

Implementing Actions in the Yolo Bypass

Yolo Bypass Working Group

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*Informational Presentation – Opportunities for formal
comments will be provided in accordance CEQA and NEPA*

How we Got Here

SB5 - Central Valley Flood Protection Act of 2008



2012 --> 2017 CVFPP Update



BWFS / CS / Regional Studies



Yolo Bypass



Lower Elkhorn &
Sacramento Bypass
Setbacks

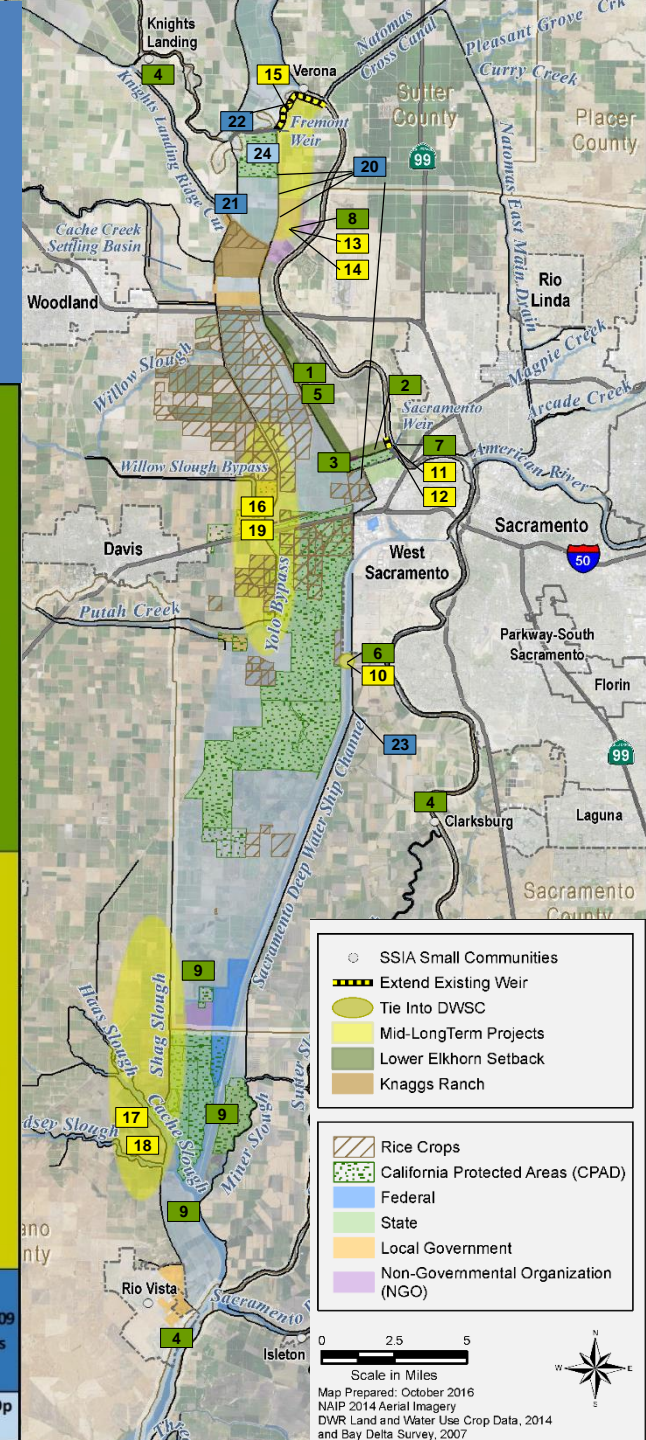
Broad Outcomes For California

- **Improved Public Safety** for urban, rural, and small communities
- **Improved Economic Stability** for California's diverse economy
- **Enhanced Ecosystem Vitality** for California's sensitive ecosystems
- **Opportunities for Enriching Experiences** for Californians and out-of-state visitors (e.g., recreation, education, and open space)

