



Quarterly Report to Environmental Enhancement Committee: 2nd Quarter, 2019 (April-June)

Active Projects:

1. Habitat Restoration of Coastal Strand, Dune, and Lagoon Ecosystems; Manchester SP
2. Restoration of Coastal Native Plant Communities & Seabird Habitat, Santa Cruz CA
3. Morro Dunes Natural Preserve Restoration, Los Osos, CA
4. Restoration of Priority Freshwater Wetlands for Endangered Species, Consumnes River Preserve

Completed Projects

1. Point Arena II Resource Lands Conservation, by The Trust for Public Land (September 2013)
2. McDaniel Slough, Arcata (June 2014)
3. Pioneering and Innovative Oyster Restoration at Elkhorn Slough (August 2014)
4. Sears Point Tidal Restoration Project (October 2015)
5. Sonoma Creek Tidal Marsh Enhancement Project (June 2016)
6. Dune Restoration at Morro Strand State Beach (June 2016)
7. Community Based Restoration on the Fort Ord Dunes State Park (September 2016)
8. Complete Restoration of Point Reyes North Great Beach Critical Dune Habitat (January 2017)
9. Restoration of Salt Marsh-Upland Transition, Tijuana Slough National Wildlife Refuge (January 2017)

Active Projects

The following grants are currently being funded from the EEF, with a brief update for each:

1. **Habitat Restoration of Coastal Strand, Dune, & Lagoon Ecosystems; Manchester SP**
 - **Grantee:** CA Department of Parks and Recreation
 - **Term:** 07/01/2015 – 12/31/2018
 - **Dollar amount authorized by EEC:** \$106,711
 - **Invoiced to date:** \$91,498.03

- **Work completed:** Invasive species treatment and monitoring. Work is complete, awaiting final invoice.
- **More information available at:**
Request final report from Daniel Orr.

2nd Quarter Update: Since the December 2017 Report, hand crews returned to areas where previous herbicide treatment resulted in lower die-off of European beachgrass rates than expected. Work included removal of 30 acres of European beach grass and iceplant from dunes. EEF funds were used for per-treatment mapping, herbicide treatments, hand crews and education for area closures. Delays in project timing, due to wildfire, contributed to lower treatment success. Approximately 2-5% of green shoots remain. State parks will seek funding for additional treatments. Initial grant allocations were modified to allow purchase of spraying equipment for use by permanent staff to maintain efforts. Post treatment monitoring demonstrates die off but beachgrass has not begun to decompose.



Picture above: Forestry Aid spraying iceplant in treatment areas on November 9, 2018. Reddish hue in sky is smoke from the Camp Fire moving into coastal Mendocino County.

Pictures below: Example before and after photos illustrating die-off of beachgrass following treatment.



2. Restoration of Coastal Native Plant Communities & Seabird Habitat, Santa Cruz, CA.

- **Grantee:** Social and Environmental Entrepreneurs
- **Term:** 05/15/2016 – 12/31/2018
- **Dollar amount authorized by EEC:** \$82,400.37
- **Invoiced to date:** \$70,891.22
- **Work completed:** Seed collection, planning, ice plant removal, native plantings, monitoring.
- **More information available at:** No additional information at this time.

2nd Quarter Update: The project appears to be successful, but a final report has not been received. Grant will be closed out in coming months and remaining funds will revert to the environmental enhancement fund. EEF staff visited the project site to April 13th, 2018. Ice plant has been removed along the cliff providing a ledge which is heavily used by nesting cormorants. Ice plant was also removed from the bluffs and replaced with native plants.



Photo to right: Cormorants nesting on cleared cliff edge at Natural Bridges State Park.

3. Morro Dunes Natural Preserve Restoration, Los Osos, CA.

- **Grantee:** California Department of Parks and Restoration
- **Term:** 07/21/2017 – 06/30/2020
- **Dollar amount authorized by EEC:** \$180,000.00
- **Invoiced to date:** \$0
- **Work completed:** Determination of monitoring plots, mapping of treatment areas, dune stabilization, contracting, initial treatments.
- **More information available at:** Request treatment maps and contracts from Daniel Orr

2nd Quarter Update: Since the last report a local resource conservation district (RCD) contracted by State Parks has completed the first rounds of treatments in Phase 1 and 2. Follow up treatments have begun in Phase 1 area and will continue soon in areas outside of Snowy Plover nesting season.

Pictures below: Map of treatments at Morro Dunes natural preserve restoration. Phase 1 efforts in blue and Phase 2 treatments in pink.



