

COASTAL CONSERVANCY

Staff Recommendation  
March 22, 2018

**LAKE DALWIGK URBAN GREENING PROJECT**

Project No. 17-026-01  
Project Manager: Laura Cholodenko

**RECOMMENDED ACTION:** Authorization to disburse up to \$381,120 to the Solano Resource Conservation District to increase native upland and wetland habitat and install visitor amenities at Lake Dalwigk Detention Basin in the city of Vallejo, Solano County.

**LOCATION:** Lake Dalwigk Detention Basin, City of Vallejo, Solano County

**PROGRAM CATEGORY:** San Francisco Bay Area Conservancy

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**EXHIBITS**

- Exhibit 1: [Project Location](#)  
Exhibit 2: [Conceptual Planting Plan and Site Photograph](#)  
Exhibit 3: [Project Letters](#)
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**RESOLUTION AND FINDINGS:**

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Sections 31160–31165 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes disbursement of an amount not to exceed \$381,120 (three hundred eighty-one thousand, one hundred twenty dollars) to the Solano Resource Conservation District (SRCD) to construct the Lake Dalwigk Urban Greening Project in the city of Vallejo, Solano County. This authorization is subject to the following conditions:

1. Prior to the disbursement of Conservancy funds, SRCD shall submit for the review and approval of the Executive Officer of the Conservancy a final work program, including a schedule and budget; a plan for acknowledging Conservancy funding; and the names of project contractors.
2. The Solano Resource Conservation District shall provide evidence that all necessary permits and approvals for the project have been obtained.

Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. The proposed authorization is consistent with Chapter 4.5 of Division 21 of the Public Resources Code, regarding the San Francisco Bay Area Conservancy.
  2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
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### **PROJECT SUMMARY:**

Staff recommends the disbursement of up to \$381,120 to the Solano Resource Conservation District (SRCD) to implement an urban greening project (the project) at the Lake Dalwigk Detention Basin in the City of Vallejo, Solano County (Exhibit 1). The project will enhance wildlife habitat, construct visitor amenities and provide opportunities for students to learn about the local environment through volunteer restoration events.

One component of the project consists of restoring the basin to a functioning wetland and wildlife area by planting 2,200 shrubs, 240 trees and 16,000 rushes, sedges and grasses. Plants installed will be regionally native species that are drought-tolerant. The plants will enhance resting habitat for migrating birds and will create more habitat diversity and complexity to support increased use of the site by other wildlife. Currently, Lake Dalwigk supports a diversity of waterfowl, but offers very little other wildlife habitat due to a scarcity of vegetative cover. Vegetation will also enhance the hydrologic function of the basin by improving storm water infiltration, reducing erosion, and filtering runoff to improve lake and storm water quality.

Most of the plants and irrigation system will be installed by community volunteers, local high school youth, and the California Conservation Corps. Shrubs and trees will be planted along an existing trail that surrounds the majority of the basin, which will greatly improve the aesthetic quality of the site and create more areas of shade for visitors. Small trees, sedges and rushes will be planted on two islands in the middle of the basin to enhance wetland habitat (Exhibit 2).

A second component of the project involves increasing visitor amenities to increase visitor awareness and protect the restored area. SRCD will install at least 10 interpretive signs, along the trail, that include descriptions of the native plantings and upland habitats created, resident and migratory birds and other wildlife, wetland function, climate change mitigation, and best management practices for storm water. In addition, SRCD will install a permanent drinking water fountain in the northern section of the project site and two dog-waste stations to protect water quality and help maintain an inviting environment for visitors.

The City of Vallejo suffers the greatest socio-economic challenges of all Solano County's cities. Eighteen percent of its population lives below the poverty line and seventy-five percent of the city's children were eligible for free or reduced-price school lunch in 2015. The community surrounding the project site is disadvantaged and therefore less able to respond to the risks of harm from climate change and other environmental concerns. This project will benefit the local

community by improving flood protection and by enhancing free and easily accessed open space that encourages residents to visit for relaxation and exercise.

