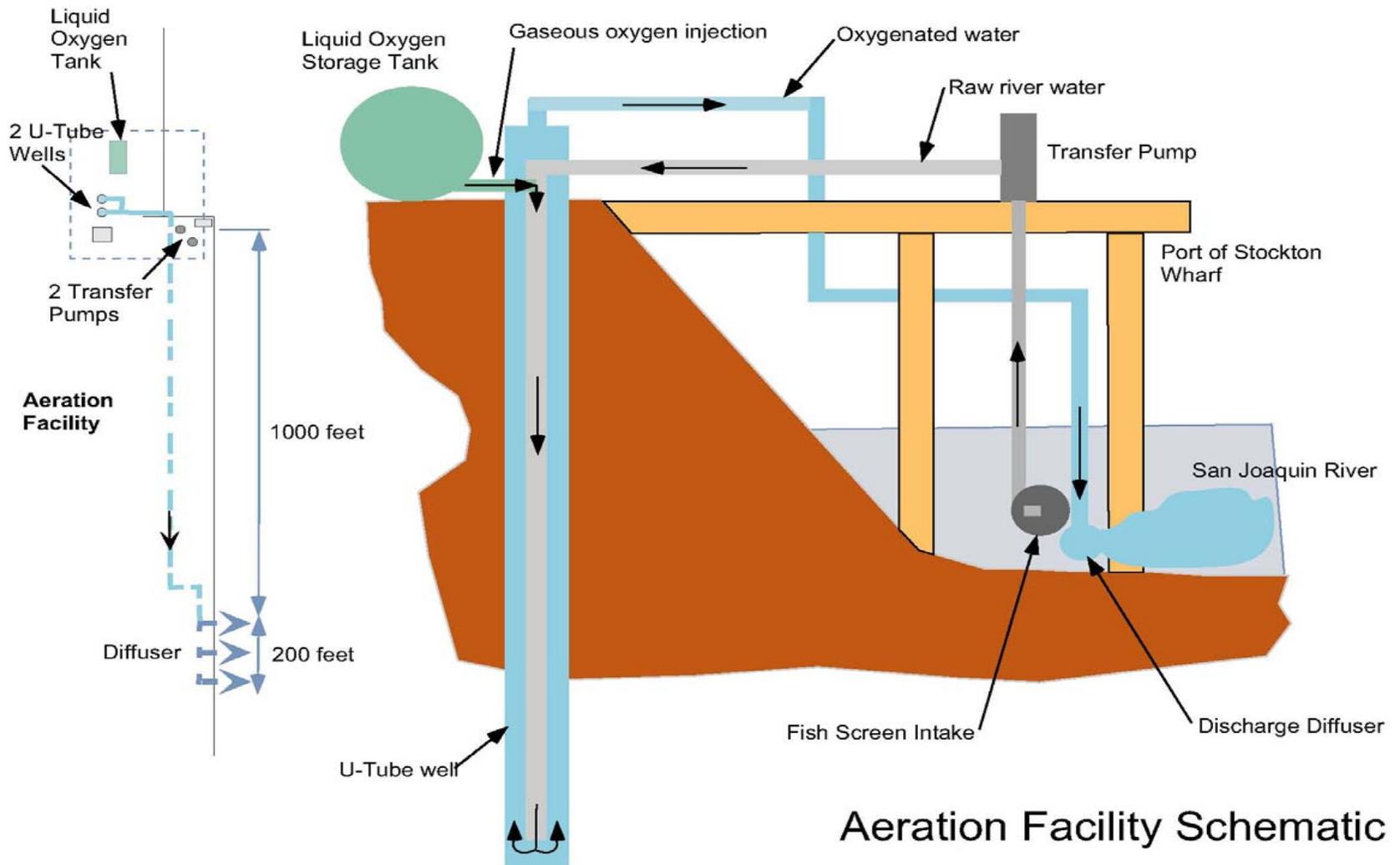
San Joaquin River Deep Water Ship Channel
Aeration Demonstration Project



What is the DWSC Demonstration Dissolved Oxygen Aeration Project?

