

# YOLO BYPASS DRAINAGE AND WATER INFRASTRUCTURE IMPROVEMENT STUDY:

Recommended Studies – Draft  
October 9, 2013



Number	Study Name	Description of Existing and Future Need	Study Components
RS - 1	Bypass Sedimentation Rate Changes due to Managed Flooding	<ul style="list-style-type: none"> <li>Future increased inundation area, duration and frequency of flooding could increase sedimentation rates</li> </ul>	<ul style="list-style-type: none"> <li>Develop methodology and study existing sedimentation rates in the Toe Drain/Tule Canal, and existing ditches throughout the Bypass</li> <li>Sedimentation near west side tributaries should be considered, as east side flooding could impact velocities and settling rates upstream</li> </ul>
RS - 2	Changes in Vegetation with Increased Frequency and Duration of Flooding	<ul style="list-style-type: none"> <li>Future conversion of agricultural lands to habitat other than managed wetlands could allow vegetation proliferation at unknown rates in the designated floodway</li> </ul>	<ul style="list-style-type: none"> <li>Develop methodology and study the type and growth patterns of vegetation on lands within a managed flooding context similar to current proposed scenarios                             <ul style="list-style-type: none"> <li>Assess changes in forage value of wetlands and grassland plants.</li> <li>Assess the effect on the growth of vegetation needed for nesting cover.</li> <li>Assess the effect on carrying capacity/maintenance of ditches.</li> </ul> </li> </ul>
RS - 3	Mammal Management Plan	<ul style="list-style-type: none"> <li>Mammals including beaver, river otters and muskrats can impede drainage and supply pathways with lodge construction</li> <li>Existing operations deal with mammal blockages on an as needed/case by case basis.</li> </ul>	<ul style="list-style-type: none"> <li>Develop a plan to improve protocols for managing these species and their activities</li> </ul>
RS - 4	Mutual Water Company Development Planning	<ul style="list-style-type: none"> <li>Coordinated water management, especially between smaller private landowners operating land for various or similar uses poses a challenge</li> <li>Some landowners in the Yolo Bypass have begun this process in order to facilitate efficient use of resources and management activities based on per acre assessment fees</li> </ul>	<ul style="list-style-type: none"> <li>Develop guidelines for landowners interested in establishing a Mutual Water Company</li> </ul>