On-going management and monitoring of the project will be the responsibility of the Vallejo Sanitation and Flood Control District (VSFCD) and Great Vallejo Recreation Department (GVRD). These project partners own the project site and currently maintain Lake Dalwigk. After project construction, these agencies will continue weed control as needed, and maintain dog-waste stations, drinking fountains and interpretive signs. VSFCD will also provide staff support to coordinate Vallejo Watershed Alliance volunteer days to involve the community in on-going site maintenance and education.

Solano Resource Conservation District is a non-regulatory, special district to the State of California that works with the Natural Resources Conservation Service (NRCS) and a variety of other partners to design and implement large and small ecosystem restoration programs, habitat enhancement projects, and watershed-based environmental education. SRCD has extensive experience restoring native vegetation in riparian, floodplain, and upland habitats across Solano County. In the past five years, SRCD has implemented projects that resulted in more than 73,000 linear feet of habitat restoration and 53 acres of native grassland installed, and the participation of more than 17,000 students in environmental education and conservation programs.

**Site Description:** Historically a tidal marsh, the project site is a 44-acre detention basin that is now separated from tidally influenced areas by development. The basin has been modified to serve as a storm water facility for the City of Vallejo. The basin was dredged and re-shaped in 2012 to increase storm water capacity and create islands for wildlife. Storm water collected in Lake Dalwigk is pumped to a drain that conveys flows to the Napa River, just north of the River's confluence with San Pablo Bay.

There is very little canopy diversity or native habitat available in the upland areas of the site (Exhibit 2). However, a small number of native trees and shrubs, such as coast live oak and coyote bush, are thriving, indicating that additional plantings of these species will result in successful site revegetation. Most of the basin is surrounded by a developed trail that has sections composed of asphalt and other sections that have a compacted gravel surface.

The basin is two blocks from the San Francisco Bay Trail that will help connect the project site to the larger bay area population. A large park-and-ride facility is located adjacent to the northeast corner of the project site, where hundreds of locals can look over the basin each day and take an interest in the opportunities to participate in the revegetation effort or to visit the site on their own. Lake Dalwigk Park, which has picnic tables, restrooms, and other recreational facilities is adjacent to the southern end of the project site.

## PROJECT FINANCING

Coastal Conservancy	\$381,120
Vallejo Sanitation and Flood Control District	\$7,500
<b>Project Total</b>	<b>\$388,620</b>

Greater Vallejo Recreation District, VSFCDC, and NRCS will provide in-kind support for the project that includes assistance with permitting, management of contractors, soil testing, removal of invasive trees, and weed control. SRCD will provide in-kind support that includes organizing and overseeing volunteer planting events for students and local volunteers over three years. The value of these in-kind contributions is estimated to be \$153,000.

The expected source of Conservancy funding for the project is the fiscal year 2017/18 appropriation to the Conservancy from the “Water Quality, Supply, and Infrastructure Improvement Act of 2014” (Proposition 1, Division 26.7 of the Water Code, §§ 79700 et seq.). Funds appropriated to the Conservancy derive from Chapter 6 (commencing with § 79730) and may be used “for multi-benefit water quality, water supply, and watershed protection and restoration projects for the watersheds of the state” (§ 79731). Section 79732(a) identifies the specific purposes of Chapter 6, of which the following subsections pertain to this project: (a)(2) – implement watershed adaptation projects in order to reduce the impacts of climate change on communities and ecosystems; (a)(4) – protect and restore aquatic, wetland and migratory bird ecosystems including fish and wildlife corridors; (a)(9) – protect and restore rural and urban watershed health to improve watershed storage capacity, forest health, protection of life and property, storm water resource management, and greenhouse gas reduction and (a)(10) – protect and restore coastal watersheds including but not limited to bays, marine estuaries, and near shore ecosystems.

The proposed project provides multiple benefits and will help achieve the above-referenced Chapter 6 purposes. Trees and other vegetation planted on site will reduce on-site air temperatures, providing a natural, shady respite for visitors when high air temperature can create potentially unhealthy conditions. These improvements will be even more critical as climate change increases seasonal high temperatures. As vegetative cover is established, the plants’ root structure will stabilize soil and filter runoff entering the basin, thus enhancing the site’s storm water management functions. Vegetation will also provide enhanced habitat corridors used by migratory birds and other terrestrial wildlife and will improve air quality. Visitor enhancements such as interpretive signs, dog waste stations and drinking fountain will help protect public health and help protect the planted and restored areas, consistent with subsection (a)(9), above.

