





**Final Report** 

# A Framework for the Future: Yolo Bypass Management Strategy



**CALFED Bay-Delta Program** 

Yolo Bypass Working Group, Yolo Basin Foundation, and Jones & Stokes

### Final Report

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Prepared for:

CALFED Bay-Delta Program

Prepared by:

Yolo Bypass Working Group, Yolo Basin Foundation, and Jones & Stokes



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The creation of the Yolo Bypass Working Group and the subsequent Yolo Bypass Management Strategy was possible because of the interest and dedication of the many landowners, farmers, and duck club members (stakeholders) with a direct interest in the Yolo Bypass. These approximately 50 individuals took significant time out of their work days to travel to and attend meetings, review documents, and participate in discussions. These stakeholders were not paid to participate in such efforts and the lengths to which they consistently participated is a testament to their commitment to collaborative problem solving. Their patience in seeing this uncharted process through is appreciated. The Yolo Basin Foundation will be forever grateful to them for trusting us to carry out this task.

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#### **Preface**

The Yolo Basin Foundation (Foundation) and the Yolo Bypass Working Group (Working Group) are pleased to present the following document: A Framework for the Future: The Yolo Bypass Management Strategy (Management Strategy).

The Management Strategy is the product of more than 2 years of meetings held by the Working Group, a collection of landowners, water users, and public agencies (collectively defined as "stakeholders") that have ownership of or responsibility for property and flood conveyance functions in the Yolo Bypass (Bypass).

The genesis of the project came from the Foundation and other parties who were concerned that many entities throughout the Sacramento River watershed were expressing an interest in creating and enhancing fish and wildlife habitat in the Bypass. Specifically, the Foundation observed that such habitat-related discussions were ignoring the presence of private property in the Bypass. The future of the Bypass was being planned as though the Bypass were a blank slate; the established agricultural economy and the existence of significant areas of privately and publicly managed wetlands were being ignored.

The Foundation has a reputation for successfully working with the Bypass community, a reputation developed over its decade-long work establishing the Vic Fazio Yolo Wildlife Area (Yolo Wildlife Area). It became clear that the issues facing the future of the Bypass were the same as those encountered in the Yolo Wildlife Area effort but on a landscape level. With this in mind, the Foundation prepared a proposal to the CALFED Bay-Delta Program (CALFED) for the development of a grassroots, stakeholder-driven group that would define its own concept for the future of the Bypass, a locally based concept that would accommodate a range of land uses and lifestyles. The formation of the Working Group and the preparation of this Management Strategy are the culmination of that initial goal.

The Working Group has spent time and effort reviewing the overall mission of CALFED, particularly CALFED's ecosystem restoration concepts for the Bypass. Simultaneously, the Working Group has also developed its own concept for the Bypass. This document presents an integration of those concepts.

It is important to note that the establishment of the Working Group is in response to CALFED, rather than in blanket support of CALFED. From the perspective of the Working Group, the Bypass already provides extensive and important habitats for many wildlife species. The Bypass also provides important economic opportunities for landowners and their employees, along with tax revenue opportunities for Yolo and Solano Counties. Most importantly, the Bypass provides critical flood management functions for the Sacramento Valley. While the regional economic opportunities of agriculture are currently threatened, it is important to remember that such

conditions are cyclical. This cyclical nature means that landowners must retain flexibility in managing their lands. The Working Group remains concerned that CALFED has not answered many critical questions regarding the program's impact to the Bypass economy, land use, flood conveyance, and private property rights.

The Working Group envisions the Bypass as a mix of land uses, where agricultural economic viability, flood conveyance capacity, and fish and wildlife habitats can be balanced. The Bypass can be a place where landowners are fairly compensated for land use and flood conveyance changes. It can be a place where landowners need not be threatened by the presence of additional wildlife habitat and special-status species. It can be a place where realistic goals and objectives can be achieved, resulting in benefits for all parties involved. To do so, however, will require a commitment on the part of numerous state and federal decision makers to work with the local community of stakeholders to solve problems and resolve many issues with mutually beneficial results. The Management Strategy identifies these problems and issues.

As previously stated, Working Group participants have spent time reviewing CALFED's concept for the Bypass. Many of the ideas put forth by CALFED for the Bypass are scientifically laudable but are unrealistic in the context of private property rights and current and future land use. These ideas fail to capture the realistic needs of landowners in maintaining current use of their lands, while remaining financially stable. In short, they are proposed actions created in the absence of involvement from the people most affected.

Looking to the future, the Working Group seeks to assist CALFED by clarifying these ideas and identifying achievable goals. This document presents a framework through which CALFED can meet the spirit of its vision, while respecting the needs and desires of private landowners and stakeholders. The Working Group appreciates the opportunity to participate in planning the future of the Bypass.

#### **Executive Summary**

A Framework for the Future: The Yolo Bypass Management Strategy (Management Strategy) presents a locally based concept for the future of the Yolo Bypass (Bypass). It has been prepared by the Yolo Bypass Working Group (Working Group), a collection of landowners, water users, and public agencies (collectively defined as "stakeholders") that have ownership of or responsibility for property and flood conveyance functions in the Bypass. The Management Strategy is the culmination of a stakeholder- and consensus-based process that was funded by the CALFED Bay-Delta Program (CALFED) in 1998. As a product of a consensus-based process, the Management Strategy presents conditions of agreement and disagreement between Working Group members regarding key issues.

