



Fact Sheet

Arundo donax in the Alhambra Creek Watershed

PRODUCED BY THE ALHAMBRA WATERSHED COUNCIL

The Alhambra Watershed Council

The Alhambra Watershed Council (AWC) is comprised of diverse groups and interests in the Alhambra watershed. These stakeholders include residents, landowners, City of Martinez, Contra Costa County, community organizations, East Bay Regional Park District, National Park Service, and many more.

The AWC was formed in response to the severe storms of 1997–98, which caused serious erosion and major flooding in the City of Martinez and other parts of the watershed. These events brought residents together to develop a coordinated watershed-wide planning effort to protect and conserve natural resources, infrastructure, and property.

To that end, the AWC adopted a Watershed Management Plan in 2001. The Plan has several goals that relate to Arundo removal, such as reducing flood damage, reducing fire fuel loads, restoring native plant communities, conserving stormwater, and improving water quality.

The AWC's primary goal is to address watershed problems by recommending solutions that benefit the watershed and its users. The AWC recommends that Arundo be removed throughout the watershed.

What Is Arundo?

Arundo (*Arundo donax*), also known as “giant reed,” is a non-native plant that is highly invasive in California. The plant's stems resemble bamboo, and its leaves resemble corn leaves. Arundo is incredibly fast-growing and can grow four inches a day and up to thirty feet tall. To sustain its rapid growth, Arundo usually grows along streams or other waterways. Arundo consumes a lot of water—about five times more than a native plant uses. The plant displaces native plants and provides little-to-no food or habitat for wildlife. In the Alhambra Creek Watershed, there are many stands of Arundo along Alhambra Creek and its tributaries.



A stand of Arundo in Martinez

Why Is Arundo Harmful?

❖ Arundo causes erosion.

The plant's shallow roots are easily undercut by nearby streamflow. The roots then break off from creek banks and take soil along with them. Large Arundo infestations can encroach on waterways, diverting water and causing additional erosion on the opposite bank.

❖ Arundo destroys fish and wildlife habitat.

Numerous animal species that depend on riparian areas are in decline. According to the California Invasive Plant Council, Arundo is “threatening California's riparian ecosystems by outcompeting native species, such as willows, for water.” Arundo displaces native plants that provide food, shelter, and breeding habitat for fish and wildlife.

❖ Arundo is a flood hazard.

Arundo grows in thick stands that can partially or completely block the flow of water in waterways. This can cause creek banks to overflow, posing a risk to nearby inhabitants and property.

Removing Arundo Alice's Way: A Legacy of Determination

Long-time Martizians fondly remember the late Alice Alderette as a determined Arundo warrior. Alice guaranteed her signature method eradicated Arundo stands without chemical use. Her method takes perseverance, but it gets the job done. If you have a small stand of Arundo on your property and do not want to use herbicides, consider trying Alice's method.

- Using a hand saw, cut the Arundo stalks down as close as possible to the ground.
- Check the Arundo stand often to look for new shoots.
- Once new shoots grow about 4–5 inches tall, stomp on them with your sturdiest boots by attacking the shoots from the side and bending them over with your boot to break the stalk.
- Pick up and remove all broken shoots from the site.
- Keep returning to the Arundo stand and stomp on new shoots until they stop re-sprouting.

Resources

For more information on Arundo and creek bank erosion, please visit:

UC Davis's Giant reed Weed Report from *Weed Control in Natural Areas in the Western United States*

wric.ucdavis.edu/information/natural%20areas/wr_A/Arundo.pdf

California Invasive Plant Council

cal-ipc.org
www.cal-ipc.org/using_herbicides/

Streamside Management Program for Landowners in Contra Costa County

www.californiaurbanstreamspartnership.com/smpl-program

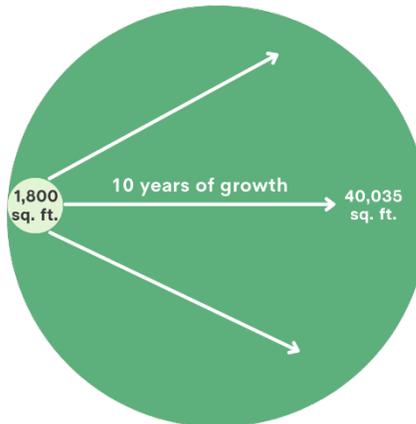
For questions or watershed-related concerns, contact:

**Alhambra Watershed Council
c/o Contra Costa Resource
Conservation District
925-672-4577 ext. 4
www.ccrd.org**

❖ Arundo is a fire hazard.

Although Arundo uses a lot of water, it burns readily even when green. Dense stands pose a fire hazard to nearby wildlife habitat and neighborhoods. After a fire, Arundo rapidly grows back even thicker from its rhizomes, and with little or no competition from native plants that burn less easily but are fire sensitive. Arundo transforms the less fire prone native plant buffers along our waterways into potential wildfire threats to our environment and homes.

ARUNDO SPREADS FAST



In 2013, one stand of Arundo in Martinez took up 1,800 square feet of space. Ten years later, the same stand now takes up over 40,000 square feet of space.



Arundo leaves

Removing Arundo

The serious threat that Arundo poses to our streams can be controlled. Many small or mid-sized Arundo infestations throughout our watershed can be eliminated now before becoming more problematic. Larger infestations can be controlled, but such efforts are costly and usually require coordination among multiple stakeholders. The easiest and most economical way to control Arundo is to treat it early before it becomes well established.

An effective method to remove Arundo is to do an initial cutting and complete removal of cut stems from a waterway in early summer. The Arundo will send up new shoots, which can be hand-sprayed with an approved herbicide by fall (or cut and removed again). Treatment needs to be repeated at least annually until the infestation is gone. After each treatment, the infestation should be smaller and the task easier. Please note that permits may be required.

For further herbicide use information, visit www.cdpr.ca.gov/docs/dept/factshts/factmenu.htm

What You Can Do to Help

Please be mindful of the fact that this plant propagates vegetatively, meaning that if even a small piece of the plant falls into a waterway, it can sprout into a new plant. When sections of the stem or root break off, they float downstream and start new colonies. New shoots can grow from any of the plant's nodes, and rooting can take place when an Arundo stem droops and encounters water.

The AWC recommends removing Arundo from your property using the methods described in this Fact Sheet. After Arundo removal, replant the area with native plants. Consult the Streamside Management Program for Landowners in Contra Costa County at custreams@gmail.com, or 510-932-2370.

Special thanks to the Walnut Creek Watershed Council and the Sonoma Ecology Center for their informative Arundo brochures, which were used in preparing this 2022 Fact Sheet.