The proposed project was selected through the competitive grant process under the Conservancy’s Proposition 1 Grant Program Guidelines adopted in June 2015 (see § 79706(a)). The SRCD submitted a proposal to the Conservancy’s Proposition 1 grant round in December 2016 that included the proposed project. The project was reviewed in the competitive grant round along with many other projects and ranked highly in the review process. Staff is recommending this project as it meets the priorities and criteria described in the Conservancy’s Request for Proposals, including benefits to the disadvantaged community that surrounds the project site.

**CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:**

The proposed project would be undertaken as part of the San Francisco Bay Conservancy, pursuant to Chapter 4.5 of the Conservancy’s enabling legislation, Public Resource Code (PRC) Sections 31160-31165, which provides that the Conservancy may award grants in the nine-

county San Francisco Bay Area to help achieve the goals of the San Francisco Bay Area Conservancy Program.

Pursuant to PRC Section 31162(d), the Conservancy is authorized to award grants to “promote, assist, and enhance projects that provide open space and natural areas that are accessible to urban populations for recreational and educational purposes.” Consistent with this section, the project will enhance native habitat and facilities in an existing area of open space that is accessible to residents of the City of Vallejo for recreational and educational purposes.

This project is appropriate for prioritization under the selection criteria set forth in Section 31163(c) in that: (1) it supports the Solano County General Plan goal to increase access to safe and healthy outdoor venues for recreation and it supports the county’s Climate Action Plan that calls for planting of native perennial species to sequester carbon and to provide native species habitat; (2) the project will create interpretive features and will serve a regional constituency by being in close proximity to the San Francisco Bay Trail; (3) SRCD would commence work within months of Conservancy authorization; (4) the Project will provide opportunities for benefits (urban greening) that would be lost if not quickly implemented; and (5) SRCD has secured matching, in-kind funding.

The project is consistent with Section 31165 in that it will enhance bay and watershed resources and facilitate environmental education related to these resources.

**CONSISTENCY WITH CONSERVANCY’S 2018 STRATEGIC PLAN  
GOAL(S) & OBJECTIVE(S):**

Consistent with **Goal 8, Objective C** of the Conservancy’s 2018-2022 Strategic Plan, the proposed project will increase resilience to climate change impacts by planting trees and other vegetation that lower temperatures by creating shade and increasing evapotranspiration, sequestering carbon and improving air quality.

Consistent with **Goal 12, Objective D** of the Conservancy’s 2018-2022 Strategic Plan, the proposed project will enhance wetland and upland habitat by planting native trees, shrubs, sedges, rushes, and grasses.

Consistent with **Goal 13, Objective B** of the Conservancy’s 2018-2022 Strategic Plan, the proposed project provides recreational facilities that include interpretive signs, drinking fountains, and dog-waste stations.

**CONSISTENCY WITH CONSERVANCY’S  
PROJECT SELECTION CRITERIA & GUIDELINES:**

The proposed project is consistent with the Conservancy’s Project Selection Criteria and Guidelines, last updated on October 2, 2014, in the following respects:

**Required Criteria**

1. **Promotion of the Conservancy’s statutory programs and purposes:** See the “Consistency with Conservancy’s Enabling Legislation” section above.