Potential Yolo Bypass/Cache Slough Flood & Ecosystem Improvements

Concepts Reflect Ongoing Local, State, and Federal Planning Efforts

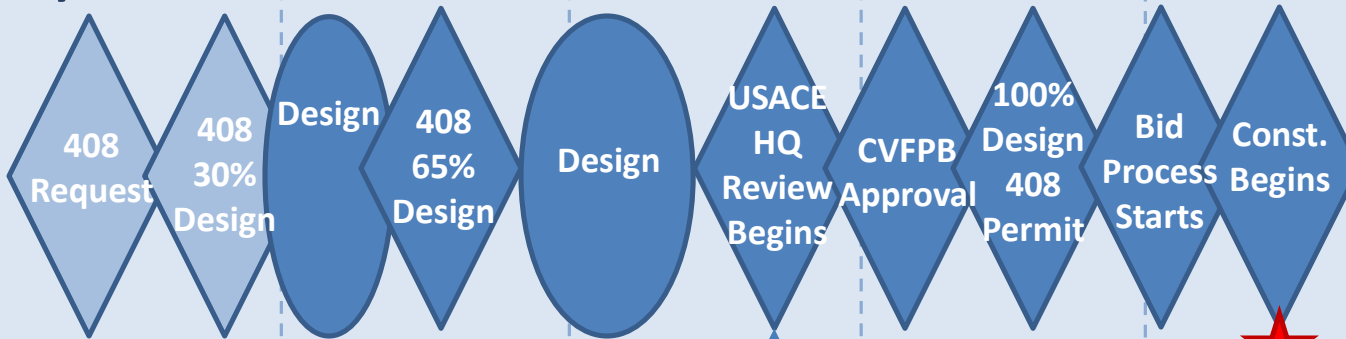
1	Lower Elkhorn Setback	Phase I (2015-2022)
2	Sacramento Bypass Levee Setback	
3	Bryte Landfill Remediation	
4	Small Community Feasibility Studies: Clarksburg, Knights Landing, Rio Vista, Yolo (pending competitive grant process)	
5	Lower Elkhorn Conservation Strategy Implementation	
6	Deep Water Ship Channel Design, Permitting, and Real estate	
7	Sacramento Weir Extension Design, Permitting, and Real estate	
8	Upper Elkhorn Design, Permitting, and Real estate	
9	Small Actions in Lower Yolo Bypass - Degrade Prospect Island Levee - Build Prospect Island Cross Levee - Step Levee Modification - Degrade Lower Egbert Levees	
10	Deep Water Ship Channel Construction	
11	Sacramento Weir Extension	
12	Sacramento Bypass Conservation Strategy Implementation	
13	Upper Elkhorn Setback	
14	Upper Elkhorn Conservation Strategy Implementation	
15	Fremont Weir Extension	
16	Westside Yolo Bypass Setbacks and Levee Raises - Willow Slough/Putah Creek	
17	Lower Westside Yolo Bypass Levee Setback and Fix-in-Place Improvements	
18	Lower Westside Yolo Bypass Conservation Strategy Implementation	
19	Westside Yolo Bypass Conservation Strategy Implementation - Willow Slough/Putah Creek	
20	Agricultural Crossing Improvements	Near-Term 2009 BiOp Projects
21	Wallace Weir Improvements	
22	Improve Existing Fremont Weir Adult Fish Passage	
23	Lisbon Weir modifications	Mid-Term BiOp Projects
24	Fish Passage and Floodplain Inundation Notch	



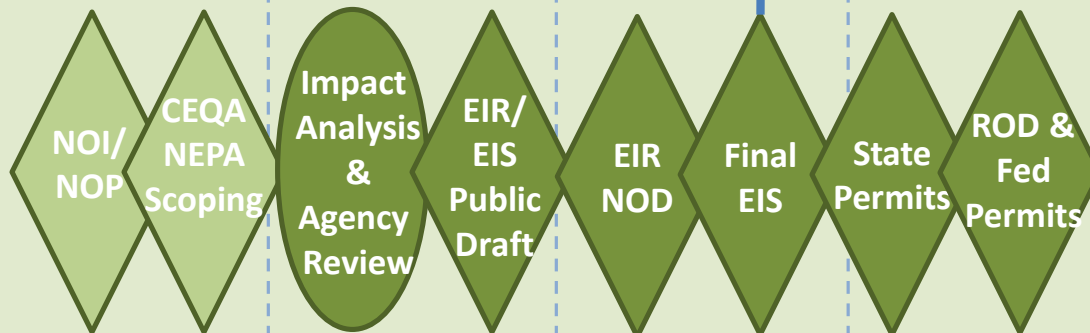
Anticipated Project Schedule

Lower Elkhorn Basin Levee Setback Project Key Milestones and Permitting Activities

