U.S. Army Corps of Engineers (USACE)

APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT

33 CFR 325. The proponent agency is CECW-CO-R.

Form Approved - OMB No. 0710-0003 Expires: 01-08-2018

The public reporting burden for this collection of information, OMB Control Number 0710-0003, is estimated to average 11 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or burden reduction suggestions to the Department of Defense, Washington Headquarters Services, at whs.mc-alex.esd.mbx.dd-dod-information-collections@mail.mil. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR APPLICATION TO THE ABOVE EMAIL.

PRIVACY ACT STATEMENT

Authorities: Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Programs of the Corps of Engineers; Final Rule 33 CFR 320-332. Principal Purpose: Information provided on this form will be used in evaluating the application for a permit. Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public and may be made available as part of a public notice as required by Federal law. Submission of requested information is voluntary, however, if information is not provided the permit application cannot be evaluated nor can a permit be issued. One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and/or instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned. System of Record Notice (SORN). The information received is entered into our permit tracking database and a SORN has been completed (SORN #A1145b) and may be accessed at the following website: http://dpcld.defense.gov/Privacy/SORNsIndex/DOD-wide-SORN-Article-View/Article/570115/a1145b-ce.aspx

(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)

1. APPLICATION NO.	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE

(ITEMS BELOW TO BE FILLED BY APPLICANT)

5. APPLICANT'S NAME
First - Julia Middle - Last - Richards
Company - San Diego River Conservancy
E-mail Address - julia.richards@c.ca.gov

8. AUTHORIZED AGENT'S NAME AND TITLE (agent is not required)
First - Dustin Middle - Last - Harrison
Company - San Diego River Conservancy
E-mail Address - dustin.harrison@sdrc.ca.gov

6. APPLICANT'S ADDRESS:
Address- 1350 Front Street, Suite 3024
City - San Diego State - CA Zip - 92101 Country - USA

9. AGENT'S ADDRESS:
Address- 1350 Front Street, Suite 3024
City - San Diego State - CA Zip - 92101 Country - USA

7. APPLICANT'S PHONE NOs. w/AREA CODE
a. Residence b. Business 619-645-3188 c. Fax 619-238-7068

10. AGENTS PHONE NOs. w/AREA CODE
a. Residence b. Business 619-525-4094 c. Fax 619-238-7068

STATEMENT OF AUTHORIZATION

11. I hereby authorize, Dustin Harrison to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

SIGNATURE OF APPLICANT 9-16-19 DATE

NAME, LOCATION, AND DESCRIPTION OF PROJECT OR ACTIVITY

12. PROJECT NAME OR TITLE (see instructions)
San Diego River Watershed Invasive Non-Native Plant Control and Restoration Program

13. NAME OF WATERBODY, IF KNOWN (if applicable)

14. PROJECT STREET ADDRESS (if applicable)
Address
City - State- Zip-

15. LOCATION OF PROJECT
Latitude: °N Longitude: °W

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions)
State Tax Parcel ID Municipality Cities of San Diego, Santee, El Cajon, La Mesa, County of San Diego
Section - Township - Range -

17. DIRECTIONS TO THE SITE

This notification is intended to cover all river segments, tributaries, ponds and wetlands in the San Diego River Watershed, San Diego County (Figure 1). Projects can be accessed from Interstate 5 on the western end or State Route 79 on the eastern end of the San Diego River Watershed, connected by Interstate 8 traveling east-west then using major arterials or side streets to enter project locations. All project locations receive a Right of Entry prior to work beginning. While this notification is intended to cover all waterbodies mentioned above within the San Diego River Watershed, there are several focus areas that are currently under treatment or that will be treated in the near future.

18. Nature of Activity (Description of project, include all features)

The typical restoration process for Arundo begins in the Fall with reduction of target plant biomass. Target plants are disposed of properly, usually removed off-site to a land fill, using a variety of heavy equipment specifically designed for brush removal with mowing attachments. Tracked vehicles can disturb the soil surface when operated. Disturbance of the soil surface is problematic as it increases the likelihood of: higher rates of soil erosion, disturbance of the mulch layer (exposing soil)- increasing the presence of weeds, and creates the possibility of disturbing cultural resources. Using rubber-tired tractors for reduction of biomass reduces the likelihood of these impacts significantly. No biomass is left in the low flow channel. Other large non-native plants (palms, Brazilian pepper tree, tamarisk, etc.) are reduced and Arundo stands are mowed. The Arundo is typically treated via cut stump method or re-sprouts shortly after being mowed (4-6 weeks). A follow up treatment using glyphosate and/or imazapyr herbicide formulations approved by the Environmental Protection Agency (Rodeo®, Aqua master® and Habitat) for use in riparian areas occurs following biomass removal and periodically for a period of three to ten years, or until the non-native root mass is no longer viable. These herbicides are generally non-toxic to wildlife. Only target non-native plants are treated.

