

## CVFPP Revised Draft Opportunities Environmental Stewardship Scope Definition Workgroup September 30, 2009

The following list of opportunities was summarized from the individual sticky notes prepared by the participants in ESSD Workgroup Meeting # 1. These opportunities are grouped into two categories: Physical Tools and Policy/Management Tools. The Physical Tools category represent actions that can be taken that directly result in changed physical conditions. The Policy/Management Tools represent management actions that can be taken that indirectly affect physical conditions.

### A. Physical Tools

1. Reoperate reservoirs to promote well-timed flood management from both an ecological and conveyance perspective and provide flexibility to address changes in climate, regulations, and scientific understanding.
2. Increase and enhance floodplain capacity to store water and improve ecosystem functions.
3. Plan and implement levee setbacks new or enlarged flood bypasses along the Sacramento-San Joaquin river system to improve the ecosystem functions, enhance flood protection, and provide public access for education and recreation.
4. Develop other hydrogeomorphic and ecological approaches to flood management, including operation and maintenance practices that combine an understanding of ecosystem functions with opportunities to increase flood protection.
5. Pursue a variety of structural and non-structural solutions to address O&M issues
6. Develop site-specific O&M plans based on current hydraulic models.
7. Develop and implement comprehensive advanced mitigation banks.
8. Plan for climate change through restoration of floodplain function, reservoir re-operation, increased habitat connectivity, and increased conveyance capacity via levee setbacks and bypasses.
9. Increase and improve the quantity, diversity, and connectivity of riparian, wetland, shallow floodplain, and shaded riverine aquatic habitats within the flood management system by incorporating setback levees and new or larger bypasses into the flood management system (wherever possible) and rehabilitating fluvial geomorphic processes and flow regimes.
10. Integrate multi-objective uses (e.g., flood water detention, habitat restoration, recreation, agriculture).
11. Discourage the establishment of new invasive species, prevent the spread of existing infestations, and reduce the extent of existing infestations within the flood management system.

### B. Policy/Management Tools

#### Collaboration and Coordination

12. Collaborate with and leverage funds from other programs and funding approaches (e.g., BDCP; CALFED, FERC licenses; San Joaquin River settlement; NRCS and Farm Bill; State Water Project, Habitat Joint Ventures, DFG state wildlife plans, Caltrans blueprint plans, Water Code 12585.7).
13. Adopt a collaborative, corridor-based approach to the flood management planning process that includes local, state and federal government agencies, non-profit organizations, and local landowners and that ensures multi-objective projects. Share more responsibility between federal, state, and local agencies to facilitate decision making process.

# CENTRAL VALLEY FLOOD MANAGEMENT PLANNING PROGRAM



14. Leverage existing programs and planning efforts (e.g. BDCP, Riparian Habitat Joint Venture, HCPs, NCCPs, IRWMPs, climate change adaptation policies, DPR's Central Valley Vision) to develop programmatic and regional, rather than local and piecemeal, conservation and restoration plans as part of a system-wide flood plan. Consider existing habitat preserves (e.g., state and federal wildlife areas, state parks, land trust properties, NRCS lands) during this process.
15. Develop an NCCP/HCP for the flood system and collaborate with other NCCP/HCPs.
16. Align new infrastructure, such as levee setbacks, with other infrastructure such as roads, to leverage other agency mandates funding streams and accomplish multi-objective projects.
17. Engage with Native American representatives to preserve sacred sites and incorporate traditional knowledge into flood management policies, projects, and maintenance activities.
18. Give management of habitat projects to local land trusts, other NGOs, RCDs and State Parks to help reduce management costs.

## Private Lands

19. Increase use of flood easements to accommodate flood waters, preserve agricultural land, and provide habitat.
20. Modify the Williamson Act to accommodate habitat enhancement.
21. Support agriculture by developing a means to compensate environmental services provided by private lands (financial incentives, types of insurance, etc).
22. Recognize the importance of, and the potential for, agricultural landscapes to improve water quality and conserve habitat through wildlife-friendly agricultural practices such as best management practices.

## Regulatory Considerations

23. Make use of programmatic and regional permits.
24. Develop and implement a corridor management strategy that would make use of and facilitate programmatic and regional permitting.
25. Develop a US Army Corps of Engineers regional variance for vegetation management on levees.
26. Revise US Army Corps of Engineers Operations and Maintenance manuals to acknowledge and support multiple objectives.
27. Expand use of Safe Harbor agreements to encourage habitat development on private lands and adjacent public lands.

## Other

28. Ensure that the best available scientific and technical data is employed in plan development and encourage the development or refinement of additional models, data, tools, and other resources that could enhance the flood management planning process in the future.
29. Create economic and legislative incentives to reduce new urban development in high-risk floodplains.
30. Develop ecosystem function and habitat and species abundance targets, in order to provide a measure of success for the flood plan.
31. Include lessons on multi-objective flood management into school curricula to influence long-term behavioral change and to connect the stewardship ethic and practices to K-12 education
32. Use ecological and economic models to plan, prioritize and evaluate opportunities for multi-objective action.