

Early Detection Rapid Response (EDRR) Pilot Project – Updates!

Cal-IPC Symposium
October 10, 2014

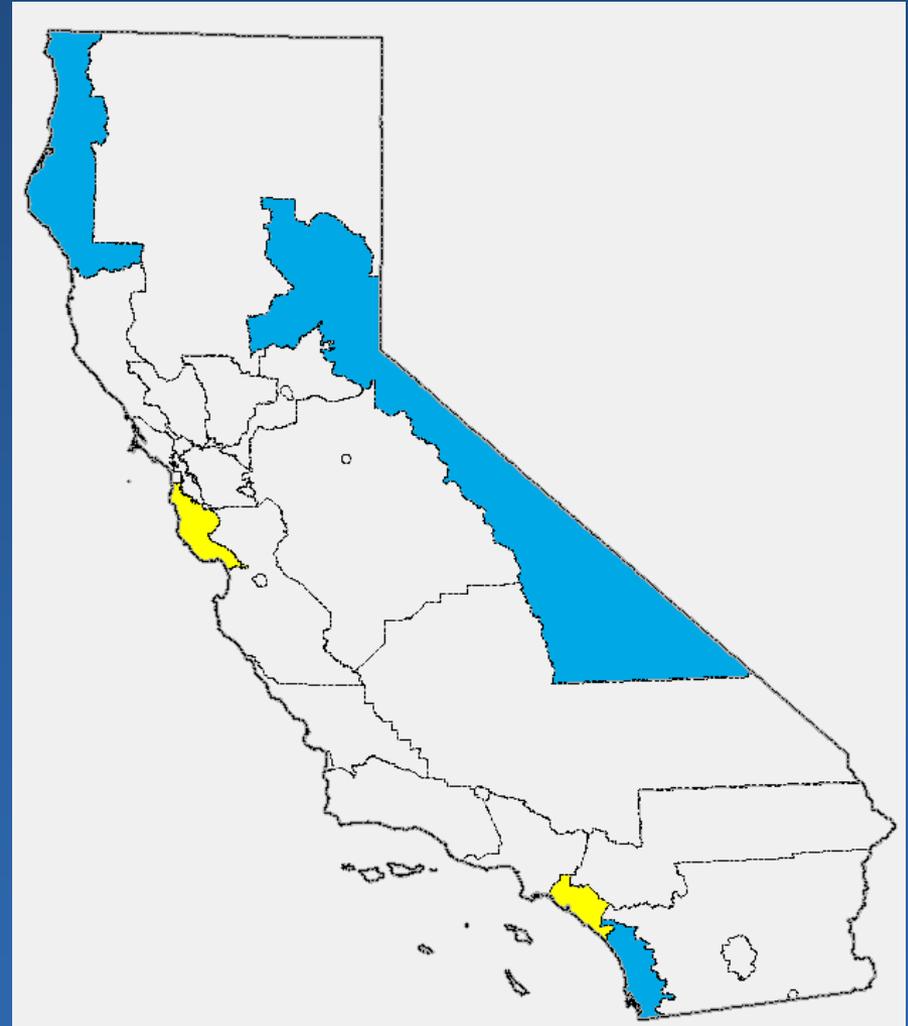
Ramona Robison
Natural Resources Division





State Parks EDRR Pilot Project

- Santa Cruz
- Orange Coast
- San Diego Coast
- North Coast Redwoods
- Sierra





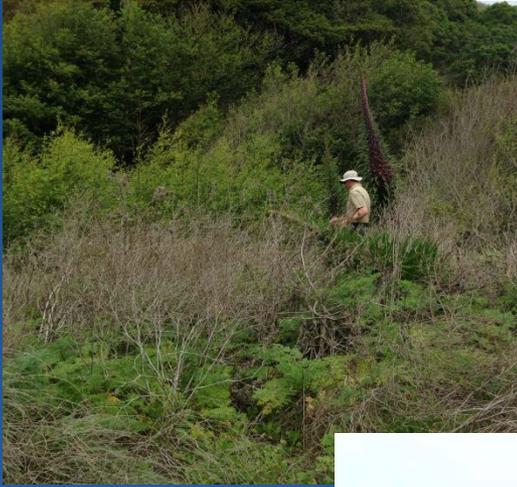
EDRR Pilot Project Goals

- Reduce invasive plant management costs over time
- Train employees and volunteers to detect new weeds
- Develop management framework and document effort





Results From First Two Districts





- Noxious weeds
- Weed identification photos
- Weed identification help
- Weed lists and laws
- Brochures, reports and publications
- Maps
- Report a weed
- Class schedule
- Fairs and events calendar
- Weed control
- Weed watchers
- Volunteer information
- School resources
- Frequently asked questions
- KC Weeds Newsletter
- Weeds in the news
- Noxious Weed Control Board
- Knotweed projects
- About us
- Weed links
- Site map

To offer a suggestion or report an error on the King County Noxious Weeds website, please contact [Sasha Shaw](#), education specialist.

