

MEMORANDUM OF AGREEMENT

THE SANTA ANA RIVER WATERSHED TRUST FUND FOR ARUNDO ERADICATION AND HABITAT ENHANCEMENT IN-LIEU FEE MITIGATION PROGRAM

This agreement regarding establishment of an In-Lieu Fee Program, hereinafter, the Santa Ana River Watershed Trust Fund for Arundo Eradication and Habitat Enhancement (Fund) is made and entered into on (Date), by and among the U.S. Army Corps of Engineers, Los Angeles District (Corps), the Santa Ana Watershed Association of Resources Conservation Districts (SAWA), and the Orange County Water District (OCWD).

I. PREAMBLE

A. Whereas, the Corps, SAWA, and OCWD (collectively, “the Parties”) recognize the effect of invasive non-native vegetation on decreasing functions related to native species habitat, water quality, and hydrology of riparian ecosystems and the importance of invasive non-native vegetation eradication for restoring and enhancing native riparian functions and values within waters of the United States including wetlands (see Exhibit A);

B. Whereas, the parties have the ability and desire to work with public and private landowners to restore riparian areas in the Santa Ana River Watershed that are infested with invasive, non-native plant species, such as but not limited to *Arundo donax* (Arundo), *Ricinius communis* (castor bean), and *Tamarix* spp. (saltcedar or tamarisk);

C. Whereas, discharge of dredge or fill material into waters of the U.S. including wetlands is regulated under provisions of Section 404 of the Clean Water Act and administered through a permit program under the auspices of the Corps;

D. Whereas, the Corps recognizes the potential for direct, indirect, and cumulative impacts that may occur to waters of the U.S. as a result of activities authorized under Section 404 of the Clean Water Act; the Corps requires compensatory mitigation including restoration and enhancement to offset unavoidable impacts to the aquatic resources to ensure authorized activities comply with the Section 404(b)(1) Guidelines (40 CFR 230);

E. Whereas, the Corps recognizes the utility of eradicating Arundo and other invasive exotic vegetation to increase functions and values of riparian ecosystems to compensate for unavoidable impacts to waters of the U.S. as evidenced by the peer-reviewed scientific literature (see Exhibit B);

F. Whereas, the Corps recognizes SAWA as a non-governmental natural resource management organization committed to increasing natural resource values within the Santa Ana River Watershed in the context of an established program (see Exhibits C and D)

G. Whereas, OCWD has established the Santa Ana River Watershed Trust Fund to eradicate Arundo and restore native riparian habitat, which supports endangered and sensitive species (see Exhibit E);

H. Whereas, the parties in partnership have demonstrated the wherewithal to successfully eradicate Arundo, manage endangered species, and involve the public (Exhibits C, D, E, and F);

I. Whereas, this success and expertise is manifest and recognized in the recovery progress of the least Bell's vireo in the Prado Basin, near-eradication of Arundo on San Timoteo Creek resulting in an excess of approximately 200 acres of riparian habitat values, and widespread public recognition and support in part through congressional appropriations (Exhibits F, G, and H);

J. Whereas, experience in eradicating Arundo for the purpose of compensatory mitigation has been demonstrated by the OCWD (Exhibits E and F) and SAWA (Exhibit G and H);

K. Whereas, those monies deposited into the Fund by permittees at the direction of the Corps will be solely used to restore and enhance riparian resources by removal of the invasive, non-native plant species listed above;

L. Whereas, the parties will obtain approval of public and private landowners prior to conducting any work on their lands;

M. Whereas, the Corps retains full authority to approve or deny the use of those Fund monies generated through the permitting process, to approve proposed project sites, and to approve or modify plans.

N. Whereas, this agreement does not in any manner affect statutory authorities and responsibilities of the signatory parties.

O. Whereas, the following exhibits are incorporated as appendices to this agreement:

- Exhibit A. Literature Summarizing Impact of Exotic Vegetation on Riparian Functions
- Exhibit B. Literature Summarizing Value of Exotic Vegetation Removal in Mitigation
- Exhibit C. SAWA Work Summary, Contract, and Budget for FY 2001 and FY 2002
- Exhibit D. Los Angeles Times Article on SAWA
- Exhibit E. Agreement establishing the Santa Ana River Watershed Trust Fund
- Exhibit F. Cooperative Agreement between the OCWD and the U.S. Fish and Wildlife Service to Cooperatively Manage OCWD's Lands in Prado Basin
- Exhibit G. Map of the San Timoteo Arundo Removal Project
- Exhibit H. Map of Arundo Removed from the Santa Ana Watershed Program
- Exhibit I. Santa Ana River Watershed Program Annual Work Plan

II. OCWD AGREES TO:

A. Maintain the dedicated interest-bearing account known as the Santa Ana River Watershed Trust Fund for the purpose of receiving funds to be used for this *Arundo* eradication and habitat enhancement program. The OCWD will annually provide a statement showing the credits and debits within the account.

B. Use the funds generated to support the following tasks: removal or treatment of invasive weeds, endangered species management, obtaining conservation easements, mapping, and monitoring (see Exhibit I). The OCWD will annually evaluate costs and provide a detailed cost analysis to the Corps.

C. Provide expertise, oversight, and assistance in all aspects of the activities that will be associated with the implementation of this Agreement, including permit compliance and reporting.

D. Maintain records, documents, and other evidence pertaining to monies received and expenses incurred related to removal of invasive exotics, mapping, monitoring, reporting, and other costs. By April 30 of each year, SAWA will provide the Corps with a statement detailing monies received and expenses incurred.

