

Granite Rock

Moro Cojo Restoration Project

Previous Restoration: 2005-2007

Partners Involved: Louis Calcagno, Coastal Conservation and Research

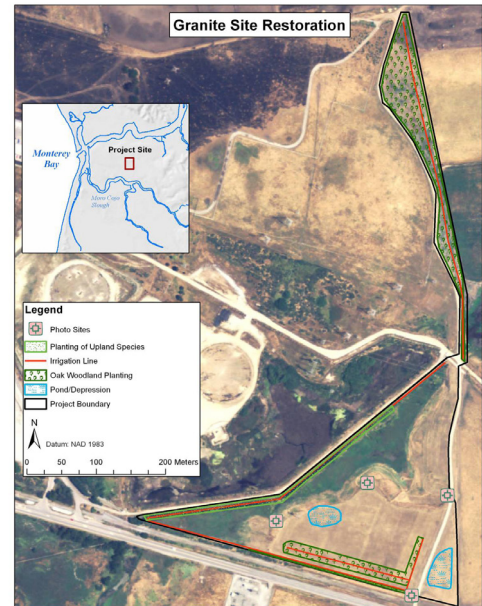
Previous Work Performed

Restoration began in 2005 with weed removal mainly by weed whacking and hand removal. The flat field was mowed several times and drill seeded with a mix of native grass species. In one depression, a forest of cottonwoods was planted, which has now flourished.

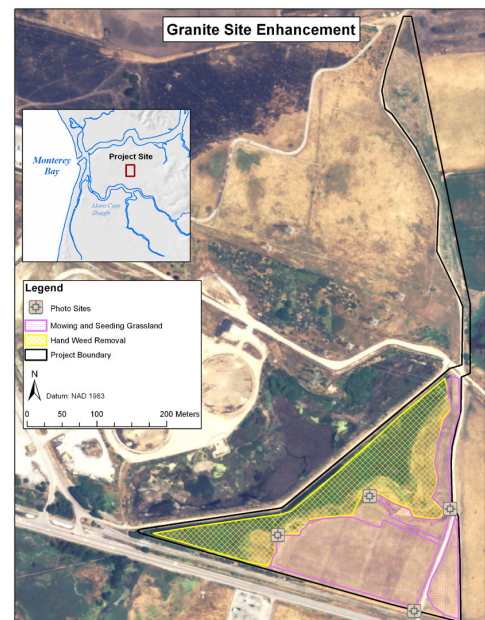
Restoration Performed

Irrigation was installed from the greenhouse to the fence line along Dolan road, and then across to the berm and along fence line at the Northwest part of the property. Native upland species were planted along the berm and the Dolan road fence line to provide habitat and to act as a buffer from the heavily used road. The upland species planted along the berm on the western side of the site will add to the habitat value of the restoration site. Two slight depressions were dug to allow for the pooling of fresh water and the creation of patches of wet meadow habitat on the site.

Along the panhandle going out the north side of the site, an oak woodland was established. Irrigation was installed to ensure survival for the first three years, after which watering is no longer needed. The woodland benefits the system by providing habitat for native birds and mammals, allowing for more infiltration of rain and storm water into the ground for nearby wetlands, and act as a barrier along the cattle pasture. The long term goal is to establish a wildlife corridor made up of wetland and upland habitats for native species traveling between the Moro Cojo and Elkhorn Sloughs.



Aerial of Granite Rock restoration plan



Aerial of Granite Rock enhancement plan

Enhancement Performed

Bi-annual mowing of the field is conducted to maintain the momentum of succession from an invasive grassland to a native grassland and wet meadow. Additional native grass seed were spread to encourage a higher rate of succession. The wetland area is in relatively good condition, however, ongoing weeding using weed-wackers and hand-pulling is performed to maintain the dominance of native plant species on the site and provide valuable habitat.

Plants

Non-native plants identified for removal:

Bristly Ox Tongue	<i>Picris echioides</i>
Bull Thistle	<i>Cirsium vulgare</i>
Cockle Burr	<i>Xanthium strumarium</i>
Curly Dock	<i>Rumex crispus</i>
Hemlock	<i>Conium maculatum</i>
Italian Thistle	<i>Carduus pycnocephalus</i>
Mustard	<i>Brassica campestris</i>
Radish	<i>Raphanus sativus</i>
Sow Thistle	<i>Sonchus oleraceus</i>

Restoration Success

Site 1



2012



Site 2



2012



CRAM Scores

The California Rapid Assessment Method (CRAM) was used to assess the condition of health at Granite Rock during 2009 and 2012. In 2009 The CRAM Index Score was 58 and in 2012 it increased to 62. Biotic Structure was given a score of 83 in 2009 and this did not increase in 2012.

