

STRATEGIC PLAN

FOR THE CONTROL OF NOXIOUS AND INVASIVE WEEDS

VENTURA COUNTY

WEED MANAGEMENT AREA

2026

I. Introduction

The Ventura County Weed Management Area (VCWMA) is a regional network formed by state and local agencies, public and private landholders, the agricultural industry, and environmental organizations involved in managing, controlling and eradicating invasive plant species in Ventura County. Invasive, non-native plant species establish, quickly reproduce, spread, and cause harm to the environment, agriculture, economy, and human health. The VCWMA encourages cooperative efforts between its Partners, including county, state, local, and federal agencies and other interested organizations, individuals, and landowners, on invasive weed management and its funding.

The California Food and Agriculture Code 7272(b) states that a “weed management area” is a local organization that brings together all interested landowners, land managers (private, city, county, state, and federal), special districts, and the public in a county or other geographical area for the purpose of coordinating and combining their action and expertise to deal with their common weed control problems. The organization shall function under the authority of a mutually developed memorandum of understanding and be subject to statutory and regulatory requirements. A weed management area may be voluntarily governed by a chairperson or a steering committee.

Mission Statement

The VCWMA is committed to improving the economic and environmental health of Ventura County and utilizing integrated management to minimize the negative impacts of noxious weeds. VCWMA promotes, coordinates, works on and funds activities that prevent the introduction, establishment, and spread of noxious weeds in Ventura County. VCWMA Partners learn and collaborate with each other to manage invasive weeds in Ventura County.

The Problem

Weeds are a serious threat to Ventura County’s natural resources and agriculture. A limited number of non-native plants are classified as noxious and invasive weeds due to their aggressive competitive behavior. Invasive weeds outcompete native plants, degrade animal habitats, create fire danger, exacerbate erosion, and increase costs for farmers, ranchers, and landowners. *Arundo donax* currently has the greatest negative impact of all invasive weeds in Ventura County due to how it affects the environment, agriculture, flooding, water supply, fire, and local communities’ connection to nature. Other new and limited range invasive

weeds may expand their range and negative impact if not eradicated or controlled before they spread.

The Solution

Goals of the Strategic Plan for coordinated weed management in Ventura County:

1. Reduce fire hazard and fire control costs.
2. Protect and enhance cropland and rangeland productivity.
3. Increase the effectiveness of weed control in roadsides, parks, open spaces, and waterways.
4. Improve cooperation with watershed groups and land managers to gain funding to protect and enhance ecosystem biodiversity and sensitive habitats.
5. Improve early detection and eradication of new and limited range invasive weeds.
6. Support education and workforce development in the field of weed management.

To Accomplish these Goals the VCWMA will:

1. Make the public aware of the environmental degradation and increased fire danger in Ventura County lands due to the uncontrolled spread of invasive weeds.
2. Engage with Partners to initiate and support projects that benefit agriculture.
3. Work with local watershed groups to coordinate funding acquisition to support early detection protocols to enhance ecosystem biodiversity.
4. Coordinate and promote the sustained invasive weed detection, mapping, eradication, control, and restoration efforts of land managers countywide.
5. Provide greater public access to the VCWMA so people can recognize the benefits of weed management and participate in weed management efforts with Partner groups, events and VCWMA meetings.
6. Support local internship and career opportunities for weed management.

II. Program Elements

Implementation of the Strategic Plan, which emphasizes proven integrated weed management practices set forth in the Program Elements, will support eradication and control to limit the spread of invasive weeds in Ventura County. VCWMA Partners will combine resources, align priorities, and share information and strategies to enable a viable active Strategic Plan to accomplish our goals. The Strategic Plan will be revised as needed to reflect changes in invasive weed priorities, program successes and challenges.

The Strategic Plan is made up of five elements critical to building a successful regional weed management program.

- A. Education, Awareness, Outreach
- B. Prevention; Exclusion, Detection
- C. Surveying and mapping
- D. Eradication, Control, and Monitoring
- E. Funding and cost share/in-kind services

A. Education: Awareness and Outreach

An engaged and informed public is instrumental in supporting policies and actions that eradicate, control and limit the spread of weeds. The public is interested and has actively contributed in many ways to weed management in Ventura County, including locating new weed populations, manually pulling weeds, and rallying support for controlling and eradicating weeds in infested sites where they live. Engaging the public includes being responsive to the public's needs, concerns, perceptions, and priorities. Raising public awareness and understanding requires a well-planned and well-funded long-term effort.