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

The San Diego River Conservancy has conducted a watershed based invasive non-native plant control and riparian restoration program on the San Diego River Watershed since 2009. Arundo and other non-native invasive species pose a serious threat to the native flora and fauna, and are a significant flood and fire risk to the community. The plants have severe and negative impacts on biological and hydrological functions within the riparian system. The target invasive non-native plants are not typically utilized as a food resource and have poor structure for nesting and use by other organisms as shelter. Arundo and other non-native invasive species out-compete native vegetation forming monotypic stands that interfere with native plant succession and establishment. Additionally, Arundo, pampas grass, palms and eucalyptus in particular are extremely flammable throughout the year as mature stands contain large amounts of dead material. Stands are tall and well ventilated, contributing to fast moving hot fires that are carried up into the existing riparian woodland canopy.

USE BLOCKS 20-23 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards:

Type Amount in Cubic Yards	Type Amount in Cubic Yards	Type Amount in Cubic Yards

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

Acres

or

Linear Feet

23. Description of Avoidance, Minimization, and Compensation (see instructions)

24. Is Any Portion of the Work Already Complete? [X] Yes [ ] No IF YES, DESCRIBE THE COMPLETED WORK

Biomass removal and herbicide treatment follow up occurs quarterly for 2-5 years as needed. It is estimated approximately 165 acres have been controlled to date. Past experience, however, indicates that areas of new and extended growth are often encountered in untreated areas years after the initial mapping was conducted. The San Diego River Conservancy is working to update this mapping effort with more recent aerial imagery and remote sensing land cover data to better estimate extent of invasive non-native vegetation cover. Preliminary analysis estimates approximately 180 acres of newly infested areas and previously overlooked locations in addition to the original 354 acres totaling approximately 537 acres invasive plant canopy. This would mean nearly 372 acres remain to be biomassed and treated in the next 5 years.

25. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (if more than can be entered here, please attach a supplemental list).

a. Address-

City - San Diego State - Zip -

b. Address-

City - La Mesa State - Zip -

c. Address-

City - Santee State - Zip -

d. Address-

City - El Cajon State - Zip -

e. Address- Unincorporated San Diego County

City - State - Zip -

26. List of Other Certificates or Approvals/Denials received from other Federal, State, or Local Agencies for Work Described in This Application.

AGENCY	TYPE APPROVAL*	IDENTIFICATION NUMBER	DATE APPLIED	DATE APPROVED	DATE DENIED
CDFW	SAA 1600 Renewal	160020090263R5	02/08/2019	03/06/2019	
USFWS	Letter of Concurrence	2008B0219/2008TA	12/21/2007	11/18/2008	
USACE	RGP 41	SPL200301094CLH	06/02/2014		

* Would include but is not restricted to zoning, building, and flood plain permits

27. Application is hereby made for permit or permits to authorize the work described in this application. I certify that this information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

SIGNATURE OF APPLICANT	DATE	SIGNATURE OF AGENT	DATE
	9-16-19	Justin Harrison	9/16/2019

The Application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

Notification Package for:
USACE Regional General Permit No. 41
San Diego River Watershed
Invasive, Non-native Plant Removal Program
September 12, 2019

Permittee: The Regional General Permit applies to anyone in the California portion of Los Angeles District of the Corps of Engineers (Los Angeles, Orange, Riverside, San Diego, San Bernardino, Imperial, Ventura, Santa Barbara, Mono, Inyo, and San Luis Obispo counties).

