

**Morro Bay National Estuary
Program Community Project
Program Concept Proposal**

Project title: Chorro Flats Botanical Inventory

Applicant organization: Central Coast Salmon Enhancement d/b/a Creek Lands Conservation

Organization type: Non-profit

Address: 229 Stanley Ave. Arroyo Grande CA 93420

Contact information: Don Chartrand, Executive Director, 805-294-2575, don@creeklands.org

Amount requested: \$5,266.40

Total project cost: \$10,000

Amount and source of other funding: \$5,000 in volunteer time, donations.

Project description: Creek Lands Conservation proposes to lead an innovative botanical inventory project with a team consisting of trained volunteers, CLC staff, and AmeriCorps Watershed Steward Program (WSP) members at Chorro Flats, which is owned by the San Luis Coastal Resource Conservation District. This project is the critical first step in a long term goal to diversify and enhance some previous restoration efforts at Chorro Flats. The project depends on community volunteers to deepen scientific understanding of the botanical diversity at the site. Over time, we intend to build on this understanding in future projects that will increase biodiversity, prepare Morro Bay watershed ecosystems for climate change and improve wildlife habitat conditions.

The project is very likely to benefit regional environmental literacy initiatives involving Central Coast school districts, but that involvement exceeds the scope of this proposal.

Other involved organizations include the California Conservation Corps (CCC) and its related AmeriCorps program, the Watershed Steward Program (WSP). Two regional Resource Conservation Districts (San Luis Coastal and Upper Salinas-Las Tablas) will be invited to utilize the findings and lessons learned to inform riparian habitat restoration and conservation projects involving similar watersheds throughout the Central Coast.

Project tasks: See project narrative, Appendix A herein. Note that the complete project consists of five major task areas, but that this proposal seeks funding for just two of the six task areas.

Budget: See Budget Table, Appendix B herein.

Schedule: See Time Table, Appendix C herein.

Partial funding: Should we receive an award that is less than our requested amount, we will use that amount as "seed funding" to stimulate funding from other sources to enable implementation of this important project.

APPENDIX A, PROJECT NARRATIVE:

Chorro Flats Botanical Inventory

Creek Lands Conservation is pleased to propose a botanical inventory project that will be used as part of a long range effort to diversify and enhance some previous restoration efforts at Chorro Flats, which is owned by SLC-RCD. The heart of the Chorro Flats Botanical Inventory project consists of a “bio-blitz” transect on Chorro Flats in which volunteers, CLC staff, and Ameri-Corps Watershed Steward Program (WSP) members will be trained to use the iNaturalist app to log observations of any organisms (plants, invertebrates, amphibians, reptiles, birds, bats, etc.). The main purpose of the transect is to create a thorough botanical inventory of the parcel.

All observations will be confirmed by taxonomic experts and openly shared with naturalists and organizations.

Data collection will be conducted with COVID-19 safety measures and both WSP members and trained volunteers will have the ability to go into the field independently for socially distanced and independent outdoor data collection.

The project consists of 6 tasks:

1. Meetings/ Management: this task ensures that all project stakeholders and participants operate from the same set of assumptions and expectations, including but no limited to project deliverables, project timelines, process guidelines, and safety measures pertaining to both COVID19 and field work. Several meetings involving various combinations of stakeholders and participants will take place over the course of the project. Stakeholders include MBNEP, SLC-RCD, CLC, and CCC (WSP); participants are anyone who is involved in the project including volunteer data collectors. CLC will manage all aspects of the project, from inception to conclusion.
2. Volunteer Coordination: CLC has been recruiting volunteer participants in Citizen Science projects for several months and we have assembled a team comprising several local residents who are looking to participate in exactly this type of project. We will invite 3-6 of these volunteers to join 3-4 CLC staff members and 2 WSP members in the botanical inventory data collection effort. Part of this task includes training all participants in the use of the iNaturalist app prior to the Bioblitz (see Task 4).
3. Site Assessment/Logistics: preliminary site visits by CLC staff members, interviews with RCD and MBNEP staff, and other sources of data will allow CLC to generate a site-specific project map before the Bioblitz data collection effort so participants know exactly where to go within the Chorro Flats parcel and what is expected of them when they arrive. Logistical considerations such as iNaturalist functions, parking, COVID safety, field safety equipment, and other details will be carried out before and during the data collection effort.
4. Bioblitz: on the day of the bioblitz, participants will assemble and review instructions and safety measures. Small teams will be distributed across the parcel to ensure thorough coverage. Participants will use iNaturalist to log observations of any organisms they encounter

during the assessment period, including plants, invertebrates, amphibians, reptiles, birds, mammals. They will be instructed in how to deal with multiple observations of the same species, and to emphasize the botanical inventory of the parcel. Observations will be validated by designated Identifiers, either credentialed scientists on CLC staff and/or from stakeholder agencies possibly including CA State Parks ecologists. Our aim is to validate a high percentage of the bioblitz observations at a research grade level of quality.

6. Findings report and recommendations for restoration: CLC will utilize iNaturalist features including bioblitz species tallies and visualization and communication tools to facilitate translating the results to benefit the community. The information will feed into a final report that paves the way for development of a restoration plan for the site.

Following this project, we will use the botanical inventory to cross reference extant plants with evidentiary support (e.g., paleo-botanical studies, sediment cores, etc.) for other plant species that were present and/or more abundant in past times. This biodiversity information will serve as a baseline from which we will construct a restoration plant palette. The existing plant palette will be assessed to identify where non-native plant types can be removed, and where over-abundant native types (e.g., willow spp.) could be thinned to create space for introduction of other plant types. The plant palette will be amended to include the “missing” plants and a restoration project map will be created indicating where habitat can be enriched through native plant diversification. This task will be funded by CLC through a targeted fundraising effort.

The project field team will then utilize the botanical inventory-informed restoration plan to return to Chorro Flats to collect seeds of target species for propagation, and will use the seeds to propagate plants for use in the habitat restoration step. We also anticipate using the restoration plan to guide non-native plant removal and native plant thinning to prepare the restoration areas for plantings. When seedlings and starts are ready for planting (1-2 years post collection and sourcing) the team will return once again to plant out the site guided by the restoration map.

Eventually, data from future biodiversity transects can be compared to the baseline transect to document changes in overall biodiversity as native species discover and adapt to the presence of increased plant diversity. At that time, educational materials can be developed to help guide other California watershed restoration efforts to improve and safeguard California biodiversity.

Thank you for considering our concept! We look forward to working with you.

Respectfully,

A handwritten signature in black ink, appearing to read "Don Chartrand". The signature is fluid and cursive, with a large initial "D" and "C".

Don Chartrand
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