

# European Beachgrass Removal: Year 1 Report

Prepared for: Guadalupe Nipomo Dunes National Wildlife Refuge

Prepared by: The Land Conservancy of San Luis Obispo County

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## Pre-Treatment

A pre-treatment survey was completed in February 2019 using a 50-meter<sup>2</sup> grid, covering the entire treatment area. The survey evaluated the European beachgrass (*Ammophila arenaria*) cover (Figure 1) as well as endangered and threatened plant species (Figure 2). When special status plant species were found, they were flagged so to be obvious during treatment and location noted using a GPS.

Special status species were documented throughout the treatment area with flags. These flags allowed for herbicide applicators to be aware when near rare species as well as give an overview of the special status species within the treatment boundary. This survey was only able to document individuals visible at the time of the visit. Figure 2 and Table 1 documents the special status species found in the pre-treatment survey.

*Table 1: Number of special status species found in the preliminary in survey (November 2017).*

Species	Number of Individuals Found
Dune spectaclepod ( <i>Dithreya maritima</i> )	316
Surf thistle ( <i>Cirsium rhothophilum</i> )	72

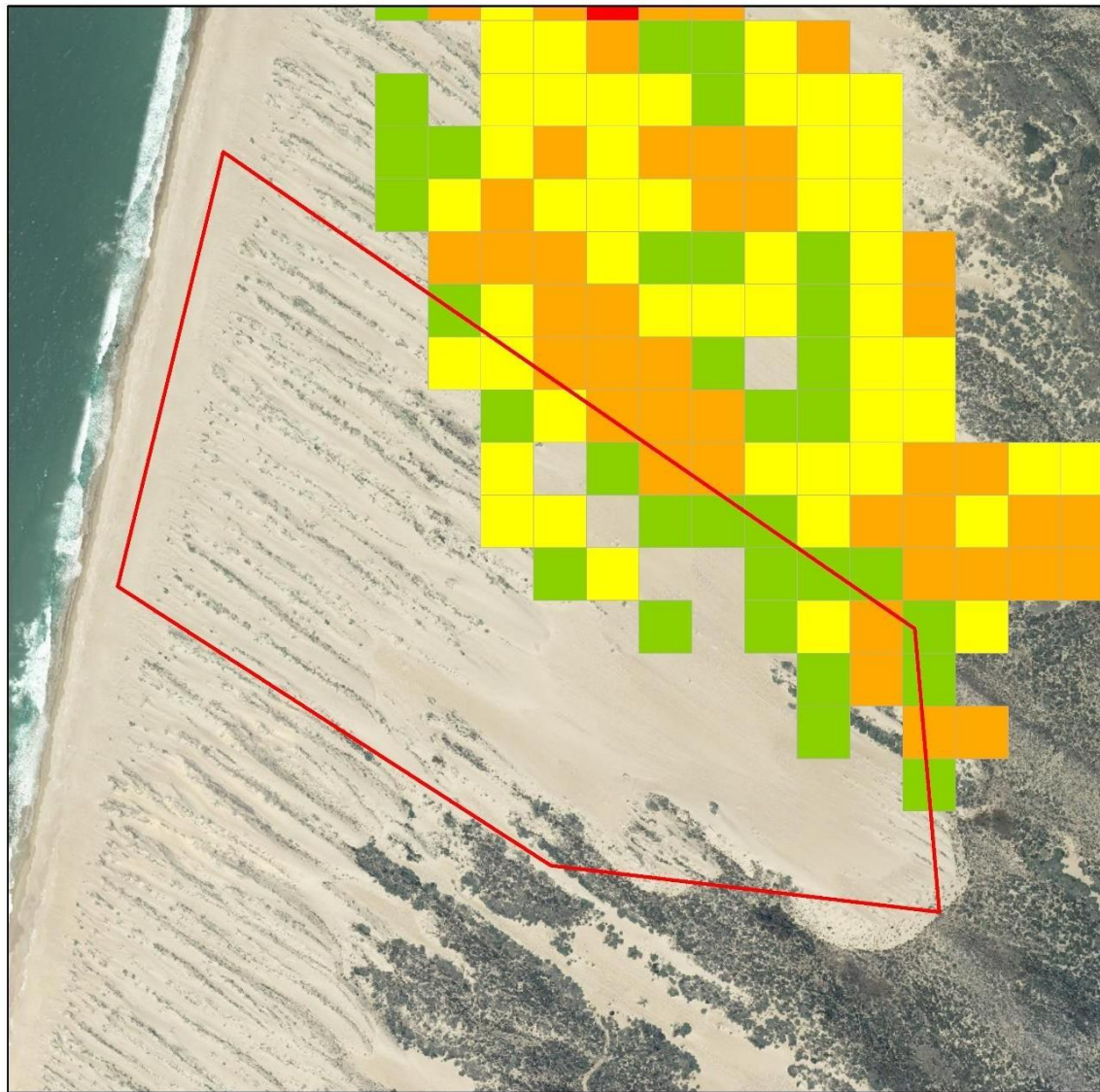
## Treatment

The Land Conservancy of San Luis Obispo County completed Year 1 treatment of the 19.4-acres of European beachgrass (*Ammophila arenaria*) on the southern edge of the beachgrass population. Backpack sprayers and truck sprayers were used to apply Round up Pro (glyphosate) and Habitat (Imazapyr). Treatment occurred on February 6, 2019.

Other nontarget invasive species found throughout the treatment area were European searocket (*Cakile maritima*), narrow-leaf iceplant (*Conicosia pugioniformis*), and highway iceplants (*Carpobrotus spp*).

## Post-Treatment

A post-treatment survey will be completed in summer 2019 using a 50-meter<sup>2</sup> grid, covering the treatment area.



# **Guadalupe Nipomo Dunes National Wildlife Refuge**

Pre-Treatment Beachgrass Survey

## **Legend**

- 0-1% Cover
- 1-5% Cover
- 5-25% Cover
- 25-50% Cover
- Treatment Area

0 1 2 4 6 Miles



Created by: L. Roddick 04/03/2019

Figure 1: Pre-treatment European beachgrass percent cover mapping.





## Guadalupe Nipomo Dunes National Wildlife Refuge

### European Beachgrass Treatment

#### Legend

- Beach spectaclepod
- Surf thistle
- Beachgrass Treatment (2/6/2019)
- Treatment Area

0 1 2 4 6 Miles



Figure 2: Area treated on February 6, 2019 and the special status species found in pre-treatment survey.



*Figure 3: LCSLO crew treatment of European beachgrass.*

### **Plover Monitoring**

A plover monitoring contract was finalized with Trihydro Corporation for the three years of monitoring. Weekly and annual reports will be given to Refuge Manager, Deborah Kirkland.