WATERSHED PROTECTION PROGRAM

Cottonwood Creek Invasive Species Removal Project

TIJUANA RIVER WATERSHED

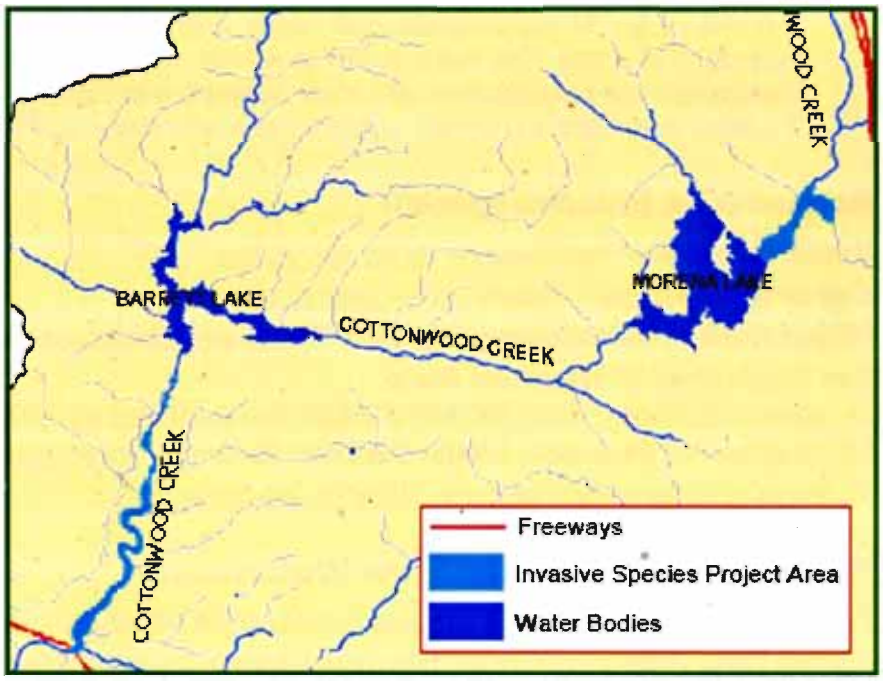
BACKGROUND: In 2004, the County of San Diego received a voter-supported Proposition 13 grant from the State Water Resources Control Board to remove two (2) **invasive plant species,** *Tamarisk* ("salt cedar") and *Arundo donax* ("false bamboo") from two areas along Cottonwood Creek.

Following the removal, a massive **revegetation** of native plants (e.g. willows, mule fat, & cottonwoods) will bring the area back **to its natural state**.

Invasive plant species are non-native plants introduced to an area from other parts of the world. Invasive species are devastating to our environment:

- They negatively affect a variety of Commerce: fisheries to agriculture.
- They cause an area to be prone to devastation from floods and fires.
- They disrupt the structure and stability of San Diego's natural communities.

159 ACRES of the invasive weeds, Arundo donax and Tamarisk will be removed from areas above **Lake Morena** and below **Barrett Lake**, for a total cost of about $710,000.



MONITORING: The County of San Diego monitoring plan includes taking samples of water both upstream and downstream of the project area. The stream and wetland monitoring includes an account of acres surveyed, invasive species removed, and natural habitat restored. Monitoring will be conducted in partnership with local citizen monitoring groups to encourage stewardship and long-term support within the Tijuana River Watershed.

COUNTY OF SAN DIEGO

Invasive Plants of Cottonwood Creek:

Arundo donax

a.k.a. Giant Reed, or False Bamboo

- Perennial grass
- Native to India
- Height can reach over 20 ft.

- Introduced into L.A. as ornamental – early 1800s
- Reproduces primarily through rhizomes which root and sprout readily
- Root & stem fragments can float miles downstream and initiate new infestations

Tamarisk Family

a.k.a. Salt Cedars

(Tamarix aphylla, T. chinensis, T. gallica, T. parviflora, and T. ramosissima)

- woody shrub or small tree, native to N. Africa & M. East

- Intro to Western U.S. as ornamental
- slender branches with gray-green foliage, form dense thickets 12-50 ft. in height
- long tap roots allow them to reach deep water tables
- spreads from roots or submerged stems, and by flowering
- can produce thousands of tiny seeds in a small capsule

Get Involved! ***You*** **can help protect our natural resources for future generations.**
Plants like *Arundo donax* clog our creeks, reducing their water-carrying capacity. They increase the risk of fire in dry seasons and floods during winter storms. *Tamarisk* consumes enormous quantities of water. This water is lost to wildlife, agriculture, and drinking supply - *at a high price. Pollutants found in urban runoff further degrade water quality.*
To learn more about volunteer opportunities and water quality, visit the websites below.

Resources on Invasive Species:

California Invasive Plant Council www.cal-ipc.org
California Native Plant Society www.cnpssd.org
Project NIMBY (No Invasives in My Back Yard) www.carlsbadwatershednetwork.org
San Diego Weed Management Areas
www.cdfa.ca.gov/phpps/ipc/weedmgtareas/SanDiego/SanDiego_hp.htm
UC Cooperative Extension, Master Gardener Program www.mastergardenerssandiego.org
10 Ways to Save water Outdoors www.bewaterwise.com

Resources for the Tijuana River Watershed:

Project Clean Water www.projectcleanwater.org/html/ws_tijuana.html
Tijuana River Watershed Portal http://trw.sdsu.edu/English/homeFrame.htm
Tijuana River National Estuarine Research Reserve www.tijuanaestuary.com
Border 2012 Water Task Force
http://irsc.sdsu.edu/task_force/Portal/English_Home_Page/English_Home_Page.htm
US-Mexico Border Philanthropy Partnership www.borderpartnership.org
US Environmental Protection Agency
www.epa.gov/usmexicoborder/intro.htm
San Diego Stream Team
www.sdstreamteam.org

COUNTY OF SAN DIEGO
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