Permit Number: SPL-2003-01094-EBR	Issuing Office: Los Angeles District
Effective Data: September 5, 2019	Expiration Date: September 5, 2024

Prospective Permittee must submit the following information to the Corps prior to use of this RGP:

A. Name, address and telephone number of the prospective permittee:

Name:	Julia Richards
Organization:	San Diego River Conservancy
Address:	1350 Front Street, Suite 3024
Telephone:	619-645-3188
Email:	julia.richards@sdrc.ca.gov
Website:	http://sdrc.ca.gov/

B. Location of the proposed project, including a vicinity map:

This notification is intended to cover all river segments, tributaries, ponds and wetlands in the San Diego River Watershed, San Diego County (Figure 1). An initial mapping of invasive species was conducted in 2010 and subsequent removal, control and restoration efforts have been underway since that time. While this notification is intended to cover all waterbodies mentioned above within the San Diego River Watershed, there are several focus areas that are currently under treatment or that will be treated in the near future (Figure 2).

C. Project purpose:

The San Diego River Conservancy (Conservancy) has conducted a watershed based invasive non-native plant control and riparian restoration program on the San Diego River Watershed since 2009. The project involves multiple public and private funding sources that allow the San Diego River Conservancy (a state agency) and its partners (non-profit organizations and local jurisdictions), to carryout restoration of riparian habitat in the San Diego River Watershed through the control of invasive non-native plants (mainly *Arundo)* and the planting of native species (Figure 1). Funding sources may include, but are not limited to: State Water Resources Control Board (SWRCB), Wildlife Conservation Board (WCB), State Coastal Conservancy (SCC), Department of Water Resources (DWR), County of San Diego, California Department of Fish and Wildlife (CDFW), California Natural Resources Agency (CNRA), U.S. Fish and Wildlife Service (USFWS), Natural Resource Conservation Service (NRCS), fees and fines,

donations, and mitigation projects.

Arundo and other non-native invasive species pose a serious threat to the native flora and fauna, and are a significant flood and fire risk to the community. The plants have severe and negative impacts on biological and hydrological functions within the riparian system. The target invasive non-native plants are not typically utilized as a food resource and have poor structure for nesting and use by other organisms as shelter. *Arundo* and other non-native invasive species out-compete native vegetation forming monotypic stands that interfere with native plant succession and establishment. These non-native invasive species also alter hydrology by utilizing significantly more water than native vegetation and filling in areas that would otherwise remain open habitat, which is important for regulating flows. Creek and river flow capacity is reduced by excessive biomass that cause overbank flows and flooding.

Arundo, pampas grass, palms and eucalyptus in particular are extremely flammable throughout the year as mature stands contain large amounts of dead material. Stands are also tall and well ventilated, contributing to fast moving hot fires that are carried up into the existing riparian woodland canopy. Riparian areas with extensive amounts of *Arundo* experience fires frequently, which would otherwise be an unusual event. Some riparian systems with extensive *Arundo* stands are moving from a natural flood regulated system to a fire dominated system, which is drastically altering the ecosystem. Flooding is a natural process in a functional riparian ecosystem. *Arundo* is altering the flood regime by blocking flows with its thick growth, creating unstable banks due to its poorly developed root systems that easily fragment, and contributing to bridge and flood control structure failure by becoming lodged against bridge pylons and blocking and diverting flows.

D. Brief description of the proposed project. including the aerial extent of work being proposed and the method of biomass removal/ disposal:

Active restoration activities involving equipment are carried out from September 15th to March 15th, which avoids/minimizes impacts to the breeding/reproductive season for wildlife, fish and native plants.

The typical restoration process for Arundo begins in the Fall with biomass reduction using a variety of heavy equipment specifically designed for brush removal with mowing attachments. Tracked vehicles can disturb the soil surface when operated. Disturbance of the soil surface is problematic as it increases the likelihood of: higher rates of soil erosion, disturbance of the mulch layer (exposing soil)- increasing the presence of weeds, and creates the possibility of disturbing cultural resources. Using rubber-tired tractors for reduction of biomass reduces the likelihood of these impacts significantly. No biomass is left in the low flow channel. Other large non- native plants (palms, Brazilian pepper tree, tamarisk, etc.) are reduced when Arundo stands are mowed. The Arundo typically re-sprouts shortly after being mowed (4-6 weeks). A follow up treatment using glyphosate and/or imazapyr herbicide formulations approved by the Environmental Protection Agency (Rodeo®, Aqua master® and Habitat) for use in riparian areas occurs following biomass removal and periodically for a period of three to ten years, or until the non-native root mass is no longer viable. These herbicides are generally non-toxic to

wildlife. Only target non-native plants are treated. Other target non-native invasive plants (listed in RGP 41) and scattered patches of Arundo under ¼ acre may be treated in the fall and spring and left to decompose.