- A DWR lead project
- Two year demonstration study
- Demonstrate
 - Technology
 - Effectiveness
 - Effects





Aeration Facility Schematic

Extraction Pumps and Air Burst System



August 2007

San Joaquin River Deep Water Ship Channel
Demonstration Dissolved Oxygen Aeration Project

U-Tubes and Liquid Oxygen System



August 2007

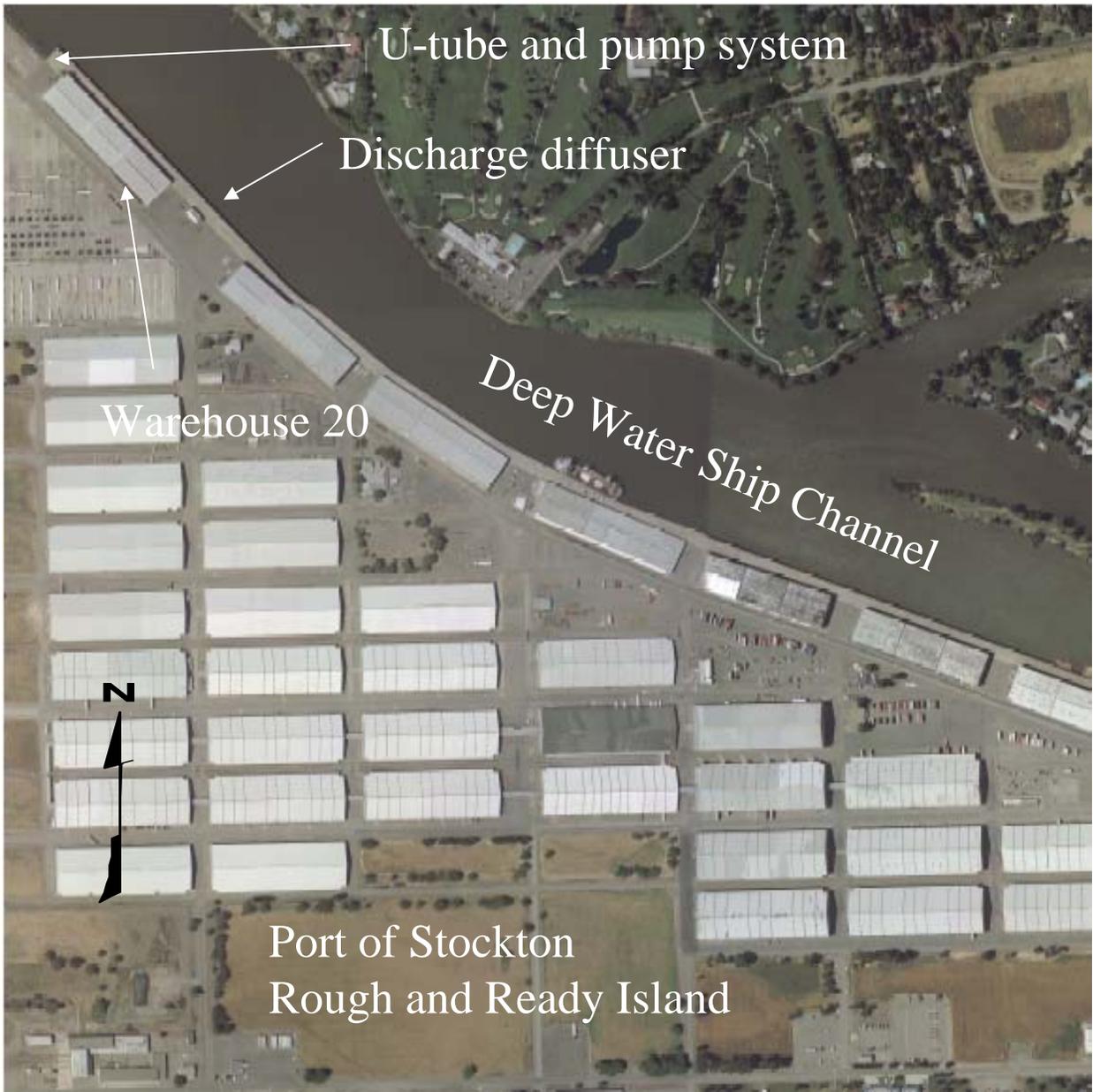
San Joaquin River Deep Water Ship Channel
Demonstration Dissolved Oxygen Aeration Project



