



About the Napa Sonoma Salt Marsh Restoration Pipeline

Background

A new pipeline will deliver recycled water for salinity reduction and tidal restoration of 640 acres of former salt ponds. This wetlands restoration project will provide up to 1,700 acre-feet per year to the bittern ponds as part of the habitat enhancement plan.

Cargill operated the salt pond complex at the north end of San Pablo Bay until the early 1990s. The property was sold to the State of California and the California Department of Fish and Game (as it was then called) in 1994. The salt ponds have the potential to provide diverse wetland habitat, but the area wasn't able to be fully restored without clean water to eliminate the bittern (waste byproduct) left over from the salt production process.

Since that time, a multitude of partners have collaborated to complete environmental documents, procure funding, conduct feasibility studies, design the project, obtain easements from private property owners, and construct the pipeline. The primary purpose of the pipeline is to provide a source of clean water to help restore the Napa Sonoma Marsh. Available recycled water will be used for agricultural irrigation during and after restoration.



Partnerships

Local, regional, state and federal agencies are committed to restoring the Napa-Sonoma Marsh. Multiple partners have been involved, including the Sonoma Valley County Sanitation District (SCVSD) and members of the North Bay Water Reuse Program (NBWRP). The NBWRP is a coordinated regional effort of water and sanitation agencies in Sonoma, Marin and Napa counties organized to offset potable water demand by promoting water reuse for agriculture, urban and environmental uses.

Other partners in the Napa Sonoma Marsh restoration include the Army Corps of Engineers, California Department of Fish & Wildlife, California Coastal Conservancy, private landowners, Ducks Unlimited, The Bay Institute, Cargill, U.S. Geological Survey, U.S. Fish and Wildlife Service and the Wildlife Conservation Board.

Funding

NBWRA is a recipient of American Recovery and Reinvestment Act (ARRA) and Title XVI funds through the federal Bureau of Reclamation. Some of these funds (approximately \$2 million plus matching funds from SVCSD) were used for design and construction of the pipeline that will provide recycled water to ponds 7 and 7A. In addition, the project is receiving \$367,000 from state Proposition 50 funds through the Bay Area Integrated Regional Water Management Program. The total project cost is estimated at \$10 million.

Water for Wetland Restoration and Agricultural Uses

Around 1860, the Napa Sonoma Marsh was one of the most productive wetlands of the Pacific Coast, providing habitat for millions of birds. By the mid-1980s, the San Francisco Bay perimeter had lost over 91 percent of its wetlands. The Napa Sonoma Marsh represents one of the few sizeable expanses where restoration is feasible. This San Pablo Bay area is of great importance to migratory shorebirds and waterfowl as well as special status mammals, endangered fish, and other aquatic animals. Ponds 7 and 7A contain bittern, which is highly toxic to aquatic wildlife and cannot be discharged into the Bay. This recycled water pipeline will decrease salinity and dilute, creating valuable habitat for fish and wildlife.

Connections for agricultural irrigation along the pipeline route are part of the construction. Available recycled water will be used for agricultural irrigation during and after restoration, providing grape growers in the Carneros Region a clean, drought-proof source of water.

Using treated recycled water for irrigation has the potential to decrease groundwater and surface-water use in the Carneros region, minimizing the risk of groundwater intrusion from saltwater. Saltwater intrusion causes saline water to enter freshwater aquifers, leading to contamination of drinking and irrigation water sources.



Photo credit: Jennifer Fraser, Bay Nature



Project Milestones and Timeline

Spring 2004	U.S. Army Corps of Engineers, State Coastal Conservancy and California Department of Fish and Wildlife completed an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the entire 10,000 acres of Salt Marsh restoration.
March 2007	Proposition 50 funds were awarded from the California Department of Water Resources through the Bay Area Integrated Regional Water Management Plan process. The Bay Area Clean Water Agencies administers the grant funds for a portion of the pipeline design.
December 2009	NBWRA and Bureau of Reclamation complete an EIS/EIR that incorporates a recycled water pipeline extending from the SVCSD to the Napa Sonoma Salt Marsh restoration site.
May 2010	ARRA funds awarded to NBWRA through Bureau of Reclamation for the remaining portion of project design.
September 2010	Sonoma Valley County Sanitation District notifies property owners; seeks access for design work.
May 2012	Grant is awarded to SVCSD for project construction through the US Bureau of Reclamation Title XVI program.
Spring 2013	Construction began.
Winter 2013/14	Pending permitting, recycled water is available for bittern dilution, habitat enhancement, and agricultural use along pipeline route.
Fall 2014	Bittern dilution and salt pond restoration begins with recycled water, following U.S. Army Corps of Engineers completion of its project component