Project sites are then re-planted with native vegetation- particularly any areas that have biomass reduction. Planting density and pallet varies depending on amount and type of existing native cover on the site- but typically 200 plants per acre at minimum are planted. The riparian pallet represents a minimum of three species from each growth form (tree, shrub and ground cover). All plants are propagated from native plants found in the watershed.

Plantings are typically 1-gallon pots to bullet tubes (D-40/D-60 tubes). Some plants, such as the forb *Utica dioic* (stinging nettle) do not grow well in larger containers and are planted from small rose pots. Native seed may be used when site conditions allow for native seed to germinate. This is of benefit as weedy plants from surrounding areas do not 'take over' the site. Keeping these ruderal weeds out allows the planted native vegetation to establish quickly.

All sites then enter a re-treatment cycle, using approved herbicides, of any re-sprouting target exotic plants. This is carried out in the Fall or Spring for at least ten years (more frequently earlier in the cycle and then skipping years later in the cycle) to ensure complete control of target non-native plants.

Watering and maintenance of native plantings, treatments of pepper weed (which is dormant from fall to spring) occurs from March 16th to September 14th. These passive forms of maintenance and control do not involve bringing any mechanized equipment into the riparian habitat. Specific conditions for these activities during nesting season are clearly outlined in permits (USFWS and CDFW).

E. Acreage of "fully infested stands" and "partially infested stands" which would be affected by the proposed project:

In 2010, a remote mapping exercise of the acreage of individual invasive non-native plants within the San Diego River Watershed was conducted. Areas mapped include most riparian zones and undeveloped upland areas, additional acreage exists in urbanized areas. All mapping is of "fully infested stands" as defined by RGP 41 (>80% cover) and partially infested stands (>50% cover).

Table 1. San Diego River Watershed estimated fully and partially infested stands

Species	Type	Acreage
Arundo	Fully infested stands	161
Brazilian pepper tree	Fully infested stands	118
Canary Island date palm	Palm Tree	> 150 trees
Eucalyptus	Partially infested stands	32
Mexican fan palm	Palm Tree	> 1,000 trees
Pampas grass	Partially infested stands	64
Perennial pepperweed	Shrub	5
Tamarisk	Fully infested stands	107
Other invasive non-native	Partially infested stands	48
		537 acres

It is estimated that approximately 165 acres of those originally mapped in 2010 have been treated and are undergoing re-treatments or restoration with native plantings. Past experience, however, indicates that areas of new and extended growth are often encountered in untreated areas years after the initial mapping was conducted. The San Diego River Conservancy is working to update this mapping effort with more recent aerial imagery and remote sensing land cover data to better estimate extent of invasive non-native vegetation cover. Preliminary analysis estimates approximately 180 acres added to the original 354 to total 537 acres invasive plant canopy. This would mean nearly 372 acres remain to be biomassed and treated in the next 5 years. Since the presence and extent of non-native plant species vary dramatically over time, project funding can limit and delay treatment of any given area. Also, "partially infested stands" can become fully invested over a short period of time. Due to these changing circumstances in on-the-ground conditions, the Conservancy employs biological monitors to consult on the status of the stands and compliance with permit conditions.

F. Citation of this RGP:

Permit Number: SPL-2003-01094-EBR	Issuing Office: Los Angeles District
Effective Data: September 5, 2019	Expiration Date: September 5, 2024

G. Copy of a letter to the State Historic Preservation Office (SHPO) inquiring about the presence or absence of listed and/ or eligible sites for listing in the National Historic Register in the proposed project area that may be affected by the proposed activity;

See Attachment 1

H. Copy of a letter to the U.S. Fish and Wildlife Service (USFWS) inquiring about the presence or absence of any federally-listed endangered or threatened species or designated critical habitat in the proposed project area that may be affected by the proposed activity;

See Attachment 2

USFWS has already completed a 'Technical Assistance Letter' for the program.
The letter states that as long as minimization and avoidance measures are followed (as outline in the plan submitted by San Diego River Conservancy), harassment and. or take of listed species is unlikely. A section 7 consultation with the Service is not required at this time.