2. **Consistency with purposes of the funding source:** See the “Project Financing” section above.
3. **Promotion and implementation of state plans and policies:**
  - *California @ 50 Million (2015)* – The report calls for prioritizing investments in urban forestry and other land management practices that have climate resilience benefits. The proposed project will plant trees and shrubs that improve air quality and reduce the effects of increasing air temperatures.
  - *Safeguarding California Plan: 2017 Update (Draft)* – The plan recommends investing in urban forestry where it yields multiple benefits such as capturing storm water and improving water and air quality. This project will result in a functional green space, while improving storm water detention and the quality of water entering Lake Dalwigk and ultimately San Francisco Bay.
4. **Support of the public:** The project is supported by Congressman Mike Thompson, California State Senator Bill Dodd, Assemblymember Timothy Grayson, Solano County Supervisor Monica Brown, and the Napa-Sonoma Audubon Society (Exhibit 3).
5. **Location:** This project is located within the City of Vallejo, 1,500 feet east of the Napa River near its confluence with San Pablo Bay and approximately 5 miles south of the Napa-Sonoma Marshes Wildlife Area, owned by the California Department of Fish and Wildlife. The Wildlife Area supports abundant numbers of resident and migratory waterbirds.
6. **Need:** The City of Vallejo, including the neighborhood around Lake Dalwigk, faces ongoing economic and social challenges. GVRD and VSFCDC—special districts in the City that own and manage the project site—face similar economic challenges and do not have sufficient resources to complete the proposed improvements. SRCD has not be able to secure other grant funding; therefore, without Conservancy support, the project will not move forward and Lake Dalwigk will continue to support mostly weeds and annual grasses.
7. **Greater-than-local interest:** The project is of regional interest because it improves the quality of water entering San Francisco Bay while increasing carbon sequestration within a disadvantaged urban community. The project is also located two blocks from the San Francisco Bay Trail, a regional trail network whose users can easily access the site for drinking water, bird watching, and to read the interpretive information placed around the basin.
8. **Sea level rise vulnerability:** The project site is 1,500 feet from the shoreline but it is located in a low lying area that could be affected by sea level rise. It is likely that sea level rise will raise the groundwater elevation of the site, which will decrease Lake Dalwigk’s capacity for storm water. The effect of rising ground water elevations and decreased capacity is not expected to affect any of the plantings by 2050 assuming 1 foot of sea level rise. By 2100, with 5 feet of sea level rise, it is expected that wetland vegetation on the islands may become too frequently inundated to survive. However, upland habitat and visitor amenities will be installed 5 to 25 feet above the current surface water elevation and should persist.

**Additional Criteria**

10. **Resolution of more than one issue:** The project will enhance wildlife habitat and water quality, improve flood capacity, and will also create an attractive area of open space for the local and regional community to enjoy.
14. **Readiness:** The grantee and the project partners (GVRD and VSFCD) are ready to start the project upon Conservancy authorization.
17. **Cooperation:** Habitat restoration work will be accomplished with the direct involvement of local community members participating in 18 volunteer events and nine student events. Community members will also have the opportunity to participate in guided bird surveys at the site led by the Napa-Solano Audubon Society.
18. **Vulnerability from climate change impacts other than sea level rise:** Plantings at the site are vulnerable to stress and desiccation due to increases in air temperature and reductions in rainfall. The project will install drought tolerant species that are better able to withstand these impacts.
19. **Minimization of greenhouse gas emissions:** Implementation of the proposed project will produce greenhouse gases from volunteers and workers traveling to and from the site. However, the project is expected to reduce greenhouse gases in the long-term as the planting of 240 trees and 2,200 shrubs is estimated to sequester 37 times more carbon over 20 years than those implementation activities will produce. Perennial trees and shrubs sequester atmospheric carbon any time they are actively growing, and it is anticipated that by establishing mostly long-lived and vigorous species (coast live oak, willow species, drought-tolerant shrubs), carbon sequestration will occur throughout the 20-year project period and beyond.

**COMPLIANCE WITH CEQA:**

The proposed project is exempt from CEQA pursuant to 14 Cal. Code Regs. § 15304 (Class 4 exemption) regarding minor alterations to land. This exemption specifically allows for “[n]ew gardening or landscaping, including the replacement of existing conventional landscaping with water efficient or fire resistant landscaping.” Plants installed as part of the Lake Dalwigk project will be California native species, all of which are water efficient and adapted to the local environment. Supplemental drip-irrigation will be limited to the first three summers to help plants get established, and will be discontinued after that time.

Section 15304 specifies that “Class 4 consists of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes.” The Lake Dalwigk project proposes to remove about a dozen palm trees that are non-native and have been listed as invasive by the California Invasive Plant Council. Furthermore, they have suffered fire damage in the past, and have responded by sprouting from the base so their current growth form is stunted, shrubby, and does not qualify as scenic. Installation of the signs, dog waste stations and the drinking fountain will also result in minimal disturbance to the land and vegetation at the site.

Staff will file a notice of exemption upon Board authorization.