BVAS Andy Mauro Nature Preserve Habitat Restoration Project

Purpose and Need for Project

The purpose of the Mauro Preserve Habitat Restoration Project is to restore native vegetation, which will provide habitat for two rare species of birds: the coastal Cactus Wren (Campylorhynchus brunneicapillus) is a Species of Special Concern under the State of California, and the coastal California Gnatcatcher (Polioptila californica californica) is protected under the federal Endangered Species Act. More common wildlife species will also benefit from the restoration. When the Buena Vista Audubon Society acquired the Preserve in 2017, it was dominated by invasive, non-native plant species, which provide little benefit to wildlife.

Buena Vista Audubon Society is committed to restoring and maintaining the Mauro Preserve for the benefit of the plants and animals it supports, in the context of our Conservation Mission:

“…to actively support programs to protect, preserve, restore, and enhance natural ecosystems on a local, regional, national, and international level.”

The intent of the restoration is to actively reduce non-native species occurrences, then restore native vegetation, including coastal sage scrub, maritime sage scrub, and native grassland on the Preserve.

The Preserve is located within the North County Multiple Habitat Conservation Plan (MHCP), the City of Oceanside Draft Subarea Habitat Conservation Plan/Natural Community Conservation Plan (SAP) soft line preserve, and a Pre-Approved Mitigation Area (PAMA). Restoration of the habitat and long-term maintenance and monitoring will support the goals and objectives of the City of Oceanside Subarea Plan.

Funding

The U.S. Marine Corps at Camp Pendleton, through their Readiness and Environmental Protection Integration (REPI) program, provided half the funding for acquisition and all of the funds for restoration and long-term management. The majority of the remaining funds for acquisition came from the California Natural Resources Agency, through their Environmental Enhancement and Mitigation Program. And local non-profits and individual BVAS members also contributed to the purchase of the Preserve.
The Mauro Preserve Habitat Restoration Project has four objectives.

1. Restore and enhance coastal sage scrub, maritime sage scrub, and native grassland to provide habitat for the coastal California Gnatcatcher and the coastal Cactus Wren.
2. Preserve habitat for the state and federally protected thread-leaved brodiaea (*Brodiaea filifolia*).
3. Control invasive, non-native weeds.
4. Provide education and limited passive recreational opportunities.

In order to meet these objectives, the proposed project includes three elements.

I. Habitat Restoration and Enhancement
The primary focus of this project is restoring and enhancing native habitat, and these activities will be implemented in a two-phase approach over a 6-year period.

**Phase I** will occur over the first two to three years of restoration activities, focusing on reducing the invasive weed seed bank and controlling mustard, fennel, and artichoke thistle.

**Phase II** will consist of active seeding and planting of native vegetation on the majority of the Preserve. This will be implemented after the invasive species have been treated to significantly reduce the seed bank of invasive plants.

Phase I will require a few years of invasive weed removal due to the extent of persistent invasive plants covering the Preserve. Up until the 1980s, the Preserve was a dairy farm with a long history of grazing and farming operations. Since the dairy farm closed in the mid-1980s, the native habitat has not returned. With the exception of 0.5 acre of disturbed sage scrub habitat, the Preserve is entirely occupied by non-native forbs and grasses. The highly invasive wild fennel, artichoke thistle, and mustard dominate. These invasive plants will be the focus of eradication efforts as part of the habitat restoration. The disturbed sage scrub area will be enhanced with native plant seedlings and seeds in order to allow this plant community to flourish and spread.

The Preserve is habitat for the state and federally protected thread-leaved brodiaea (*Brodiaea filifolia*), a rare species of flowering plant in the cluster-lily genus that is only found in Southern California. All activities will involve the protection of this plant, to allow for the expansion of the population over time.

The success of the restoration and enhancement activities will be measured throughout the project by both quantitative and qualitative measurements called "metrics." Where
these metrics indicate that activities are failing to meet performance goals, the project manager will implement remedial measures.

II. Educational and Limited Passive Recreation Opportunities
The BVAS is committed to providing educational opportunities to increase public awareness of native habitats and their intrinsic value. As part of the project, we will provide public access in a limited key area, with the majority of the Preserve being off-limits to the public.

An access gate will be established from the Muirfield Drive cul-de-sac access area to the Mauro Preserve after the habitat has been restored. This will not be implemented until approximately 2025; until then the Preserve will remain closed to the public.

No wheeled or motorized vehicles will be permitted, except for restoration and maintenance activities. No off-lease pets will be permitted. With the focus on protection of habitat for sensitive plants and animals, rather than public access and trail use, we do not intend to install any public facilities.

III. Long-term Habitat Management
Following achievement of the restoration success metrics, long-term management of the Preserve will commence. It is anticipated that this will occur in 2025. The Preserve will be actively managed in perpetuity, thanks to the establishment of a long-term endowment funded by the U.S. Marine Corps at Camp Pendleton.