I. For work occurring on tribal lands, an approval letter from the tribe;

No work will be occurring on tribal lands.

J. Results of a migratory bird survey (if work is being proposed in "partially infested stands" between March 15 and September 15).

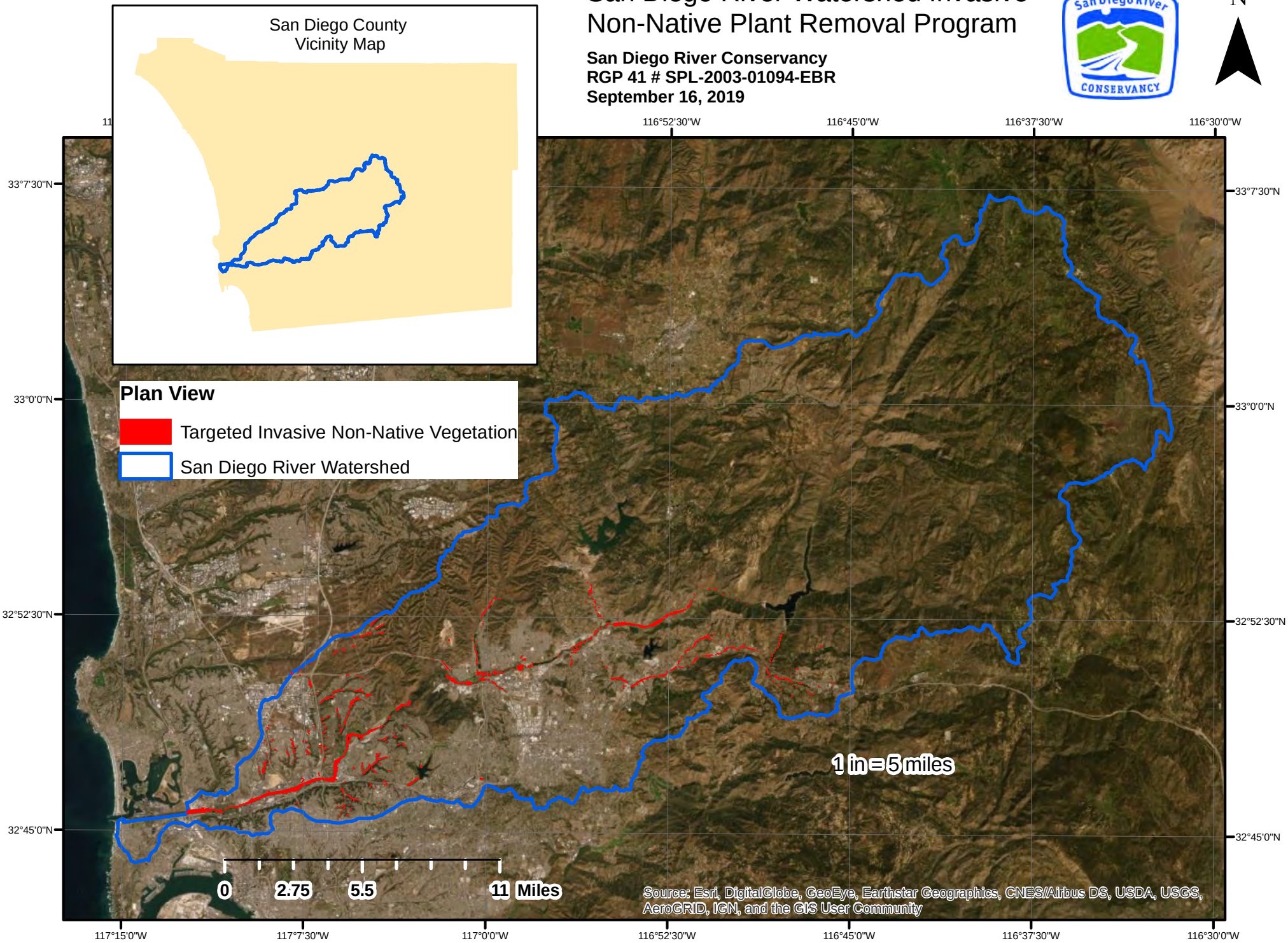
No active control or biomass reduction of "partially infested stands" will occur between March 15th and September 15th. Specific conditions outlined under DFG 1600 and FWS technical assistance letters specify in detail mitigating and avoidance measures.