The VCWMA will implement or continue the following education tasks.

A1. Immediately establish and maintain a website as a means for stakeholders and the public to connect with VCWMA and access information about meetings (notices-agendas-minutes), weed management resources, work being done by the VCWMA and its Partners, and how to get involved with groups working on invasive weed control in Ventura County.

A2. Continue to provide weed management information relevant to Ventura County at VCWMA meetings for WMA Partners and interested members of the public and to encourage communication between WMA Partners and stakeholders.

A3. Work with Watershed Councils and other countywide groups to produce, distribute, and present education materials about *Arundo donax* and its impact. Partner with the media and others to promote the eradication/control of *Arundo donax* and other invasive plants with a high fire impact. Work with VCWMA Partners, new stakeholders, and residents to support the establishment of a Calleguas Creek Watershed Council, which will create and implement an *Arundo donax* removal program as soon as possible.

A4. Create educational materials on Ventura County invasive weed management for distribution to the public via social media and in print.

A5. Promote the importance of invasive weed management at public events throughout Ventura County, including the annual Wildflower & Weed Show and Ventura County Fair, by creating a display describing local projects of the VCWMA and its Partners.

A6. Sponsor workshops on how to train and engage volunteers in weed management activities including iNaturalist weed identification and mapping.

A7. Work with Ventura County nurseries, Plant Right and other Partners on educational efforts aimed at reducing the sale of invasive plants by replacing them with non-invasive alternatives.

A8. Work with the California Invasive Plant Pest Council (Cal-IPC) on local invasive weed management educational events.

A9. Prioritize proactive outreach to engage private property owners in affected areas about the urgent need for eradication, explain best practices for removing and disposing of *Arundo donax* biomass, and ensure compliance with applicable laws and regulations governing that removal and disposal.

A10. Support permit guidance efforts to ensure that stakeholders, including private property owners, are aware of the permitting requirements and project funding opportunities; understand

project eligibility criteria, including best practices for eradicating *Arundo donax* on their properties; and know the process for submitting eligible project proposals for permit coverage.

B. Prevention: Exclusion and Detection

Prevention is any activity that keeps a non-native noxious or invasive species from entering and becoming established in a new range. Preventing establishment of an invasive weed avoids future control costs. Public outreach and education are key to preventing the spread of new weeds. Effective public awareness and outreach support exclusion and detection work.

Exclusion is any action that prevents a weed from entering a region. Border inspections are effective at the national and state level. At the county level, we rely in part on Ventura County Agriculture/Weights & Measures' regulatory activities. These activities include enforcement of plant quarantines, inspections of incoming plant product shipments for regulated weeds (including aquatic plants), nursery inspections, and the development of other weed exclusion programs including the certification of weed-free-forage with interested hay growers. To support weed exclusion, it is also important to educate VCWMA Partners and the public on activities that are known to spread invasive weeds.

Detection of invasive weeds that elude exclusion includes all activities that locate new and expanding weed infestations. When new weeds are introduced into a region and found and mapped before wide-spread establishment, eradication efforts are more possible, and removal costs are lower. Ranchers and other property owners who have no botanical skills, but notice a plant they have never seen, are often the first to detect a new weed. When unknown weeds are encountered, farmers, land management organizations, and any concerned individuals are encouraged to bring weeds for identification to VCWMA Partner groups. Use of iNaturalist by agencies, non-profits and the public contributes to detecting populations of new invasive weeds.

The VCWMA will implement or continue the following exclusion and detection activities.

B1. Encourage VCWMA Partner groups' efforts to survey, detect and map *Arundo donax* in upper watershed areas where it is not common, in sites where *Arundo donax* was previously removed (reinfesting), and where it was burned (immediately after).

B2. Join statewide efforts to work with the nursery industry to find alternatives to invasive plants.

B3. Review Calflora and iNaturalist for new invasive weeds or new populations of limited range weeds that have recently been added.

B4. Initiate and encourage local iNaturalist Bioblitz events in Ventura County areas that have limited iNaturalist location finds (i.e. "iNaturalist deserts").

B5. Identify correctly and inform VCWMA Partners and the public about newly detected invasive weed species. Research distribution, invasiveness and control information for new weeds to determine if removal is a priority. Get rating designations from CDFA and Cal-IPC.

