Project Description: There is currently no state or federal project description developed for modifications to the Lisbon Weir, although conceptual designs have been proposed by engineers at the California Department of Water Resources that include raising the existing flap gate structure, constructing a high and low rock ramp, and creating a new flap gate structure (see attached). Lisbon Weir modifications are included in the 2009 National Marine Fisheries Service Biological Opinion for the CVP/SWP as RPA action I.6.4, and to date, have been included as a common element in the project development for RPA actions I.6.1 and I.7. The intent of Lisbon Weir modifications is to improve fisheries management and maintain the ability to impound water for irrigation, while also reducing maintenance. Based on direction from the collective fisheries agencies, the project must address the following design criteria: (1) in conjunction and consistent with other required fisheries actions in the Yolo Bypass, modifications at Lisbon Weir should be made such that there is a reduction in fish migratory delay and potential stranding of species of management concern; (2) the design criteria should provide for the upstream and downstream passage of sturgeon, which are expected to meet the criteria for salmonids; (3) water supply reliability must be maintained or improved to continue to meet the needs of water users upstream of Lisbon Weir, including the Yolo Bypass Wildlife Area; and (4) investigate design improvements to provide for flexibility in minimizing impacts on effective drainage and/or channel conveyance capacity. This project serves primarily as a fish passage improvement action that will enhance both upstream and downstream fish passage in the Tule Canal/Toe Drain, consistent with the larger habitat restoration and fish passage projects proposed in the Yolo Bypass. This project also aims to maintain or improve drainage, channel conveyance capacity, and appropriate water surface elevations in the Tule Canal/Toe Drain.

Type of Project: Fish passage

Restoration Targets: NA

Location and Landowner: This project is located in the Tule Canal/Toe Drain at the Lisbon Weir structure in the Yolo Bypass, adjacent to the Yolo Bypass Wildlife Area owned by the California Department of Fish and Wildlife, in Yolo County (site map attached). The Lisbon Weir is maintained and operated by Los Rios Farms consistent with the terms of the 1991 Mace Ranch Agreement.

Funding:

<table>
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<th>Project Task</th>
<th>Secured Funding</th>
<th>Funding Source</th>
<th>Remaining Costs</th>
<th>Potential Funding Source</th>
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Permitting:
- **Clean Water Act Section 404**: application not yet developed
- **Endangered Species Act**: not yet developed
- **Central Valley Flood Protection Board Encroachment Permit**: application not yet developed
- **Rivers and Harbors Act, Section 408**: application not yet developed
- **Clean Water Act Section 401, Water Quality Certification (RWQCB)**: application not yet developed
- **CA Fish and Game Code, Section 1602 (Streambed Alteration Agreement)**: application not yet developed
- **CA Endangered Species Act, Section 2081**: application not yet developed
- **CEQA/NEPA**: not yet developed

Estimated Timeline: Not yet identified.

Known Obstacles to Implementation: This project currently allows for fish passage, so is a lower priority for improvements.

Project Proponent: Not yet identified (DWR and/or USBR).
Lisbon Weir
Design Concept –
Section View
Looking Upstream

Existing Flap Gates – Raise Structure by 1.5’ and Leave Notch

High Rock Ramp

Low Rock Ramp

New Flap Gates – Can Be Fully Opened for Drainage

Island

Concrete Walls

DWR FPIP – Sept 2014