Chapter 1 presents general information about the location of the project area, background about the project process, and descriptions of past and present projects related to the Bypass.

Chapter 2 presents a description of existing geographic, biologic, and hydrologic conditions in and near the Bypass as a basis for later discussions of land use opportunities and constraints. An extensive analysis of historic and recent floodflow and low-flow hydrologic data is presented, with an emphasis on flow sources and casues/patterns of Bypass inundation. The information is presented as a basis to determine whether water requirements of future proposed Bypass habitats could be met under current hydrologic conditions. Chapter 2 ends with thirteen hydrologic conclusions that the Working Group agrees could reasonably be made about Bypass conditions.

Chapter 3 identifies constraints to potential habitat enhancement in the Bypass based on concerns of landowners and other stakeholders. Assurances needed to alleviate these concerns and encourage landowner consideration of habitat-based land use changes are identified. They are:

- # maintenance of stakeholder economic viability;
- # protection of stakeholder lifestyles;
- # fair compensation for land use changes;
- # establishment of statutorially authorized, legally binding, and enforceable safe harbor (or similar) agreements regarding the introduction or enhancement of habitat for specialstatus species;
- # assessment and mitigation of habitat enhancement project impacts related to hydraulic and hydrologic alterations; and

# acknowledgment by local, state, and federal government representatives that the Working Group is a primary advisory organization for all land management/water use issues in the Bypass.

The assurances are further organized into related topics that should also be addressed in the future as part of habitat enhancement plans. They are:

- # federal and state resource management and regulatory programs,
- # water and flood management structures,
- # land and flowage easements,
- # water use and availability,
- # economic impacts,
- # public access to bypass lands,
- # flooding and floodflows,
- # upstream storage and river capacity,
- # fisheries,
- # waterfowl and upland game birds,
- # agricultural pests,
- # general habitat conditions, and
- # general information needs.

Chapter 4 describes habitat opportunities and constraints in the Bypass. Information presented in Chapter 3 is compared with CALFED's goals and objectives for the Bypass. The result is a set of realistic habitat recommendations that can accommodate existing and future land uses and constraints, while still meeting the spirit of CALFED's habitat goals and objectives. The chapter presents these habitat recommendations under two general land use categories:

- # agriculture with integrated habitat enhancement and
- # habitat enhancement as the primary land use.

Options for each general category are defined. Agriculture with integrated habitat enhancement includes suggestions for water management, vegetation management, and crop management and describes specific practices and their associated benefits, related benefits (as defined by CALFED), constraints, and funding options. Habitat enhancement as the primary land use is described more generally and includes five variables to be considered/resolved when converting large parcels of agricultural land to habitat. They are:

- # easement and acquisition funding opportunities,
- # hydraulic impacts,
- # habitat type suitability,
- # economic impacts, and
- # special-status species.

Chapter 5 presents final conclusions and recommendations of the Working Group, including eight technical studies and/or actions that should be initiated to further the assessment and potential implementation of habitat enhancement ideas in the Bypass. They are:

- # identify and coordinate comprehensive funding programs and partnerships,
- # identify and adjust policies prohibitive to habitat enhancement,
- # provide coordinated habitat design support,
- # coordinate and communicate water and sediment quality analyses,
- # develop project-specific monitoring programs,
- # support the Yolo Bypass Hydraulic Issues Technical Advisory Committee,
- # support the development of statutorily authorized, Bypass-specific safe harbor policy, and
- # analyze the feasibility of Bypass-specific "environmental water", including water rights, reliability, and transport.

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#### **List of Acronyms**

Bay-Delta Sacramento–San Joaquin River Delta and San Francisco Bay

BOR U.S. Bureau of Reclamation

Bypass Yolo Bypass

CALFED Bay-Delta Program
CESA California Endangered Species Act

cfs cubic feet per second

CNGA California Native Grass Association
Corps U. S. Army Corps of Engineers

CR County Road

CREP USDA FSA Conservation Reserve Enhancement Program

CRP Conservation Reserve Program
CVHJV Central Valley Habitat Joint Venture

CVP Central Valley Project

CWA California Waterfowl Associaton
Delta Sacramento—San Joaquin River Delta
DFG California Department of Fish and Game
DPR California Department of Pesticide Regulation

DU Ducks Unlimited

DWR California Department of Water Resources

EA environmental assessment EMU Ecological Management Unit

EPA U.S. Environmental Protection Agency
ERP CALFED Ecosystem Restoration Program
ERPP CALFED Ecosystem Restoration Program Plan

ESA federal Endangered Species Act

FCP Sacramento River Flood Control Project

Foundation Yolo Basin Foundation FSA Farm Services Agency

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Management Strategy Yolo Bypass Management Strategy

NAWMP North American Waterfowl Management Plan NDNWR North Delta National Wildlife Refuge

NMFS National Marine Fisheries Service

NRCS National Resources Conservation Service

RCD Resource Conservation District

RD Reclamation District

Reclamation Board State of California Reclamation Board SAFCA Sacramento Area Flood Control Agency

Ship Channel Sacramento River Deep Water Ship Channel

SWP State Water Project

SYMVCD Sacramento—Yolo Mosquito and Vector Control District
TAC Yolo Bypass Hydraulic Issues Technical Advisory Committee

Project Team Yolo Basin Foundation and Jones & Stokes team

TNC The Nature Conservancy UC University of California

UCD University of California, Davis
USDA U.S. Department of Agriculture
USFWS U.S. Fish and Wildlife Service