B6. Work with the CDFA and Cal-IPC to keep Ventura County weed ratings current under the CDFA's A/B/C rating system and Cal-IPC's Watch/High/Moderate/Limited inventory, to support VCWMA invasive weed prioritization.

B7. Conduct proactive outreach to stakeholders including private property owners to ensure that they know how to use iNaturalist, recognize *Arundo donax*, and understand the critical importance of early detection and removal.

B8. Support best management practices for weed vector control

C. Surveying and Mapping

Surveying and mapping of invasive plants is critical for a sharp vision of the distribution of invasive weeds including new or expanding populations. Sharing mapping locations of populations of limited range priority weed species provides VCWMA Partners a better way to collaborate and implement appropriate control or eradication strategies.

Mapping data about EDRR weeds (including iNaturalist and Calflora) helps provide a clearer view of invasive plant distribution in Ventura County, critical for prioritizing weeds to eradicate or control. VCWMA works to identify and map invasive weeds when their populations are still in small numbers in Ventura County. These new or limited range invasive plants are then possible candidates for Early Detection Rapid Response (EDRR) priority weeds targeted for removal by VCWMA and Partners before they spread and cannot be eradicated or easily controlled.

The VCWMA will implement the following surveying and mapping activities:

C1. Support education and funding for VCWMA Partners and watershed groups using new and existing tools to map *Arundo donax* including revisions that come with removal work.

C2. Support Partners and the public in the use of mapping tools including high resolution mapping, iNaturalist, and Calflora for early detection rapid response weed management.

C3. Support sharing Ventura County weed mapping data with VCWMA Partners, CDFA, statewide WMAs and other agencies including through Calflora.

C4. Promote geographic and organizational cross-boundary alliances and Partnerships for improved coordinated mapping including *Arundo donax* mapping on the Santa Clara River with the Los Angeles County Weed Management Area and its Partner organizations.

C5. Review existing and future surveying and mapping projects to ensure the efforts are coordinated and not redundant.

D. Control and Eradication

VCWMA and Partners continually update distribution of invasive weeds to help prioritize weed control and eradication.

Control measures reduce an invasive weed population in an area to a level where the land can be utilized to its fullest agricultural or biological potential as eradication is pursued.

Eradication means removal of all propagules and standing plants followed by the site being monitored for the length of time the seed or propagules are viable. The size of the eradication area can vary from countywide to a smaller specific site. The impact of *Arundo donax* on fire makes it a critical invasive plant to remove in all watersheds. The VCWMA and Partner groups must balance funding and resources between controlling more common invasive weeds with current, large negative impacts that need immediate attention, and addressing smaller populations of uncommon or new EDRR weeds with large potential impacts not yet realized.

The VCWMA will implement the following eradication and control activities.

D1. Work with VCWMA Partners, watershed groups, and others to support aquatic weed removal projects, currently focusing on *Arundo donax* and *Tamarix* spp., in the Ventura, Santa Clara and Calleguas Creek watersheds.

D2. Develop EDRR projects that target *Arundo donax* in upper watersheds with limited number of plants, removal sites that have become reinfested, recently burned sites, and sites where *Arundo donax* debris has accumulated after storm events. These efforts will include proactive outreach and education targeting agencies and property owners in affected or high-risk areas to disseminate information regarding the severity of the problem, how to detect infestation, the best practices for eradication and control, and the applicable laws and regulations.

D3. Work with VCWMA Partners on the eradication or control of CDFA (A-, B-, and Q-rated) and Cal-IPC inventory (Watch-High-Moderate-Limited) invasive weeds.

D4. Utilize appropriate biocontrol agents for more common, but destructive, invasive weeds. Work with CDFA and USDA Biocontrol groups and other agencies to encourage development of biocontrol agents for Ventura County invasive weeds.

D5. Develop new Sustainable Weed Management tool options and best management practices for control and eradication.

D6. Review and revise the South Coast Region priority weeds list with Los Angeles County WMA in 2026, and periodically after, as on-the-ground conditions change.

D7. Work with rangeland ranchers and range management scientists on animal grazing options for weed management and restoration.

D8. Invite VCWMA Partners to share experiences with new early detection, mapping, eradication, control, project monitoring, and revegetation strategies through presentations at WMA meetings and other events.

D9. Encourage invasive weed control and eradication projects using best management practices to enhance native habitat preservation and restoration.

