

Yolo Bypass Planning and Project Implementation Summary

November 2016

FLOOD PROTECTION

Lower Sacramento River/Delta North Regional Flood Management Plan (RFMP). Yolo County working with Sacramento and Solano Counties and other local agencies and districts issued the FloodProtect Plan (aka RFMP) in July 2014. The staffing for this group, called the Project Delivery Team (PDT) is working on initial implementation activities for a series of projects recommended in the RFMP. Following release of the RFMP, the PDT developed a Corridor Management Framework which includes actions in both counties. Activities in the Yolo Bypass are covered under the Yolo Bypass Corridor Management Plan. The first step in this framework was to create and sign an MOU setting out that local agencies in Yolo and Solano Counties will form a collaborative and transparent partnership with which to approach implementing flood protection activities outlined in the RFMP. This MOU was signed in 2015. DWR is providing grant funding to develop the locally based projects. A scope of work is currently being developed to continue funding for another year.

Central Valley Flood Protection Plan is being updated for 2017. This plan will be taken to the Flood Protection Board in December 2016. An administrative draft of the 2017 plan was just released to stakeholders for early review.

Lower Elkhorn Levee Setback Project– A Notice of Preparation of CEQA and a Notice of intent to prepare NEPA documents was released this Fall. The project is at 10% design currently. The project is the first step in expansion of the Yolo Bypass to improve flood protection along the Sacramento River. A draft EIR/EIS will be released in late 2017. It will be finalized in 2018. Construction is planned for 2020

Sacramento Weir Expansion – The USACOE American River Watershed Common Features General Reevaluation Report completed in December 2015 makes the recommendation to widen the Sacramento Weir and Sacramento Bypass. This study is included in the current Water Resources Development Act (WRDA) and these recommendations would be authorized if/when

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WRDA is passed. The Lower Elkhorn study is also including the widening in order to provide another method for implementation if WRDA is not passed this year. WRDA would only include authorization. The USACOE will still need appropriations through separate legislation.

The Bryte Landfill must be capped before any expansion of the Weir can start. According to a report to the Yolo Board of Supervisors: “The Bryte landfill site is expected to be remediated and capped so that it can serve as a corporation yard for local reclamation districts as part of the Bypass expansion in Lower Elkhorn.”

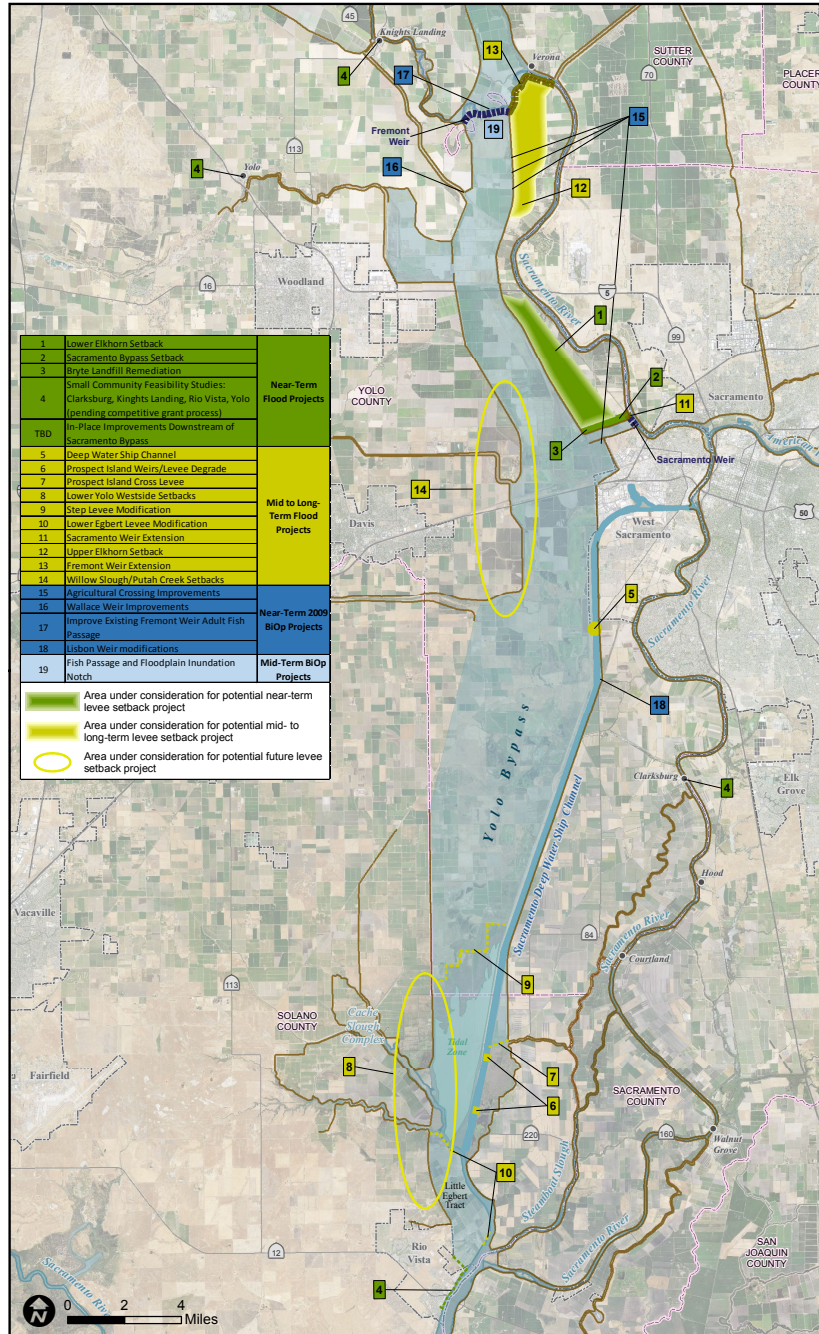
Sacramento River Flood Control Project, California, General Reevaluation –. The USACOE is preparing the Sacramento River General Reevaluation Report (GRR). The Corps began this evaluation in 2015. The USACOE representative at the May 24, 2016 Yolo Bypass Working Group meeting gave the following update: At the start of the GRR study they asked: What are the needs of the Sacramento River Flood Control System and what is required to meet those needs? The ACOE primary goals are reducing flood risk while seeking habitat restoration opportunities. Other system benefits include water supply and recreation.