Key Milestones



CEQA/NEPA and Permitting



Prop 1E Funds are required to be committed prior to 6/2020

2016

2017

2018

2019

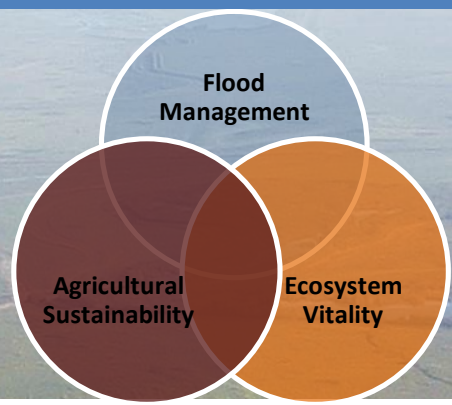
2020

2021

Proposed Project Features

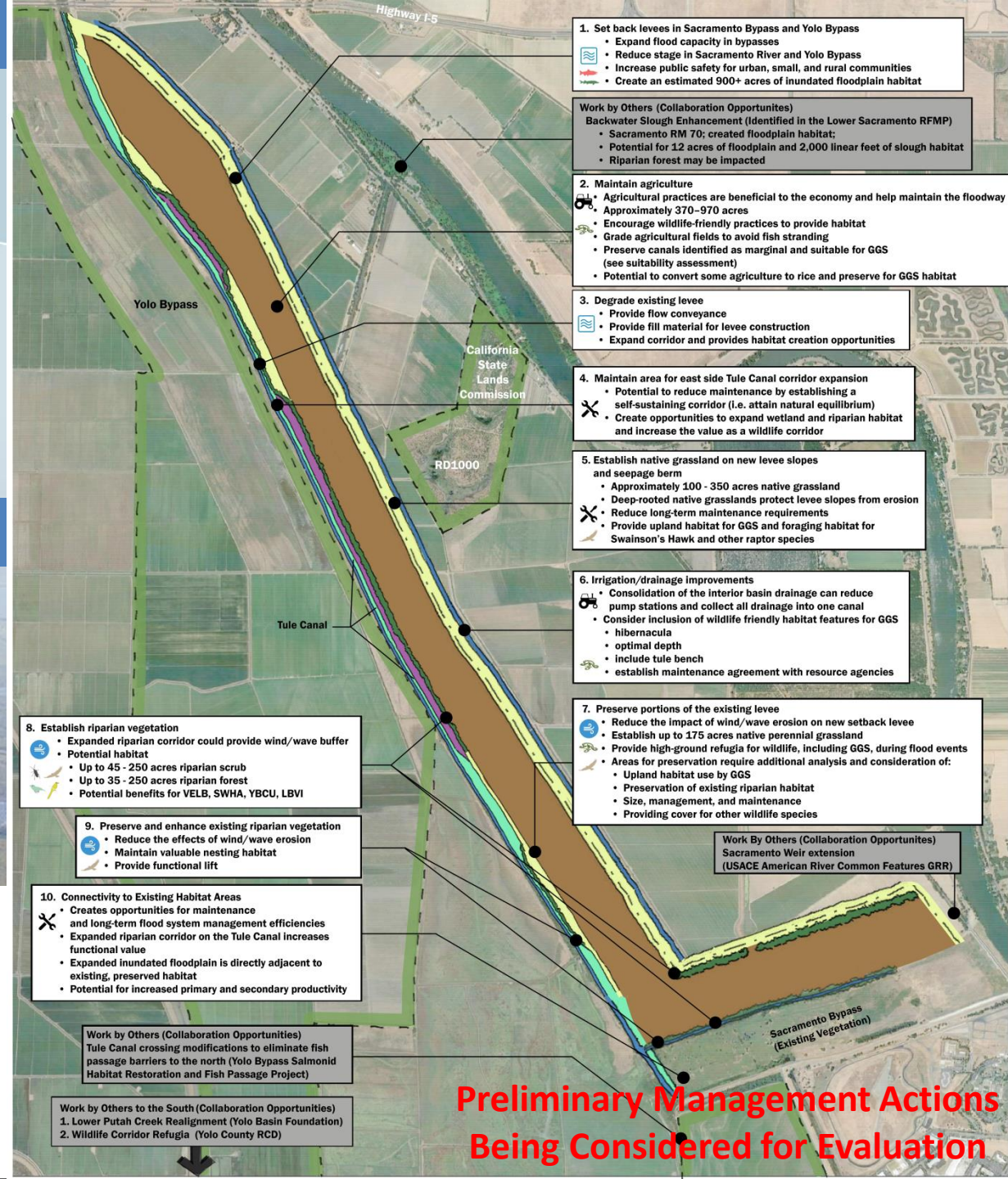
- 7 miles of Setback Levee
- Maintain Agriculture in Bypass
- Degrade Existing Levee With Portions Preserved for Habitat and Wind/Wave Protection
- Maintain Area for Expansion of the East Side of Tule Canal
- Preserve and Enhance Vegetation for Habitat and Wind/Wave Protection
- Grading and Drainage Improvements

