COASTAL CONSERVANCY

Staff Recommendation
May 24, 2012

TIJUANA ESTUARY SEDIMENT FATE AND TRANSPORT STUDY

Project No. 08-028-01
Project Manager: Karen C. Bane

RECOMMENDED ACTION: Authorization to disburse an amount not to exceed one hundred thirty thousand dollars ($130,000) to augment the September 25, 2008 Conservancy authorization to Southwest Wetlands Interpretive Association for the Tijuana Estuary Sediment Fate and Transport Study at the Tijuana River National Estuarine Research Reserve, San Diego County.

LOCATION: County of San Diego, Cities of Imperial Beach and San Diego, Tijuana River National Estuarine Research Reserve

PROGRAM CATEGORY: Resource Enhancement

EXHIBITS

Exhibit 1: Project Location and Site Map

Exhibit 2: Conservancy 9-25-08 resolution and staff recommendation

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RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31111 and 31251-31270 of the Public Resources Code:

"The State Coastal Conservancy hereby authorizes the disbursement of an amount not to exceed $130,000 (one hundred thirty thousand dollars) to augment the Conservancy's September 25, 2008 authorization to the Southwest Wetlands and Interpretive Association (SWIA) to implement the Tijuana Estuary Sediment Fate and Transport Study. This authorization remains subject to the Conservancy's September 25, 2008 conditions, attached to the accompanying staff recommendation as Exhibit 2."

Staff further recommends that the Conservancy adopt the following findings:

"Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed augmentation of funds remains consistent with the findings made under the Conservancy's September 25, 2008 authorization. (See Exhibit 2).

2. The proposed project is consistent with the additional Project Selection Criteria adopted by the Conservancy on November 10, 2011."

PROJECT SUMMARY:

Staff recommends augmenting the funding in the Conservancy's September 25, 2008 authorization by an amount not to exceed $130,000 to the Southwest Wetland Interpretive Association to implement the Tijuana Estuary Sediment Fate and Transport Study (Study). As envisioned in the original authorization, the Study includes communication of data and facilitation of workshops to help resource managers and regulatory agencies use the new scientific findings to design and evaluate sediment reuse projects along the California coast and to evaluate federal and state sediment management policies. After the Study was underway, USGS gained an opportunity to conduct a numerical modeling exercise which demonstrated that a hydrodynamic model could reproduce the patterns of transport and sedimentation observed during the project. The model has proven critical in visually communicating the new scientific findings about how fine sediment disperses.

In addition to verifying observations of sediment dispersal, the model also can be used to predict fine sediment dispersal from a proposed project. By changing the season, volume and rate of a sediment deposition, the model can be used to optimize the project to take advantage of coastal processes that minimize potential environmental impacts.

The recommended augmentation of funds will be used to demonstrate this predictive use of the model for a case study at the Tijuana Estuary. The case study will be used to help communicate to resource managers how the new scientific findings may be applied to projects at other sites along the California coast.

PROJECT FINANCING:

Proposed augmentation:

Coastal Conservancy	$130,000

September 25, 2008 authorization (See Exhibit 2):

State Water Resources Control Board	$195,000
Coastal Conservancy (Exhibit 2)	$425,000
Coastal Conservancy	$345,344
Ocean Protection Council	$1,100,550
Department of Boating and Waterways	$653,080
US Army Corps of Engineers	$179,020
USGS (in-kind)	$346,267
Total Project Cost	**$**3,244,261

The anticipated source of Conservancy funds will be the fiscal year 10/11 appropriation of the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84). This funding may be expended, in accordance with the Conservancy's enabling statutes, "for the protection of San Diego Bay and adjacent watersheds" as specified in section 75060(f) of the Public Resources Code. "San Diego Bay and adjacent watersheds" includes all coastal and bay watersheds within San Diego County. (Pub. Res. Code § 75072.6) Consistent with Proposition 84, this Study will provide information necessary to protect the beaches, bays and coastal waters of the San Diego Bay and County for future generations. (Pub. Res. Code § 75003(d)) As discussed below, the project is consistent with Chapter 6 of Division 21.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION, STRATEGIC PLAN GOAL(S) & OBJECTIVE(S), LOCAL COASTAL PROGRAM POLICIES, LOCAL WATERSHED MANAGEMENT PLAN/STATE WATER QUALITY CONTROL PLAN AND CEQA:

The proposed augmentation of funds remains consistent with the consistency and CEQA sections in the Conservancy's September 25, 2008 authorization, specifically the Conservancy's enabling legislation, the goals and objectives in the Conservancy's 2007 Strategic Plan, local coastal program policies, local watershed management plan/state water quality control plan and the California Environmental Quality Act (as there are no possible new significant environmental effects from the addition of funding for the project). (See Exhibit 2).

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

Although the proposed augmentation remains consistent with Conservancy's September 25, 2008 authorization regarding the Conservancy's Project Selection Criteria and Guidelines, updated on September 20, 2007 (see Exhibit 2), the Conservancy adopted additional project selection criteria on June 4, 2009 and November 10, 2011 to evaluate how proposed projects address vulnerability to sea level rise and other climate change impacts and minimize greenhouse gas emissions. The Study was planned, designed and permitted prior to the adoption of these criteria. The intent of the Study is to monitor the dispersal of the sediment by the tides and waves over the course of days and months. The placement of material is not intended to be a permanent improvement that needs to be resilient in the event of sea level rise or other climate change impacts. However, the data will inform whether and how regional sediment management, one of the adaptation strategies in the Conservancy's Climate Change Policy, may increase beneficial reuse of dredge materials to enable tidal wetlands and other shoreline habitats to keep pace with sea-level rise.