The study area was from Knight’s Landing to Collinsville. The feasibility study identified the future without project condition, which is everything that would reasonably happen if the project was not implemented. This was the baseline. This baseline will change over time as things change or projects are identified. Alternatives were then outlined. For the evaluation phase, USACOE will use modeling to analyze economic and environmental benefits of the alternatives and see which rise to the top. Which alternatives provide the most benefit for the cost?

The study will require CEQA and NEPA compliance. The process was originally supposed to take 3 years but due to the large study area, the complexity of the legal and policy requirements and number of stakeholders and project groups, it will take longer. The USACOE is working on a time and funding waiver to extend the study time and funding limitations. They are continuing to evaluate measures to create the final array of alternatives with a goal of January 2017.

Proposed flood protection projects are illustrated on the following map prepared for the Yolo County Board of Supervisors in September 2017.

**POTENTIAL YOLO BYPASS/CACHE SLOUGH FLOOD & ECOSYSTEM IMPROVEMENTS
CONCEPTS REFLECT ONGOING LOCAL, STATE, AND FEDERAL PLANNING EFFORTS**



FISH PASSAGE AND FLOODPLAIN HABITAT RESTORATION

The USBOR and DWR are proposing projects in the Yolo Bypass to meet requirements in the biological opinions that govern operation of the Central Valley Project and State Water Project. Most of the proposed projects were elements of the Bay Delta Conservation Plan that has been replaced by Eco Restore and Water Fix. California Eco Restore is an initiative announced in spring 2015 to help coordinate and advance at least 30,000 acres of critical habitat restoration in the Sacramento–San Joaquin Delta by 2020. The projects proposed for the Yolo Bypass are in two categories.

1. Projects to improve fish passage for adult salmon and sturgeon.
2. Projects to increase floodplain habitat for juvenile salmon migrating downstream.

Eco Restore Projects in the Yolo Bypass - DWR and USBOR are jointly planning the Yolo Bypass Salmonid Habitat Restoration and Fish Passage Project to comply with the 2009 National Marine Fisheries Service Operations Biological Opinion (Bi Op). Reasonable and Prudent Actions (RPA) actions 1.6.1 and 1.7. RPA Action 1.6.1 requires significantly increased seasonal floodplain rearing habitat availability with biologically appropriate frequency and duration from December through April in the lower Sacramento River Basin. The project would modify the Fremont Weir to construct and operate one or more gated and/or passive diversion channels to improve the connection between the Yolo Bypass and the Sacramento River. A Draft EIR/EIS is being prepared to evaluate alternatives to meet the Bi Op requirements. There are 6 draft alternatives under development by DWR and USBOR. Engineering design is at less than 10 percent. The full Public Review Draft EIS/EIR is expected to be released in November or December 2017. Permitting is expected to begin in 2017.

The Yolo Bypass Salmonid Habitat Restoration Working Group is a stakeholder group that continues to meet periodically with USBOR and DWR staff involved in the project planning and engineering. This year the group received and discussed updates on alternative development including hydraulic and fish behavior modeling, and integration of current science into the planning effort. Options for increasing floodplain habitat for juvenile salmon include multiple

passive or operable gates at the Fremont Weir to be located at 3 potential locations. The locations are the eastside, center or westside of the existing weir. The gates could range in size from 3,000 cfs to 12,000 cfs and potentially flood up to 20,000 acres. The discussion has centered on maintaining a March 15 end date for managed flooding at the Fremont Weir. This consideration is based on the Yolo County Ag Impact Study and conversations with Yolo Bypass farmers and wetland managers.

