

# FACT SHEET

## Lower Yolo Ranch Existing Conditions Report

**Deliverables:** Existing Conditions report to support effectiveness monitoring of the lower Yolo restoration project.

**Status:** Available information on pre-construction conditions at the project site and surrounding Cache Slough Complex is being reviewed and summarized.

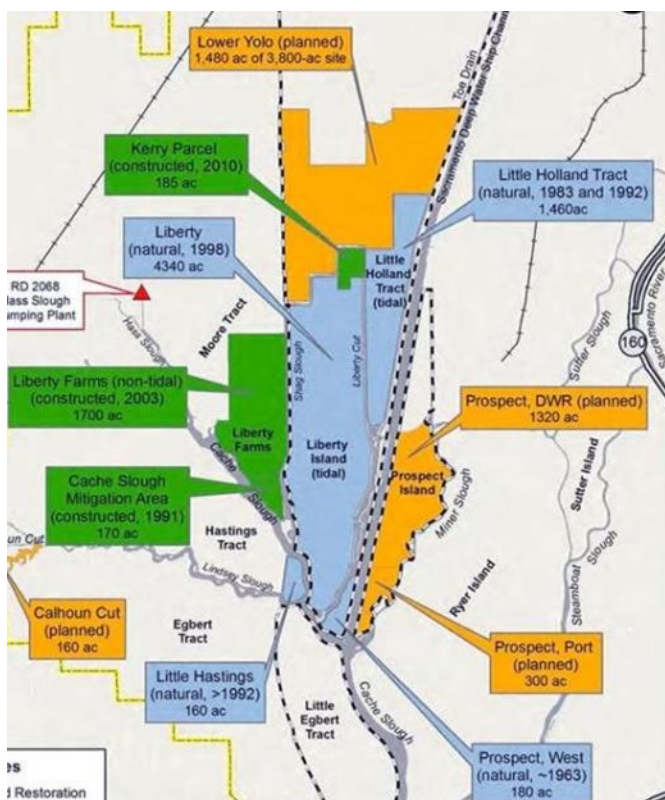
**Primary Investigator:** Ramona Swenson

**Recipient Organization:** Cardno-ENTRIX,

**Project Cost:**

**SFCWA Funding:**

**Partners:**



Cache Slough Complex restoration projects — natural (blue), constructed (green), planned (orange).

## Introduction

The Lower Yolo Ranch Restoration Project will restore tidal wetlands to enhance aquatic food production and export to benefit delta smelt and migrating juvenile salmonids.

To evaluate progress towards objectives and restoration effectiveness, post-project monitoring will measure indicators of structural and functional outcomes of the restoration actions. Assessment will require a basis of comparison. Status and trends of indicators could be compared to pre-project conditions at the Project site where appropriate, pre- and post-project conditions at other nearby sites, and/or known or hypothesized functional relationships.

## Objective

To review available information on pre-project conditions at the Lower Yolo project site and the surrounding Cache Slough Complex, as a basis for comparison for effectiveness monitoring.



Aerial imagery of the Lower Yolo site (yellow) and the Cache Slough Complex.

## Results

The Lower Yolo restoration site is part of the Cache Slough Complex. Surrounding land uses include naturally restoring areas such as Liberty Island and Little Holland Tract, constructed restoration projects, and proposed restoration sites such as Prospect Island.

Information is sought on hydrology, water quality, geomorphology, fish, and foodweb components. Potential data sources include existing monitoring programs and studies in the region, such as those supported by the Interagency Ecological Program (IEP) and CALFED Ecosystem Restoration Program. Site-specific information on terrestrial and physical conditions is also available from surveys conducted to support project design and environmental documentation.

Challenges include finding information from comparable sites or locations near the Lower Yolo project area, with suitable time scale of monitoring and comparable sampling methods.

## Conclusions

In development.

## Relevance

Extensive habitat restoration is planned for the Delta, both for OCAP BiOps requirements and the Bay Delta Conservation Plan. To evaluate the effectiveness of restoration, pre-project data and reference site information will be needed to provide a context for interpreting the monitoring data that will be collected from the restored sites. Improved understanding of data availability and gaps will inform design of project monitoring plans, as well as inform priorities for regional monitoring programs.

## Next Steps

Once the available information is reviewed and assessed, data gaps should be identified and prioritized. Additional pre-construction sampling to provide further context for evaluating Lower Yolo outcomes may be recommended for SFCWA or agencies. Continuing coordination with regional science programs can help leverage existing and planned monitoring efforts to support region-wide evaluation of restoration success.