Setting and Implementing Regional Strategies for Landscape-scale Invasive Plant Management

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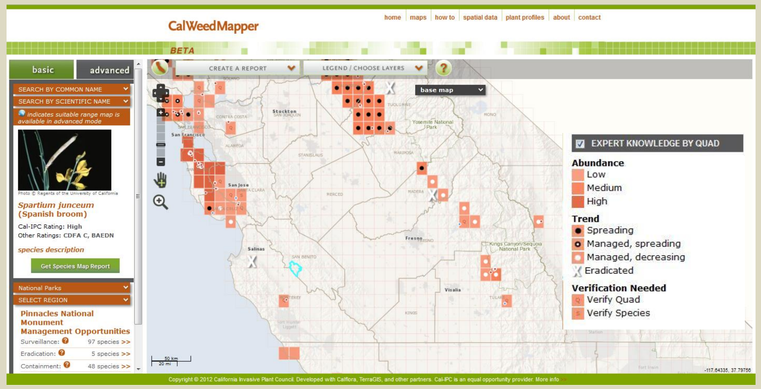
Cal-IPC is working with partners in several regions of California to develop consensus strategies based on CalWeedMapper, our online mapping tool that incorporates expert knowledge and occurrence data on >200 invasive plants statewide. We're charting a strategic course to help regions be shovel-ready to apply for funding for high priority eradication targets. We are actively supporting several types of regions, including counties, Weed Management Areas, National Parks, National Forests, State Parks and watersheds.

calweedmapper.cal-ipc.org

Data

CalWeedMapper combines two types of data: expert knowledge and occurrences (GIS). GIS datasets provide specific population locations. Expert knowledge fills in gaps in quantitative datasets and adds information on population trends and management programs. These data are also linked to existing online occurrence databases from Calflora and the Consortium of California Herbaria (CCH).



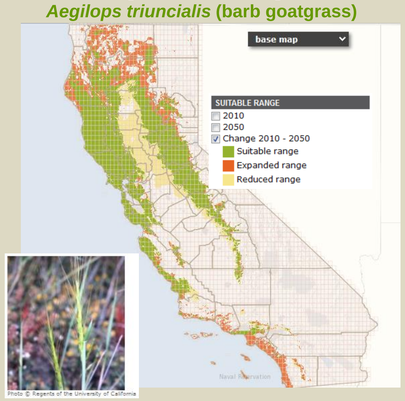
***Spartium junceum* (Spanish broom)**

Potential Spread

CalWeedMapper also maps suitable range based on climate. This suitable range information can help managers assess the potential for future spread of a species. This modeling uses Maxent modeling software, occurrence data documenting where the plant currently grows in California, and climate data for California.

CalWeedMapper displays suitable range (2010), projected suitable range (mid-century), and the expansion or reduction in range between those dates. Our projections are based on climate only and do not consider factors such as soil, habitat, and dispersal.

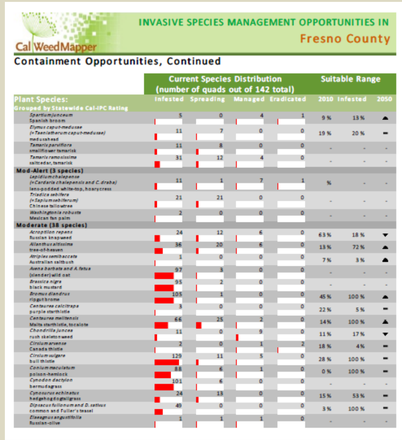
Change in suitable range for *Aegilops triuncialis* (barb goatgrass)



Management Opportunities

CalWeedMapper is designed to increase the effectiveness of invasive plant management by providing landscape scale maps that serve as the basis for setting regional priorities, tracking progress and justifying funding.

Land managers can see management opportunities for their region divided into surveillance, eradication or containment targets. These reports are derived from maps of current distribution combined with projected suitable range for 2010 and 2050 climate conditions. Land managers can download reports at several scales, including counties, Weed Management Areas, Ecoregions, Jepson Regions, National Parks, National Forests, National Wildlife Refuges, State Parks and watersheds.


CalWeedMapper
INVASIVE SPECIES MANAGEMENT OPPORTUNITIES IN
Fresno County
Containment Opportunities, Continued
Current Species Distribution (number of quads out of 142 total)
Suitable Range
Plant Species: Grouped by Statewide Cal-IPC Rating
Infested
Spreading
Managed
Eradicated
2010
Infested
2050
Spanish broom
Dittrichia graveolens
Medusahead
Tamarix parviflora
Tamarix ramosissima
Tamarix chinensis
Medium (3 species)
Iberian star-thistle
Yellow star-thistle
Medusa head grass
Moderate (38 species)
Russian knapweed
Alkanet
Tree-of-Heaven
Australian saltbush
Jointed goatgrass
Black mustard
Ripgut brome
Centaurea calcitrapa
purple starthistle
Centaurea melitensis
Malta star-thistle
Chamaesyce peplis
purple sandmat
Cirsium vulgare
bull thistle
Cirsium arvense
Canada thistle
Cirsium ochrocentrum
Cynoglossum officinale
houndstongue
Dipsacus fullonum and D. sativus
common and fuller's teasel
Elaeagnus angustifolia
Russian olive
Fallopia japonica
Japanese knotweed
Fallopia sachalinensis
giant knotweed
Fallopia x bohemica
Bohemian knotweed
Foeniculum vulgare
fennel
Genista monspessulana
French broom
Hedychium gardnerianum
Kahili ginger
Hypericum perforatum
St. Johnswort
Lepidium latifolium
perennial pepperweed
Lepidium draba
hoary cress
Lepidium chalcedonicum
Persian pepperweed
Lepidium appelianum
Lepidium chalcedonicum
Lepidium draba