Yellow archangel *Lamiastrum galeobdolon* Mint family

General description

Fast-growing perennial ground cover that may be either trailing or upright depending on conditions. Yellow archangel, also known as yellow Lamium, is very competitive and fast-growing in the forest habitats of western Washington and western British Columbia. When it is dumped with yard waste or escapes from intentional plantings, it spreads quickly into forested areas and out-competes native understory plants.

Legal status

Yellow archangel is a [non-regulated Class B noxious weed](#) in King County. Control is recommended but not required. County Noxious Weed Boards in Washington State have the option to specify control areas for this plant but no areas have been designated in King County. Contact the [Washington State Weed Board](#) for more details on designation areas.

Impacts and distribution



The variegated form of this species is a popular ornamental in garden beds and hanging baskets as well as a groundcover for shady sites. In Washington State, yellow archangel has been reported as escaping in many western Washington counties including San Juan County, Kitsap County, Pierce County, Thurston County, Snohomish County, King County and others. When it escapes from residential plantings, it becomes invasive, forming dense patches. Yellow archangel out-competes

Related information

- Agriculture in King County, Washington
- Northwest yard and garden
- Animals, plants and habitat

Related agencies

- Dept. of Natural Resources and Parks
- Water and Land Resources Division

Program offices are located at 201 S. Jackson St., Suite 600, Seattle, WA 98104. To contact staff, see the [Noxious Weed Control Program Directory](#), send an [email](#), or call 206-477-WEED ([S 206-477-9333](#)).



Orange Coast

Weed Alert!
Devil's thorn



Weed Alert!
Stinkwort



Weed Alert!
Saharan mustard





EDRR Pilot Project Methods



Himalayan Knotweed, Roadside Near Trinidad SB

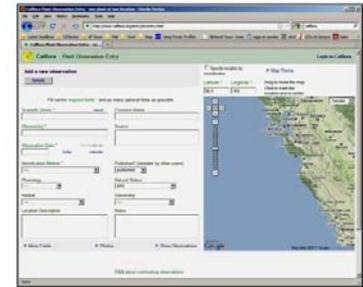


Updating the Methods



An introduction to the **Calflora Observer** iPhone application

A mobile interface to the Calflora Plant Observation database





Target List Development



EDRR Start-Up Meeting, San Diego Coast District, March 2014



Some Surprising EDRR Targets



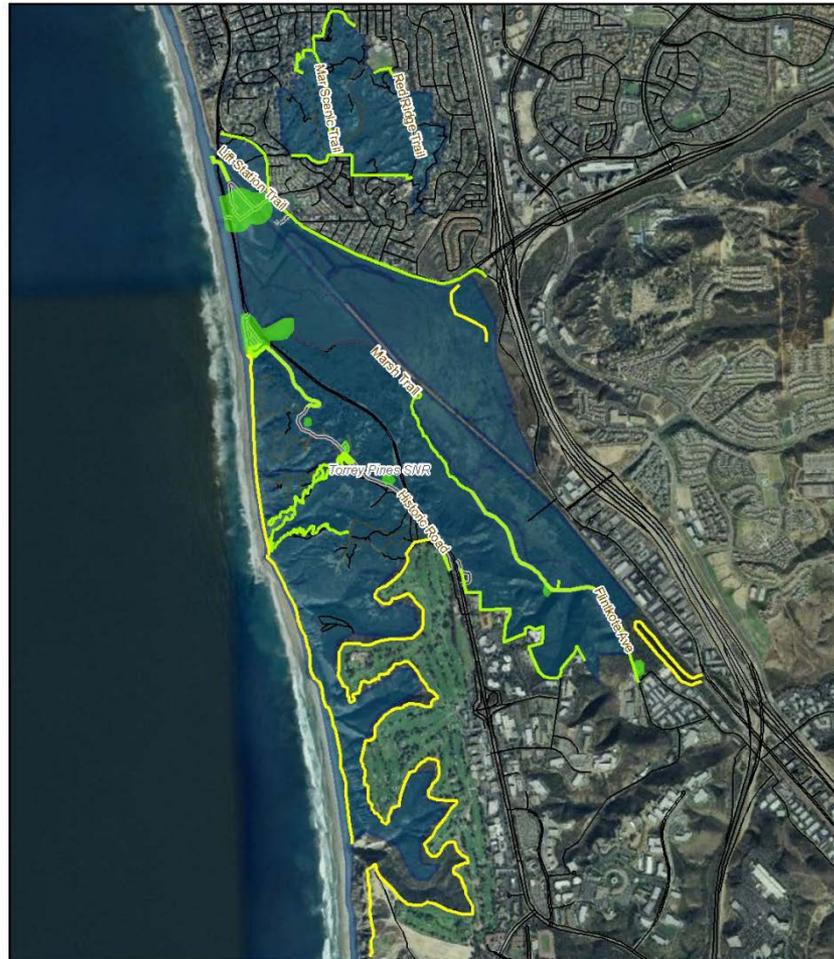
Allium triquetrum, Neal Kramer, Calphotos