E. Funding and Cost Share/In-kind Services

It is important to find and efficiently use funds and in-kind services to support program elements of the Strategic Plan. The VCWMA will work to obtain grants to successfully fund invasive weed workshops and trainings, educational outreach, mapping eradication, and control for VCWMA and its Partners. VCWMA Partners can cost share or contribute to in-kind services to gain more funding opportunities. Recent and future environmental permit coverage, including the Statutory Exemption for Restoration Projects (SERP) programmatic permit obtained by the Ventura County Resource Conservation District, streamline permitting requirements for eligible *Arundo donax* removal projects in designated watersheds and makes funding projects in these watersheds a priority. Close collaboration and increased funding for *Arundo donax* removal are critical to making the Strategic Plan successful.

The VCWMA will implement the following activities.

E1. Work to support funding for *Arundo donax* removal, ongoing maintenance and site eradication projects in Ventura County watersheds (Ventura River, Santa Clara River (including Los Angeles County), and Calleguas Creek).

E2. Work together with VCWMA Partners to obtain funding and provide in-kind services to support weed eradication and control and other goals of the Strategic Plan. (In-kind services include, but are not limited to mapping, staff time, procuring supplies and equipment, recruiting volunteers and coordinating volunteer efforts, producing publications and web sites, and data collection.)

E3. Focus on obtaining funding from CalFire and other entities to implement landscape-scale vegetative fuel management projects, utilizing an integrated approach to eradicate target combustible weeds.

E4. Improve coordination of weed management contracts, schedules, and resources among VCWMA members to optimize efficiency, promote coordinated efforts, and avoid duplication of weed management work.

E5. Work to fund invasive weed control projects which benefit native plant communities and restoration work.

E6. Work to obtain funding or donation of resources from agencies including NASA and the USDA.

E7. Encourage and support continued CDFA funding for Weed Management Areas.

E8. Review existing programs and grants to ensure agencies and Partners have increased funding for a coordinated watershed level *Arundo donax* removal and eradication effort. Audit existing efforts and future programs to prevent redundancy and ensure resources are targeted where they will be most effective in contributing to a coordinated eradication effort.

III. Invasive Weed Prioritization

Weed Prioritization guides the VCWMA and its Partners in efficiently focusing staff time, energy, funding, and resources on the invasive weed species that matter most, since early detection and rapid response removal of small, limited-range populations is the most cost-effective approach. *Arundo donax* is considered the number one invasive weed in Ventura County, as voted by VCWMA in 2019 and more recently emphasized by the 2025-2026 Ventura Grand Jury, due to its significant environmental impact, including its role in fire.

A. General Weed Prioritization Principles

- **Control feasibility:** The species must be manageable within the scope of foreseeable available resources.
- **Economic impact:** Weeds may degrade rangeland, pose a threat to livestock or crops, or have significant potential to fuel wildland fire.
- **Threat to biodiversity:** Weeds may suppress or crowd out native species.
- **Threat to Floodplain:** Dense growth of weeds in or along waterways can alter channel morphology, restrict flow, and reduce flood conveyance capacity; shallow-rooted species can also cause bank undercutting and erosion.
- **Ability to spread:** The species exhibits significant seed generation and widespread dispersion potential.
- **Soil alteration:** The species alters the chemistry and composition of the soil. Contributes to erosion, reduces the soil's capacity to support native plants and other economically valuable plants.
- **Groundwater reduction:** Weeds use water for growth, thereby reducing groundwater levels.
- **Aggressive:** Weeds require rapid response to prevent establishment.

B. Partners' Existing Prioritization and Rating Systems

Different rating systems exist across Partner groups and agencies and may not always reflect local invasive weed prioritization principles or needs. A working repository of rating systems is listed below and can be found at vcwma.org:

- **The California Invasive Plant Council's (Cal-IPC) Inventory**
(<https://www.cal-ipc.org/plants/inventory/>)
- **California Department of Food and Agriculture (CDFA) Noxious Weed Rating System**
(<https://blogs.cdfa.ca.gov/Section3162/?p=1958>)

- **South Coast Regional Weed Priority List**

In 2021, and later in 2023, CDFA and Cal-IPC worked with the VCWMA and Los Angeles County to create a South Coast Regional Priority Weed List which is a non-binding guide to target specific weeds. The South Coast Regional Priority Weed List is periodically revised to reflect changing conditions and knowledge about invasive species, including the discovery of new species.