Fish Passage improvements are being evaluated and permitted as separate projects. These projects include:

1. **Wallace Weir** – This project is currently under construction to replace the existing earthen weir at the entrance of the Knights Landing Ridge Cut with a new weir to improve irrigation and prevent endangered salmon and sturgeon migrating upstream from entering the Knights Land Ridge Cut Canal and subsequently the Colusa Basin Drain, a migratory dead end. The project includes a fish rescue facility. The project proponents are DWR and Reclamation District 108.
2. **Tule Canal Agriculture Crossing Improvements** – This project will replace existing seasonal and permanent earthen structures used to provide access for farm machinery with permanent box culvert crossings that could include operable gates. This will improve fish passage, improve drainage and require less maintenance for landowners. The project proponents are DWR and USBOR and funding is from the State and Federal Water Projects. Construction is expected to begin in 2017.
3. **Fremont Weir** - The existing fish ladder at the Fremont Weir provides insufficient passage for adult salmon and sturgeon. This project will widen and deepen the existing fish ladder at the Fremont Weir. Flows through the fish ladder will be between 500 and 1000 cfs. The project proponents are DWR and USBOR and funding is from the State and Federal Water Projects. Construction is expected to begin in 2017.

4. **Lower Putah Creek Re-alignment Project** – This project is also included in Eco Restore. Yolo Basin Foundation received an Ecosystem Restoration Grant from California Department of Fish and Wildlife in 2008. The project is located on the Glide Tule Ranch section of the Yolo Bypass Wildlife Area. The goal is to provide fish passage and habitat for fall run Chinook salmon and other native fish. The project will also provide seasonally inundated floodplain, tidal wetlands and riparian habitat. The Foundation completed the grant deliverables in September 2016. Deliverables include the Administrative Draft of a CEQA Mitigated Negative Declaration and engineering drawings and specifications for 5.6 miles of new channel and improvements to the existing restored tidal wetlands.

Delta Conservation Framework – The Framework will guide regional-scale planning, permitting, and grant making in support of implementing conservation programs and projects in the Delta, Suisun Marsh and Yolo Bypass in the next 25 years. It is a high level effort that also serves at the continuation of Eco Restore. The Framework is being developed by CDFW and they are currently holding a series of stakeholder workshops.

Regional Conservation Framework (RCF) – This is a county wide planning process intended to identify priority areas for public and private investments in habitat restoration and preservation. The Yolo Habitat Conservancy will be the lead agency for preparation of the RCF. The RCF will be prepared to expand the existing draft local conservation plan (HCP/NCCP) by adding a focus area for the Yolo Bypass and 18 additional species, including fish.

Proposition 1 Funding – In anticipation of the proposed floodplain restoration projects in the Yolo Bypass, the Yolo County Board of Supervisors approved the *Yolo Bypass Drainage and Infrastructure Study* that was completed in 2014. The study described a series of projects that are a priority for water and drainage infrastructure improvements that benefit existing Yolo Bypass uses including farming and managed wetlands. The funding is provided through either the Delta Conservancy or CDFW. Proposals were developed by a partnership led by Yolo County including Ducks Unlimited, Yolo County Resource Conservation District, CDFW and Yolo Basin Foundation. Three major grants related to the Yolo Bypass have been received.

Yolo Bypass Wildlife Area Drainage and Infrastructure Improvement Project. This \$2 million grant was awarded by Delta Conservancy to Ducks Unlimited in 2016. Additionally, \$130,000 was awarded from CDFW for CEQA and permitting for the project. The Metropolitan Water District of Southern California contributed \$132, for design and engineering under contract with cbec eco engineering. Permitting work is underway while the construction scope of work is being developed for approval by the Delta Conservancy.

Westside Tributary Flow Monitoring. Yolo County was awarded \$334,000 from CDFW in 2016 to collect flow data on the tributaries that flow from the west into the Yolo Bypass, Cache Creek, Willow Slough and Putah Creek. This is critical information that is needed for hydraulic modeling to estimate the potential impacts of the proposed modifications to the Fremont Weir for floodplain inundation to Yolo Bypass agriculture and managed wetlands. Cbec eco engineering will work with UC Davis to monitor the tributaries starting in fall 2016. The monitoring will continue through 2018.

Yolo Bypass Corridors for Flood Escape on the Yolo Bypass Wildlife Area. Yolo Resource Conservation District received \$688,195.65 from the Delta Conservancy. Yolo Basin Foundation, Putah Creek Council and Center for Land Based Learning will assist the RCD in planting of native plants during this 3-year project.

The following map was prepared by the CNRA for the Eco Restore website.