Indian Plantain, Bolsa Chica SB

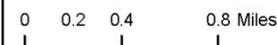


Developed GIS Map Books for Search Areas



State Parks Invasive Plant EDRR Surveillance Areas

Torrey Pines SNR
San Diego South Sector



Priority Level for surveys

- High (survey every year)
- Medium (survey every 2 years)
- Low (survey every 3 years)

- Park Boundaries
- State Parks Roads
- State Parks Trails
- Other Roads/Trails



EDRR Identification Card Updates

Weed Alert! Musk thistle



Musk thistle (*Carduus nutans*)

Mature Size



Description

- Up to 6 ft. tall thistle with painful spines
- Red-purple, globe-shaped flowerheads 1-3 in. wide
- Mature flowers often droop on long stalks
- Grows as a low round cluster of leaves in the first year
- Dark green leaves are lobed with sharp brown to whitish spines at tips
- Leaves taper down stems as spiny wings
- Reproduces by seed, resprout if cut
- Spread by wind, waterways, wildlife, waterfowl, livestock
- Native to Europe, Asia, the Mediterranean region



Bloom Period Jun - Jul

Habitat Scrub, coastal prairie, grassland, forest, disturbed sites



2-Minute Removal

Image credits: Front and back: J.M. DiTomaso ©2007 The Regents of the University of California; icons by Tim Hyland. These cards were adapted from a design by National Park Service.





Value of Collaboration with Partners

State Parks Division of Boating and Waterways Aquatic Weed Control Programs



Aquatic weeds currently treated by DBW in the Delta

Water hyacinth



Egeria densa



Spongeplant



If you see any of these plants in the Delta - LET US KNOW!
Contact the Division of Boating and Waterways (DBW) at (888) 326-2822 or ais@parks.ca.gov

Image credits: Top left: Angela Usiban, Bottom left: USDA, Top middle and bottom middle: DBW, Top right and bottom right: CDFG

Spongeplant (<i>Limnobiium laevigatum</i>)	Egeria densa	Water hyacinth (<i>Eichhornia crassipes</i>)
<p>Description</p> <ul style="list-style-type: none"> Floating to rooted perennial Thick, spongy, floating ovate-shaped leaves. Honeycomb-like spongy tissue on lower surfaces Juveniles develop into mature clumps up to 50 cm tall Small white flowers Native to Central and South America <p>Growth Period: spring- fall</p> <p>Habitat: ponds, sloughs, channels, canals, streams, and lakes</p> <p>Control Methods Currently Used by DBW:</p> <ul style="list-style-type: none"> Chemical Control Hand Removal <p>Control Options for Residents*:</p> <p><u>Hand Removal:</u> Pull plants from roots. Collect all fragments. <u>Mechanical Removal:</u> Hire an aquatic mechanical harvesting company.</p>	<p>Description</p> <ul style="list-style-type: none"> Submerged aquatic perennial 3-8 leaves, whorled Middle and upper leaves 15-40 mm long, 2-5 mm wide Small white flowers extend up to 3 cm above water surface Native to South America <p>Growth Period: spring - late fall</p> <p>Habitat: slow-flowing or still water in ditches, sloughs, canals, rivers, ponds, lakes, and reservoirs, often in nutrient-rich substrates</p> <p>Control Methods Currently Used by DBW:</p> <ul style="list-style-type: none"> Chemical Control <p>Control Options for Residents*:</p> <p><u>Hand Removal:</u> Pull plants from roots. Collect all fragments. <u>Diver Assisted Hand Removal:</u> Hire SCUBA divers to removal plants. <u>Mechanical Removal:</u> Hire an aquatic mechanical harvesting company. <u>Benthic Barriers (weed covers):</u> Use physical covers over aquatic weeds to prevent growth.</p>	<p>Description</p> <ul style="list-style-type: none"> Floating perennial, sometimes rooted in mud Shiny leaves, and spongy stalks Lavender or white flowers Native to South America <p>Growth Period: spring - late fall</p> <p>Habitat: ponds, sloughs, channels, canals, streams, rivers, and lakes</p> <p>Control Methods Currently Used by DBW:</p> <ul style="list-style-type: none"> Chemical Control Mechanical Removal Hand Removal <p>Control Options for Residents*:</p> <p><u>Hand Removal:</u> Pull plants from roots. Collect all fragments. <u>Mechanical Removal:</u> Hire an aquatic mechanical harvesting company.</p>
<p><small>*Residents that opt to use these control methods do so at their own risk. DBW does not assume any liability for injuries or damages that may occur while residents implement these methods.</small></p> <p><small>*Note that only DBW and its partner agencies are legally authorized to use the selected herbicides. Residents are cautioned not to apply these herbicides on their own.</small></p> <p><small>*Referenced from Biology and Control of Aquatic Plants: A Best Management Practices Handbook, 3rd edition, Aquatic Ecosystem Restoration Foundation http://www.aquatics.org/bmp.html</small></p>		



EDRR Future Plans



Dean Kelch, CDFA, Early Detecting in Washoe Meadows SP