(https://www.cdfa.ca.gov/plant/IPC/encycloveedia/pdf/Regional_Priorities_Compilation.pdf)

Current list of South Coast (Los Angeles and Ventura WMA) Priority Weeds

Containment*	<i>Halogeton glomeratus</i>	halogeton
Containment	<i>Linaria dalmatica</i>	dalmatian toadflax
Containment	<i>Onopordum acanthium</i>	Scotch thistle
Containment	<i>Centaurea stoebe</i>	spotted knapweed
Containment	<i>Pancratium maritimum</i>	sea daisy
Control**	<i>Alternanthera philoxeroides</i>	alligatorweed
Control	<i>Aegilops cylindrica</i>	goat grass
Control	<i>Carthamus lanatus</i>	woolly distaff thistle
Control	<i>Chondrilla juncea</i>	skeleton weed
Control	<i>Arundo donax</i>	arundo

*Containment: We do not allow any net spread of this plant.

**Control: We control this plant, but not enough for region-wide containment.

IV. Conclusion

VCWMA Partners share knowledge and collaborate on invasive weed management to improve the economic and environmental health of Ventura County. This Strategic Plan is informed by over 20 years of boots-on-the-ground work and combined expertise across the Partners and outlines an effective and sustainable approach towards coordinated invasive weed management. The strength of this plan lies in part in its flexibility and the call for cooperative, creative adaptive strategies for control and eradication of invasive weeds.

APPENDIX

Giant Reed: *Arundo donax*

- ***Arundo donax* (giant reed):** *Arundo* is a tall, invasive perennial grass that forms dense stands in riparian areas, wetlands, and disturbed sites throughout California, including major watersheds in Ventura County. It displaces native vegetation, consumes large amounts of water, increases wildfire risk, and can obstruct waterways and reduce flood conveyance capacity. *Arundo* is considered one of the most damaging invasive plants in the state and coordinated removal efforts are underway in coastal watersheds including

within Ventura County. More information about Arundo removal efforts can be found at the following links:

(vcwma.org)

(<https://www.cal-ipc.org/plants/profile/arundo-donax-profile/>)

(https://vcrcd.org/invasivespeciesremoval_current/)

Weeds and Wildfire

- **Roadside Ignition Reduction Guide:** The Durable Ignition Reduction Toolbox (DIRT) for assessing and managing weedy, high fire risk roadside sites in southern California includes detailed guidance, best management practices, and links to resources for different weed control practices, offers flowcharts to identify appropriate techniques that depend on initial conditions and long-term desired outcomes, and describes different weed treatment scenarios for site managers to investigate further. The guide can be downloaded for free using the link below.

(<https://www.cal-ipc.org/resources/library/publications/roadside-ignition-reduction-guide/>)

- **Preparing for Wildland Fire: A Step-by-Step Guide for NPS Invasive Plant Managers:** This guide describes steps that can be taken to avoid, minimize, or mitigate the introduction and spread of invasive species before and during wildland fire incidents. Although some protocols are specific to the NPS, the overall approach is generally transferable to other organizations. The guide can be downloaded for free using the link below.

(<https://www.cal-ipc.org/resources/library/publications/prep-wildland-fire/>)

Preventing Establishment of High Agricultural Risk Invasives

- **Tree of Heaven and Spotted Lanternfly:** Tree of heaven (*Ailanthus altissima*) is an invasive tree documented in California. As the preferred host of the [spotted lanternfly](#) (*Lycorma delicatula*), tree of heaven is a useful plant to monitor for signs of this pest. VCWMA encourages the use of iNaturalist and Calflora to map observations of tree of heaven. Although spotted lanternfly has not yet established in California, an infestation could lower yields and increase production costs for economically important crops such as grape, stone fruit, and nursery stock. Avoid planting tree of heaven, monitor any planted trees for spotted lanternflies, and upload observations of tree of heaven to iNaturalist or Calflora to support EDRR in case spotted lanternfly is discovered. More information can be found at the following links:

(<https://ucanr.edu/site/invasive-spotted-lanternfly/tree-heaven-overview>)

(https://www.cdffa.ca.gov/plant/PDEP/target_pest_disease_profiles/spotted_lf_profile.html)

Best Management Practices for Non-Chemical Weed Control

- **BMPs for Non-Chemical Weed Control:** This manual provides comprehensive descriptions of 21 commonly used non-chemical weed control techniques and of biological control agents for 18 weed species/species groups that will help you as a practitioner treat weeds more effectively. The manual can be downloaded for free at the link below.

(<https://www.cal-ipc.org/resources/library/publications/non-chem/>)