Potential Benefits



LEGEND

Native Perennial Grassland	Opportunity Area	Wind/wave Buffer
Cropland and Pasture (Floodplain Agriculture)	Open Water	Agriculture
Riparian Forest	Easement Lands	Flood
Riparian Scrub	Levee Center Line	Maintenance
Valley Elderberry Longhorn Beetle (VELB)	Least Bell's Vireo (LBVI)	
California Central Valley Steelhead and Chinook Salmon	Swainson's Hawk (SWHA)	
Southern DPS of the North American Green Sturgeon	Yellow-Billed Cuckoo (YBCU)	
Giant Garter Snake (GGS)		



1. Set back levees in Sacramento Bypass and Yolo Bypass

- Expand flood capacity in bypasses
- Reduce stage in Sacramento River and Yolo Bypass
- Increase public safety for urban, small, and rural communities
- Create an estimated 900+ acres of inundated floodplain habitat

Work by Others (Collaboration Opportunities)
Backwater Slough Enhancement (Identified in the Lower Sacramento RFMP)

- Sacramento RM 70; created floodplain habitat;
- Potential for 12 acres of floodplain and 2,000 linear feet of slough habitat
- Riparian forest may be impacted

2. Maintain agriculture

- Agricultural practices are beneficial to the economy and help maintain the floodway
- Approximately 370 - 970 acres
- Encourage wildlife-friendly practices to provide habitat
- Grade agricultural fields to avoid fish stranding
- Preserve canals identified as marginal and suitable for GGS (see suitability assessment)
- Potential to convert some agriculture to rice and preserve for GGS habitat

3. Degrade existing levee

- Provide flow conveyance
- Provide fill material for levee construction
- Expand corridor and provides habitat creation opportunities

4. Maintain area for east side Tule Canal corridor expansion

- Potential to reduce maintenance by establishing a self-sustaining corridor (i.e. attain natural equilibrium)
- Create opportunities to expand wetland and riparian habitat and increase the value as a wildlife corridor

5. Establish native grassland on new levee slopes and seepage berm

- Approximately 100 - 350 acres native grassland
- Deep-rooted native grasslands protect levee slopes from erosion
- Reduce long-term maintenance requirements
- Provide upland habitat for GGS and foraging habitat for Swainson's Hawk and other raptor species

6. Irrigation/drainage improvements

- Consolidation of the interior basin drainage can reduce pump stations and collect all drainage into one canal
- Consider inclusion of wildlife friendly habitat features for GGS
 - hibernacula
 - optimal depth
 - include tule bench
 - establish maintenance agreement with resource agencies

7. Preserve portions of the existing levee

- Reduce the impact of wind/wave erosion on new setback levee
- Establish up to 175 acres native perennial grassland
- Provide high-ground refugia for wildlife, including GGS, during flood events
- Areas for preservation require additional analysis and consideration of:
 - Upland habitat use by GGS
 - Preservation of existing riparian habitat
 - Size, management, and maintenance
 - Providing cover for other wildlife species

Work by Others (Collaboration Opportunities)
Sacramento Weir extension (USACE American River Common Features GRR)

8. Establish riparian vegetation

- Expanded riparian corridor could provide wind/wave buffer
- Potential habitat
 - Up to 45 - 250 acres riparian scrub
 - Up to 35 - 250 acres riparian forest
- Potential benefits for VELB, SWHA, YBCU, LBVI

9. Preserve and enhance existing riparian vegetation

- Reduce the effects of wind/wave erosion
- Maintain valuable nesting habitat
- Provide functional lift

10. Connectivity to Existing Habitat Areas

- Creates opportunities for maintenance and long-term flood system management efficiencies
- Expanded riparian corridor on the Tule Canal increases functional value
- Expanded inundated floodplain is directly adjacent to existing, preserved habitat
- Potential for increased primary and secondary productivity

Work by Others (Collaboration Opportunities)
Tule Canal crossing modifications to eliminate fish passage barriers to the north (Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project)

Work by Others to the South (Collaboration Opportunities)
 1. Lower Putah Creek Realignment (Yolo Basin Foundation)
 2. Wildlife Corridor Refugia (Yolo County RCD)

Preliminary Management Actions Being Considered for Evaluation

Ongoing Activities

- Design features being evaluated
- CEQA process is underway; reviewing scoping comments and preparing to evaluate project features
- Nearing completion of surveys to support CEQA
- Engaging with Yolo County Staff, Reclamation District Managers, Landowners, Farmers, State & Federal Agencies, and Environmental NGOs
- Continued coordination building the Local, State and Federal Partnership

Questions?

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