

Native Plant Pollinator Garden in Cesar Chavez Park, Berkeley

(1) Description of the Project

The population of Western Monarch butterflies (*Danaus plexippus*) is in a fragile state, with precipitous declines only partially relieved by short-term rebounds. Severe scarcity is the fate of a number of other insects, including important pollinators, leading to descriptions of a global “insect apocalypse”. Central to the decline of these species is habitat destruction, in particular the destruction or non-replacement of the native plant species on which the pollinators depend.

The Chavez Park Conservancy proposes to install a pollinator garden at Cesar Chavez Park (Berkeley, CA) to increase local habitat quality and floral resources for overwintering Monarch butterflies and other pollinators. The park -- a reclaimed former city landfill -- is located in the Marina of the City of Berkeley (see <https://chavezpark.org/> and <https://www.visitberkeley.com/directory/cesar-chavez-park/>). The land is the property of the State of California and is leased to the City of Berkeley, who has management authority through its Parks Department. Monarchs overwinter nearby in Alameda County (e.g., at Albany Hill, Ardenwood Historic Farm, and San Leandro and Chuck Corica Golf Courses) and are occasionally seen in the Native Plant Area.

This project would build on a previous native habitat installation at Chavez Park that was one of the first of its kind in California. Funded by the California Coastal Conservancy and the City of Berkeley, a nonprofit group (Design Associates Working with Nature, DAWN) established a Native Plant Area in a 3-acre portion of the park in 1982-1985. The Native Plant Area today is a verdant island of mostly native trees and shrubs in the otherwise largely treeless park that has persisted for nearly 40 years with minimal care. The original plantings are beginning to reach the end of their lifespan, becoming overgrown with invasive grasses, and are not replacing themselves naturally, leaving large openings where they once stood. Nonetheless, the Native Plant Area still provides not only a backbone of native habitat for wildlife at the park (see bird, insect, and plant lists at <https://chavezpark.org/>) but also the proof that native vegetation can persist largely on its own once established there. With new plant installations and a little care, it can continue to serve pollinators and other wildlife as well as the public as a rich and diverse habitat garden.

We propose to plant 100 native plants representing 10 species known to be either important nectar sources for overwintering Monarch butterflies or floral and/or host resources for other pollinators (see <https://calscape.org/> and <https://xerces.org/publications/fact-sheets/xerces-monarch-and-pollinator-habitat-kits>). The proposed pollinator garden area is a sunny 4000 ft² section off the Native Plant Area that is currently largely devoid of native plants. In addition, we propose to replace California lilac (*Ceanothus* sp.) in a nearby 600 ft² area where California lilac that was originally installed in the 1980s has recently died. See Exhibit 1 for a map of the Native Plant Area with both sites marked. Milkweed (*Asclepias* spp.), the host plant of the Monarch butterfly, is not currently planned for installation, following recommendations by Xerces Society for overwintering habitat enhancement along the coast of California.

Each planting will be provisioned with temporary wire mesh caging, a mulch ring, a flag, and an identifying label. Volunteers and hired labor will regularly maintain and water plantings the first year and chart their development. Pilot plantings were installed in this manner this last season and are flourishing, suggesting that a future planting will be highly successful. Subsequent care and maintenance (including supplemental watering) will be supplied by Chavez Park Conservancy volunteers as needed. Water is available from a spigot a short distance from the site, so watering will be manual. Conservancy volunteers will coordinate regularly with the City Parks landscape maintenance department to ensure that plant installation and maintenance does not conflict with other maintenance activities. Drought conditions should not affect project success because transplants are all being watered by hand during establishment and because they are natives plants that do not require supplemental water once established. Their installation will increase drought resilience for local wildlife because plants will increase local native plant cover, structure, and diversity.

For two years the Chavez Park Conservancy has organized and led teams of volunteers, several in coordination with The Berkeley Project in a series of stewardship events focusing on the Native Plant Area, building a skilled, dependable, and loyal regular workforce to support the project. The core of past and current work has been reduction of weeds, notably the highly aggressive kikuyu grass. Volunteers have also trimmed and pruned dead vegetation and mitigated overarching threats to native plant survival and worked closely with the City's Landscape Gardening Department to remove plant debris as needed. The City has also on occasion lent tools and work gloves for volunteer crews.

California Fish and Game Code Section 13103 at paragraph (e) in pertinent part provides for expenditures for "planting trees and other vegetation management." Paragraph (m) further provides expenditures "for the purpose of protecting, conserving, propagating, and preserving fish and wildlife." The project for which this application is made falls under these enabling provisions.

(2) Project Schedule

November 2022 – January 2023: Site preparation and planting (after first winter rains)

December 15, 2022: Interim progress report submission

January 2023 – November 2023: Bi-weekly to monthly site visits for watering and maintenance.

Summer 2023: Cage removal (when deemed safe)

December 15, 2023 – Report submission to Alameda County Fish and Game Commission

[Chavez Park Conservancy volunteers will continue site maintenance in Year 2 of project]

(3) Project Budget

The project budget consists of material expenses and labor supplied by either Oakland Civicorps or the California Conservation Corps, included both to assist with installation and to provide restoration job experience training for underserved communities. Oversight and regular maintenance is provided by a core team of volunteers; greenwaste disposal assistance will be coordinated with City employees. See detailed Budget below.