4. Restoration of Priority Freshwater Wetlands for Endangered Species, Cosumnes River Preserve

- **Grantee:** California Department of Parks and Restoration
- **Term:** 09/20/2017 – 06/30/2020
- **Dollar amount authorized by EEC:** \$89,900.00
- **Invoiced to date:** \$87,622.81
- **Work completed:** Project design, baseline monitoring, permit applications, contracting, tree planting, and construction.
- **More information available at:** Request full quarterly update and baseline reports from Daniel Orr

2nd Quarter Update: The construction phase is complete, invasive species treatments are ongoing, and the project is on schedule. The lake has been recontoured and expanded. A total of 25 acres of primrose were treated within the lakebed in September 2018. Follow up primrose treatments will occur in late-summer 2019 and late-summer 2020. Two of three native tree plantings have been completed. Horseshoe lake vegetation profile has successfully transitioned from upland to wetland species. The last set of vegetation surveys indicated a dominance by invasive species prior to the invasive species treatments. Additional vegetation surveys will be completed after invasive control efforts in 2019 and 2020.



Photo above: March 24, 2019, aerial image of Horseshoe Lake from the east.

Photo below: Priority Freshwater Wetlands for Endangered Species at the Cosumnes River Preserve. BLM staff treating milk thistle and hemlock under the rookery trees at Horseshoe Lake Restoration Project.



Completed Projects

- 1) Point Arena II Resource Lands Conservation
- 2) McDaniel Slough Tidal Restoration
- 3) Pioneering and Innovative Oyster Restoration at Elkhorn Slough
- 4) Sears Point Tidal Restoration Project
- 5) Sonoma Creek Tidal Marsh Enhancement Project
- 6) Dune Restoration at Morro Strand State Beach
- 7) Community Based Restoration on the Fort Ord Dunes State Park
- 8) Restoration of Point Reyes North Great Beach Critical Dune Habitat
- 9) Restoration of Salt-Marsh-Upland Transition, Tijuana Slough National Wildlife Refuge

Other EEC/EEF Updates:

The Fund: As of June 2017, the fund balance was reported to be \$855,879. Changeover of California Department of Fish and Wildlife accounting systems has delayed final reporting of fund condition but EEF staff estimate the fund in excess of \$1,200,000.

2018 Request for Proposals: The 2018 request for proposals (RFP) ended in an Environmental Enhancement Committee (EEC) meeting on May 15, 2019. The EEC selected five excellent projects from thirty-one applications. Grant agreements are in progress for the projects with fund availability expected September 1, 2019. The selected projects are:

1. Restoration of Ecosystem Functions to Benefit Threatened and Endangered Amphibians at Elkhorn Slough; Moss Landing

- **Grantee:** Elkhorn Slough Foundation
- **Dollar amount authorized by EEC:** \$166,524.05
- **Proposed Work:** Restoration of coastal habitat and ecological functions within freshwater and tidal habitats. Project includes repair of a failed tide gate and removal of eucalyptus from adjacent oak woodland.

2. Restoring Coastal Dune Ecosystem Health and Resilience at Salina River State Beach, Moss Landing

- **Grantee:** Coastal Conservation and Research, Inc.
- **Dollar amount authorized by EEC:** \$47,292.85+
- **Proposed Work:** Restoration of coastal dunes through removal of invasive ice plant.

3. Año Nuevo Island Seabird Habitat Enhancement Project, Santa Cruz

- **Grantee:** Oikonos Ecosystem Knowledge
- **Dollar amount authorized by EEC:** \$69,796.00
- **Proposed Work:** Enhancement of seabird habitat on state owned island refuge. Includes construction of elevated habitat enhancement and protection platforms, planting of saltgrass, and installation of erosion.

4. Little River State Beach Nearshore Dune Habitat Restoration Project, Eureka

- **Grantee:** California State Parks NCRD
- **Dollar amount authorized by EEC:** \$57,600.00
- **Proposed Work:** Restoration of twenty-two acres of nearshore dune habitat through removal of European beachgrass and yellow bush lupine.

5. Baker Creek Streamflow and Habitat Enhancement Project,

- **Grantee:** Sanctuary Forest Inc.
- **Dollar amount authorized by EEC:** \$203,683.10
- **Proposed Work:** Increase summer streamflow in Baker Creek sufficient to maintain pool habitat and support rearing for native salmon. Includes restoration of remnant wetlands, construction of earthen berms to form four ponds and an infiltration basin.