A copy of the notification package has been sent to:

U.S. Fish and Wildlife Service
California Department of Fish and Wildlife
National Marine Fisheries Service
California Coastal Commission
State Water Resources Control Board
San Diego Regional Water Quality Control Board (9)

San Diego River Watershed Invasive Non-Native Plant Removal Program

San Diego River Conservancy
RGP 41 # SPL-2003-01094-EBR
September 16, 2019



San Diego River Watershed Invasive Non-Native Plant Removal Program

San Diego River Conservancy
RGP 41 # SPL-2003-01094-EBR
September 16, 2019

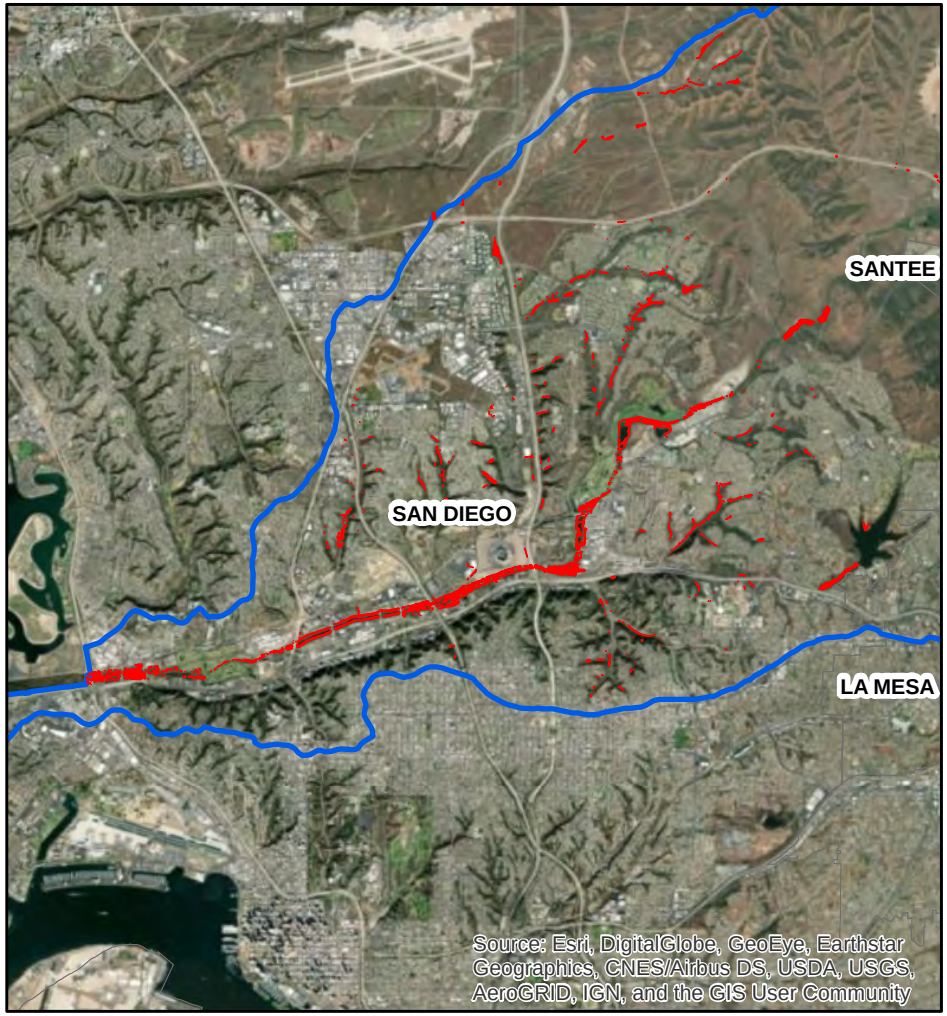
Plan View

Targeted Invasive Non-Native Vegetation

San Diego River Watershed

City of San Diego Plan View

1 in = 2 miles



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City of Santee Plan View

1 inch = 1 mile

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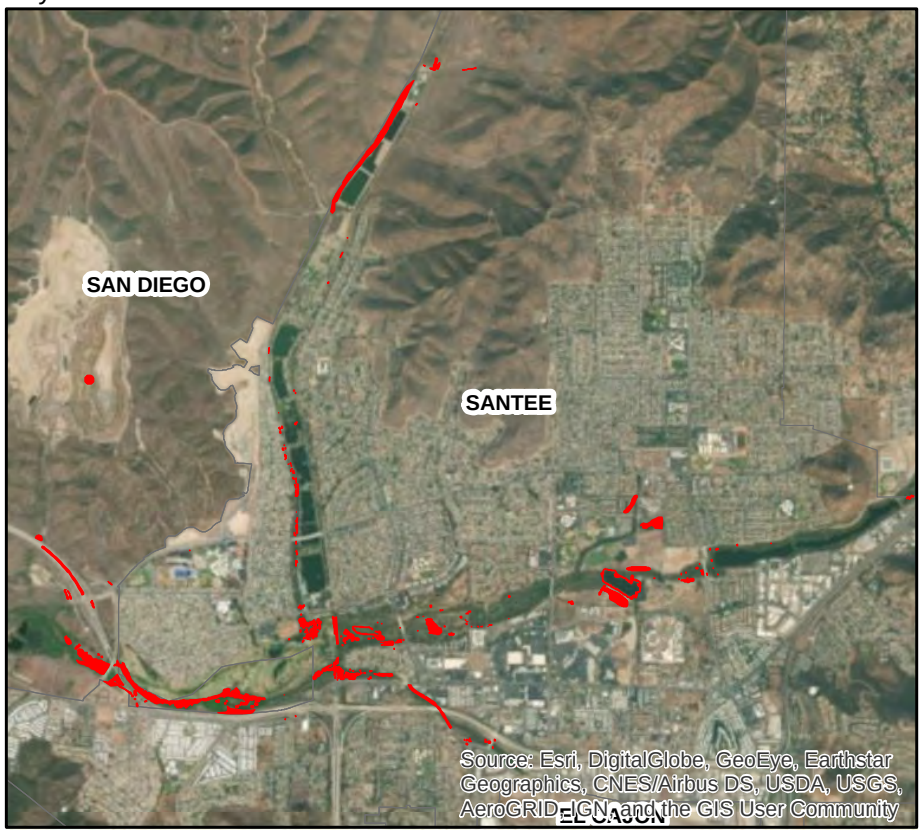

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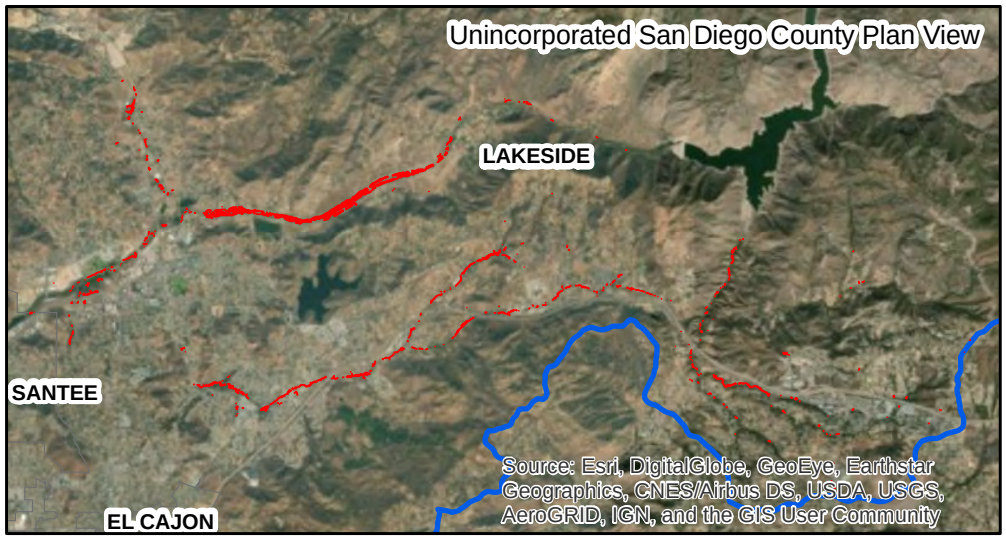

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1 in = 2 miles