

# Scope of Work

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## Habitat and Recreation Evaluation

This task will consist of evaluating the habitat and recreation value of the Sacramento River West Bank and Deep Water Ship Channel Levees (including the Yolo Bypass east levee and Sacramento Bypass Channel levees).

Jones & Stokes will gather foundational data on existing habitat and natural resource values, and recreational activities at a level of detail and usable form sufficient to determine practical opportunities for integrating habitat and recreation actions with flood management. In addition to habitat and recreational enhancements, this data will also be used to develop strategies for mitigating environmental impacts of flood management. The data will be used to inform on-going capital investment programs and feasibility studies, and support development of preliminary-stage project design.

### Task 1. Conduct Surveys and Collect Data

Jones & Stokes will research published and other existing sources of data that have not been analyzed for the City of West Sacramento Flood Improvement Program Environmental Impact Report/Environmental Impact Statement (Program EIR/EIS) (e.g., UC Davis Information Center for the Environment, environmental studies of other projects within the study area, etc.), conduct reconnaissance-level survey (including GPS data at survey locations) and compile inventory of existing natural habitat resources and recreational values within the study area.

Jones & Stokes will identify and locate probable opportunities where levee or other flood management improvements can feasibly integrate:

- natural habitat creation, restoration or enhancement;
- recreational access and use, either new or enhanced; and
- mitigation of impacts to natural habitat or recreation values due to flood management or water supply improvements.

Jones & Stokes' biologists conducted preliminary reconnaissance-level field visits to the project reaches for the evaluation of the Program EIR to document and confirm baseline conditions. The general purposes of the supplemental biological and recreation field visits under this scope are noted below.

- Confirm plant communities and describe associated wildlife habitat uses. We will use the best available base maps and Yolo County HCP

data to prepare plant community and sensitive biological resource figures for the EIR/EIS.

- Confirm whether suitable habitat is present for special-status plant species that are not identifiable at the time of the field visit. Assess existing conditions and characterize habitat for special-status wildlife and fish, including Swainson's hawk, burrowing owl, white-tailed kite, or other raptors that may potentially nest on the site.
- Identify fisheries features such as shaded riverine aquatic habitat and instream woody material.
- Confirm whether potential waters of the United States may be present that will be subject to federal regulations, and identify other wetland habitats that may be considered sensitive to state and federal agencies. A formal wetland delineation is not included in this scope of work.
- Identify formally established and informed recreation areas and nodes of activity. These will include developed and undeveloped parks, fishing access points, popular boating areas, wildlife observation areas, trails, camping locations, kite-flying hot-spots, hangouts, etc. No new statistical data will be collected. Observations will be made regarding historical use changes and future trends based on projected growth and use patterns.
- Evaluate opportunities and constraints for habitat and recreation enhancement, and indirectly constraints for other land uses based on presence of these resources.

## **Task 2. Prepare Habitat and Recreation Survey Report and Database**

Jones & Stokes will prepare a brief technical report of study results . Study results will also be presented electronically in ArcGIS, CAD, and Adobe. Site photographs will be provided to illustrate key conditions. The findings of this analysis will provide the baseline for these resource topics in the EIR/EIS. This analysis will further be used to inform a GIS-based analysis for formulation of the engineering alternatives for the flood program.

**Table 1. Cost Estimate for the City of West Sacramento Habitat and Recreation Evaluation**

Task	ICF J&S Labor Classification	Consulting Staff							Production Staff				Labor Total	Direct Expenses	Total Price	
		Employee Name	Armer Lau	Oakes Jr. Har	Teddy Kri	Hughes Jes	Maniscalco Don	Douglas Lil	Subtotal	Lead Editor	Graphic Artist	Pub Spec				Subtotal
		Project Role	Project Manager	Sr. Biologist	Landscape Architect	Botanist	Fish Biologist	GIS Specialist								
		Proj Dir	Sr Consult I	Sr Consult III	Assoc Consult III	Assoc Consult II	Assoc Consult II	Assoc Consult III								
Task 1. Conduct Surveys and Collect Data		4	60	20	40	48	40	100	\$33,100	40	20	20	\$6,400	\$39,500		
Task 2. Prepare Habitat and Recreation Evaluation		8	80	40	40	48	20	120	\$39,000				\$0	\$39,000		
Total hours		12	140	60	80	96	60	220		40	20	20				
ICF Jones & Stokes billing rates		\$200	\$110	\$145	\$100	\$100	\$100	\$100		\$80	\$80	\$80				
Subtotals		\$2,400	\$15,400	\$8,700	\$8,000	\$9,600	\$6,000	\$22,000	\$72,100	\$3,200	\$1,600	\$1,600	\$6,400	\$78,500		
<b>Direct Expenses</b>																
523.02 Reproductions (8.5x11 Color = .89/page) (8.5x11 B&W = .08/page)																
523.03 Equipment Rental GPS Rental																
523.04 Postage and Delivery																
523.05 Travel, Auto, incld. Mileage at current IRS rate (.585/mile)																
Mark up on all non-labor costs and subcontractors: 10%																
Direct expense subtotal																
Total price																