Discharge diffuser pipe

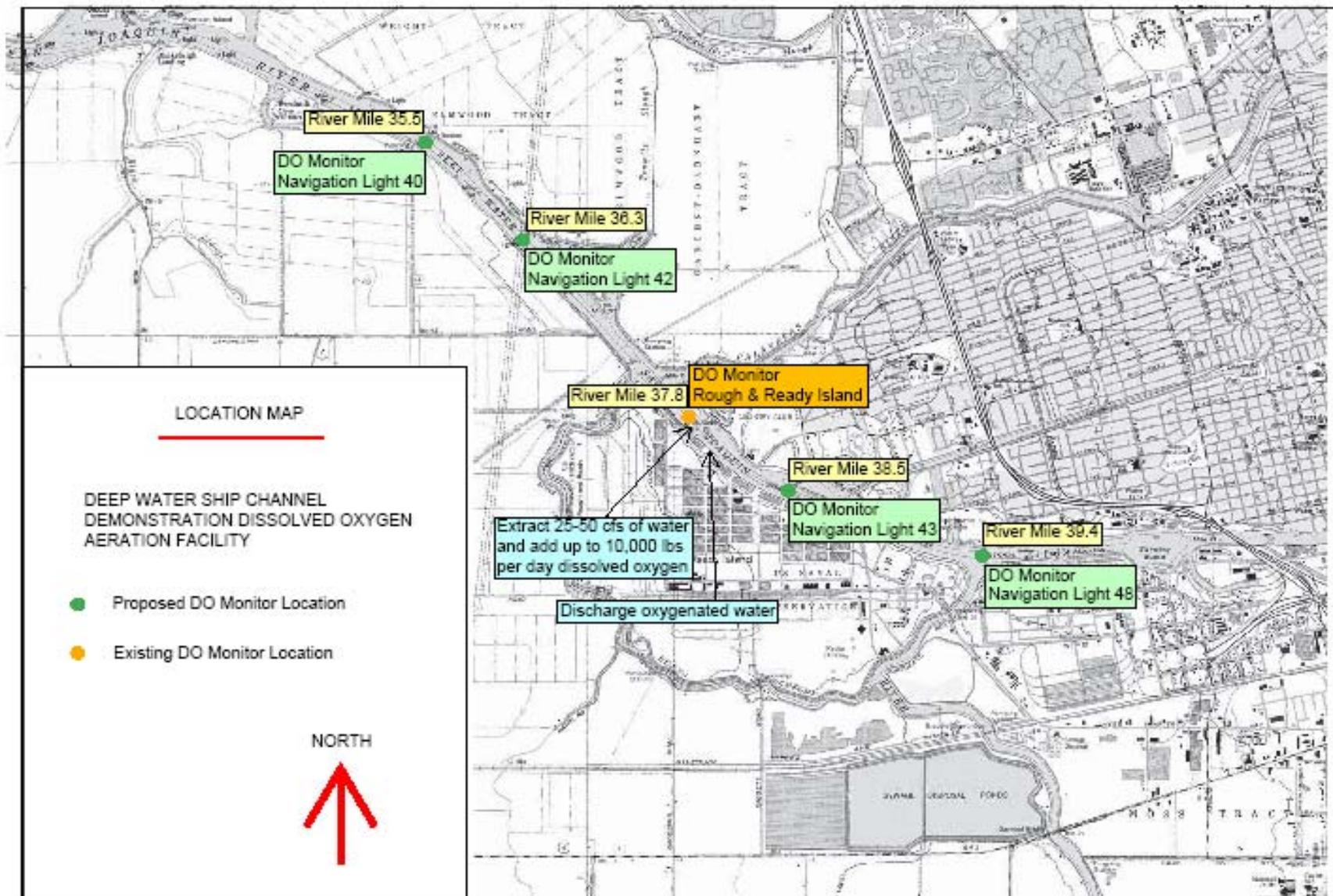
August 2007

San Joaquin River Deep Water Ship Channel
Demonstration Dissolved Oxygen Aeration Project



August 2007

San Joaquin River Deep Water Ship Channel
Demonstration Dissolved Oxygen Aeration Project





Navigation Aid Monitoring Station

August 2007

San Joaquin River Deep Water Ship Channel
Demonstration Dissolved Oxygen Aeration Project

Current Schedule

- Construction Completed in July/August 2007
- Contractor Compliance Testing of Liquid Oxygen System
- Begin testing of system
 - Local effects study without oxygen
 - Pulse operation test with and without oxygen
 - Optimization and monitoring methods testing
 - Extended operational testing beginning in Spring 2008
- Fishery study to begin in summer/fall 2007 by UC Davis Bodega Marine Laboratory