III. SAWA AGREES TO:

A. Accept legal responsibility to ensure mitigation terms are fully satisfied.

B. Remove non-native vegetation such as but not limited to *Arundo donax*, *Ricinus communis*, and *Tamarix* spp., maintain the site free of invasive non-native vegetation in perpetuity if invasive non-native vegetation exits upstream of the site or for 10 years otherwise, and provide annual monitoring reports to the Corps for a minimum period of three (3) years from establishment of each parcel. Annual monitoring reports must be submitted until sites remain at 1% or less exotic cover for 24 consecutive months. If invasive exotic vegetation cover is still greater than 1% beyond three years, eradication activities shall be reinitiated and the monitoring period cycle shall begin again, until there is less than 1% exotic cover for 24 consecutive months.

C. Plant native seedlings, rooted cutting, and propagules in areas where exotics are removed in a manner simulating natural riparian growth where there is a specific, compelling, biological or hydrological need to hasten natural recovery, as needed, and in accordance with the Annual Work Plan (Exhibit I).

D. Obtain all appropriate environmental permits, clearances, or approvals necessary to perform the removal and restoration work contemplated by this agreement.

E. Facilitate access to the restored areas by the Corps staff for the purpose of compliance

inspections.

F. Perform annual monitoring and re-treatment, as needed, of all restored areas.

G. Maintain accurate records for expenditure of funds and documentation of restored areas showing date the work began for each parcel and total number of acres restored, all of which will be included in the annual reports submitted to the Corps.

H. Perform maintenance activities as needed for each parcel by treating the re-infested areas as documented in the Annual Work Plan (Exhibit I). The program will be reevaluated at the end of year seven of a ten-year cycle by the Parties. At the end of each cycle, the program will be redesigned and/or renewed by the Parties and extended. If the program is not renewed, no new treatment sites will be initiated in years eight through ten. However, OCWD and SAWA shall not be relieved of their obligations under this agreement to restore and maintain the areas for which it has received funds through the first seven years.

I. Obtain conservation easements or rights of entry before work is to be performed on private lands. These easements will allow for the treatment protocol as described in Exhibits H and I.

IV. The Corps Agrees to:

A. Review each project requiring a Section 404 permit on a case-by-case basis and determine the suitability to use the Fund to fulfill its compensatory mitigation requirements.

B. Determine the mitigation ratio on a case-by-case basis for projects requiring a Section 404 permit prior to issuance of the permit, considering the aquatic functions and values lost from the permitted activity and the functions and values gained from the exotics removal and habitat enhancement program.

C. Perform annual compliance visits to assess the conditions of the restored areas, recommend corrective measures, if any, for a period of three (3) years from the date of initial restoration.

V. It Is Mutually Agreed:

A. This program will be limited to mitigation for unavoidable, minimal impacts to aquatic resources in the Santa Ana River Watershed, including the San Jacinto River Watershed (Exhibit H). This program will be available to any person or organization receiving an authorization under Section 404 of the Clean Water Act. Use of this mitigation program is subject to the approval of the Corps on a case-by-case basis.

B. Funds provided for compensatory mitigation shall begin to be used for eradication efforts within a year.

C. This program shall not be used to mitigate for impacts to unique aquatic resources such as vernal pools, tidal/estuarine wetlands, and/or seep wetlands.

D. This program shall be limited to mitigation for 1) permanent impacts to aquatic resources authorized by a nationwide or regional general permit (generally less than 0.5 acre), 2) permanent impacts to aquatic resources authorized by an individual permit after compensatory mitigation is first performed at a 1:1 ratio (i.e one acre of mitigation for each acre of impact) using enhancement, restoration, or creation, 3) for temporary impacts to aquatic resources, and 4) unauthorized impacts to wetlands and other waters of the U.S. in conjunction with a restoration order.

E. An acre of mitigation in this program consists of the work performed on an acre of land with 100% infestation of invasive, non-native plants. Work on an acre of land with less than 100% infestation will receive credit proportional to the percentage infestation of invasive, non-native plants.

F. Success of the restored areas shall be assessed using the following criteria:

Time from start of activities

Criteria

Year 1-2

The project area is treated for removal of non-native vegetation. Non-native vegetation on site consists of 30% of the total vegetation. Necessary grading, irrigation lines, as indicated in any project-specific mitigation plan has been conducted. Re-vegetation with native riparian vegetation has been initiated, if needed. Arundo re-sprouts are being actively treated for removal.

Year 3

Non-native vegetation consists of less than 10% of the total vegetation on site. Successful growth of native riparian vegetation including the herbaceous, shrub and tree species as listed in any site-specific mitigation plan are present.

Year 4-5

Area contains less than 1% exotic vegetation and showing a start of canopy development, with shrub and herbaceous under-story.

G. This agreement shall become effective on the date of signature by the Corps. Any party to this agreement may terminate their participation upon written notification to the other parties. The Parties may discontinue receiving funds to conduct restoration activities upon written notification to the Corps. However, the Parties shall not be relieved of their obligations under

this agreement to restore and maintain the areas for which funds have been received without written approval of the Corps.

H. This agreement may be amended mutually upon agreement by all signatory parties.

ORIGINAL SIGNED BY

Richard G. Thompson
Colonel, Corps of Engineers,
District Engineer
Los Angeles District
U.S. Army Corps of Engineers

ORIGINAL SIGNED BY

Virginia Grebbien
General Manager, Orange County Water District

ORIGINAL SIGNED BY

Shelli Lamb
Chairperson, Santa Ana Watershed Association