Item	Explanation	Estim.Cost
5 x 1 gal Manzanita (<i>Arctostaphylos densiflora</i> McMinn) - \$12/ea	Recommended nectar resource for overwintering Monarchs (Xerces Society)	\$60
10 x 1 gal California lilac (<i>Ceanothus thyrsifolius</i> or "Concha") - \$12/ea	Recommended nectar resource for overwintering Monarchs (Xerces Society)	\$120
5 x 1 gal California buckwheat (<i>Eriogonum fasciculatum</i>) - \$12/ea	Butterfly host plant; nectar and pollen source in early summer	\$60
5 x 1 gal seaside buckwheat (<i>Eriogonum latifolium</i>) - \$12/ea	Butterfly host plant; nectar and pollen source in early summer	\$60
10 x cone California Phacelia (<i>Phacelia californica</i>) - \$6/ea	Nectar and pollen source in spring	\$60
5 x California aster (<i>Symphyotricum chilense</i>) - \$12/ea	Nectar and pollen source in summer (Xerces Society)	\$60
10 x cone yarrow (<i>Achillea millefolia</i>) - \$6/ea	Nectar and pollen source in spring (Xerces Society)	\$60
10 x California beeplant (<i>Scrophularia californica</i>) and/or gumplant (<i>Grindelia stricta</i>) - \$10/ea	Nectar source in spring / early summer	\$100
10 x California fuchsia (<i>Epilobium canum</i>) - \$10/ea	Nectar source in summer	\$100
40 x cone/plug purple needlegrass (<i>Stipa pulchra</i>) - \$6/ea	Habitat and butterfly host plant (Xerces Society)	\$240
12 x rolls wire mesh, wire supplies, and cutting tools for cages (construction by volunteers)	Protect plantings from predators	\$1200
4 x hori hori - \$25/ea	For planting and weeding	\$100
1 Sharpshooter shovel for digging	For planting	\$50
4 x hand clippers - \$25/ea	For maintaining plants	\$100
2 x 5 gal water containers	For watering	\$50
Mulch [available at no cost from City of Berkeley mulch piles]	Surround plantings with weed block and moisture retention layer	\$0
2 x 100 Flags \$10/ea	Signal location of plantings	\$20
Labels (50 x metal garden plant markers for key species @ \$19/25 pack + metal plant tags @ \$50 + tax	Identify plants	\$100
Signage	City-approved signage notifying public of project, with detailed educational content	\$200
Labor (2 days Civicorps x \$1000/day)		\$2000
Total		\$4,740

(4) Annual Budget for the Applying Organization

2021 Beginning balance:	\$22,144
Income:	\$ 3,795
Expenses:	-\$ 2,709
2021 Ending balance:	\$23,230

(5) The Applying Organization

The Chavez Park Conservancy is a 501(c)(3) nonprofit, EIN number 84-3326873, incorporated in California on September 3, 2019, corporate registration No. 4313846. It is dedicated to supporting nature and public enjoyment of the 90-acre park.

Board of Directors:

- Carl Anthony, Author, former Berkeley Planning Commission member
- Jutta Burger, Science Program Director, California Invasive Plant Council
- Santiago Casal, Founder and Curator of Cesar Chavez/Dolores Huerta Homage Solar Calendar
- Carol Denney, Berkeley Activist, Journalist, Musician
- Mark Friedman, Nonprofit leader, former Mayor of El Cerrito
- Bob Huttar, Consulting biologist and arborist
- Sheila Jordan, Alameda County Superintendent of Schools Emerita
- Emilie Keas, Author, nature photographer and linguist; retired teacher of Spanish
- Norman La Force, Author, Sierra Club leader
- Richard Walker, UC Berkeley Professor of Geography, Author

Organizational Leadership:

CEO - Martin Nicolaus, retired attorney, author, and park advocate

Treasurer - Lana Lew, retired Kaiser Permanente administrator

Secretary - Jutta Burger

(6) List of Individuals Responsible for Performing and Overseeing Project

Chavez Park Conservancy Board members Jutta Burger, PhD, and Bob Huttar will be co-leading the project. Dr. Burger is a professional ecologist with over 15 years of experience working on native plants, invasive plants, and restoration in California ecosystems; she also serves as Science Program Director at the California Invasive Plant Council. Mr. Huttar is a professional biologist and arborist with extensive field experience who has been leading volunteer stewardship activities at Chavez Park.

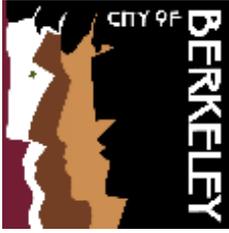
Additional on-the-ground support will be provided by Board Member Carol Denney and several regular local volunteers who help with regular maintenance activities in the Native Planting Area.

(7) Statement Describing Status of Permit Approvals (if Applicable)

The project is an extension and further development of an existing use in an area already focused on native plantings since the mid-1980s. No Federal, State, or regional permits are required. The City of Berkeley’s Parks Division has reviewed this proposal and fully endorses the project (see letter of support). Landscape maintenance staff will provide on-the-ground supplemental support if needed.



Exhibit 1. Proposed pollinator garden and supplemental habitat replanting sites within the previously-established Native Planting Area at Chavez Park, Berkeley.



February 25, 2022

Alameda County Fish and Game Commission:

I am writing in support of the Chavez Park Conservancy application for grant funding to install a pollinator garden at Cesar Chavez park. The City will support this effort by providing tools and a nearby water source. In the last two years, the City has supported 10 different volunteer groups in establishing and maintaining pollinator gardens in our parks. The Chavez Conservancy's effort to establish habitat for insects will help off-set the many years of global habitat destruction and the impending "insect apocalypse". Providing habitat for creatures such as the Western Monarch butterflies (*Danaus plexippus*) is important to help our environment recover from years of insect decline as we have paved over and eliminated much of the available habitat that supports these insects.

If you have any questions, please feel free to contact me at 510-981-6711 or by email at sferris@cityofberkeley.info.

Sincerely

A handwritten signature in black ink, appearing to read "Scott Ferris".

Scott Ferris
Director, Parks Recreation and Waterfront Department
City of Berkeley