August 27, 2019

Honorable Mayor Hall and Members of the City Council
1200 Carlsbad Village Drive
Carlsbad, CA 92008

Support for Funding Ward's Weed Eradication

Dear Esteemed Council Members:

The Center for Natural Lands Management owns and manages the 1,800 acre Rancho La Costa Habitat Conservation Area (HCA), which was set aside for the protection of endangered species and habitat in the City of Carlsbad as part of the La Costa Villages Development. There are many sensitive, threatened, and endangered plant and animal species that reside on the HCA, including the coastal California gnatcatcher (Polioptila californica californica) and thread-leaved brodiaea (Brodiaea filifolia). One of the greatest threats to the habitat and species is the invasive, non-native plant, Ward’s weed (Carrichtera annua), which was identified on the HCA in 2008.

The first infestation of this plant in the United States was found on this HCA, and CNLM has experimented with a variety of methods over the years to determine the most cost-effective treatment methods. The plant is insipid, and forms a dense mat of plants, growing in both bare ground and open habitat, creating overwhelming competition for native species. It germinates and produces thousands of seed even after modest rain events, having an exceptional growing period between November and June. Seed are easily spread by any disturbance of human or wildlife species that come in contact with them due to their barbs that lock into fabric or fur, as well as bury into soil and shoes. Ward’s weed has been discovered in multiple locations surrounding the HCA, likely spread through infested machinery or transported inadvertently through worker contact, and needs to be contained.

Australia provides us with the case of why active control is urgent in Carlsbad (Dixon 2012¹). The plant was discovered in a small location in the country the early 1900s, and has since wreaked havoc on native biodiversity across all regions. There is active research in Australia which provides support to the methods which have been applied at the HCA, and will be encouraged throughout all the infested lands in Carlsbad.

The California Department of Food and Agriculture has rated this a highly noxious and invasive weed, and it is a huge priority for containment by the San Diego Agricultural

¹Dixon, Bob. Control of wards weed (Carrichtera annua) on rare species translocation sites at Westonia in the eastern wheatbelt of Western Australia. Eighteenth Australasian Weeds Conference. May 2012.
Weights and Measures. The San Diego Management and Monitoring Program has recently prioritized this species for removal, and are actively engaging in funding for treating the species. Over the last ten years, CNLM has invested tens of thousands of dollars in the control of ward’s weed, collaborating with various San Diego agencies and funders to accomplish this work. CNLM has tried various herbicides (including Isoxaben, Chlorosulfuron, and Glyphosate), and spent hundreds of hours hand-pulling the plant as well. However, learning from Australia and attempting trials in the US, we have determined that the most effective control method is to use Gallery, a pre-emergent herbicide that kills the plant roots before it germinates. This herbicide allows native shrubs and grasses to persist and thrive, meanwhile inhibiting the growth of the competitive Ward’s weed in and among the habitat. It eliminates the need for time-consuming and expensive follow-up treatments which require additional soil disturbance and create the potential to transport the plant in clothing and soil. CNLM will be spending ~$15,000 in the coming winter and spring to treat the species. We have made significant progress at reducing this species on our HCA, but there is a Carlsbad-wide need to fund the species removal on lands adjacent to our HCA.

CNLM encourages the City of Carlsbad to allocate funding to control ward’s weed on lands adjacent to our HCA which are infested with Ward’s weed. It is critical for regional invasive species removal efforts to make a thorough investment in this effort to make significant progress towards the eradication of this species, and your funding will be critical to that success. We are engaged as partners in this process in our commitment to protecting species and habitats, and interested in providing our expertise as well.

Sincerely,

Sarah Godfrey

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