

COASTAL CONSERVANCY

Staff Recommendation
September 23, 2021

MONROVIA HIGH SCHOOL WATERSHED DISCOVERY PROJECT

Project No. 21-063-01
Project Manager: Kara Kemmler

RECOMMENDED ACTION: Authorization to disburse up to \$330,040 to Amigos de los Rios to implement the Monrovia High School Watershed Discovery Project in Monrovia, Los Angeles County.

LOCATION: Monrovia High School, Monrovia, Los Angeles County

EXHIBITS

Exhibit 1: [Project Location Maps](#)

Exhibit 2: [Site Plans](#)

Exhibit 3: [Support Letters](#)

RESOLUTION AND FINDINGS

Staff recommends that the State Coastal Conservancy adopt the following resolution and findings.

Resolution:

The State Coastal Conservancy hereby authorizes a grant of an amount not to exceed three hundred thirty thousand and forty dollars (\$330,040) to Amigos de los Rios (“the grantee”) to implement the Monrovia High School Watershed Discovery Project in Monrovia, Los Angeles County.

Prior to commencement of the project, the grantee shall submit for the review and written approval of the Executive Officer of the Conservancy (Executive Officer) the following:

1. A detailed work program, schedule, and budget.
 2. Names and qualifications of any contractors to be retained in carrying out the project.
 3. A plan for acknowledgement of Conservancy funding and Proposition 1 as the source of that funding.
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4. Evidence that all permits and approvals required to implement the project have been obtained.
5. Evidence that the grantee has entered into agreements sufficient to enable the grantee to implement, operate, and maintain the project.

Findings:

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

1. The proposed authorization is consistent with Chapter 5.5 of Division 21 of the Public Resources Code, regarding integrated coastal and marine resource protection.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
3. Amigos de los Rios is a nonprofit organization organized under section 501(c)(3) of the U.S. Internal Revenue Code.

STAFF RECOMMENDATION

PROJECT SUMMARY:

Staff recommends the Conservancy authorize a \$330,040 grant to Amigos de los Rios to implement the Monrovia High School Watershed Discovery Project, a multi-benefit urban greening project that will transform 3 acres of grassy open space at Monrovia High School in Monrovia, Los Angeles County (“the project”).

Monrovia High School is located in a disadvantaged community in the upper Los Angeles River watershed in eastern Los Angeles. The proposed project is designed to address multiple environmental and public health impacts from dense urban development and climate change. The essential watershed function of groundwater recharge is severely impaired by impervious paving, water quality is degraded by stormwater runoff, wildlife habitat is highly fragmented, and gray infrastructure and dense development create a heat island effect. According to a 2015 CalEPA study of statewide urban heat islands, eastern Los Angeles County is the most impacted region in the state by this dangerous phenomenon. The project area also suffers high pollution burdens including ozone, toxic releases, impaired drinking water, and hazardous waste. Disadvantaged communities disproportionately cope with the negative outcomes associated with dense urban development, limited access to green space, and climate change. Green spaces make regions more resilient to climate change and help cool urban regions impacted by urban heat islands, but parks-investment is low in the area surrounding Monrovia High School. The area within a half-mile of campus has a mere 0.52 park-acres per 1,000 people and the 3-acre area at the front of the high school serves as the only community green space for 7,800 people. The high school campus presents a unique opportunity to create a healthy sustainable green space for the community with learning opportunities and multiple environmental benefits.

The proposed project will transform the existing grass expanse fronting the campus into an urban forest. The conversion of the open space area will include removal of grass; regrading of site to create a bioretention area, including mulched native habitat landscape, laced with bioswales, rain gardens, and permeable pavement to collect and infiltrate stormwater and prevent runoff from entering the storm drain; planting of approximately 60 trees and 800 shrubs, including a native plant garden; changing existing sprinklers to high-efficiency spray heads; installation of interpretive elements; and creation of a nature trail with permeable surface walkways, boulders and recycled urban biomass benches incorporated to create outdoor discovery and learning spaces. All plants will be native and/or well suited to the local climate and hydrology to minimize water use and maximize habitat value. Additional trees will be planted in new low-impact development planters in the adjacent parking lot, which will also be enhanced by replacing a small area with pervious pavement to prevent polluted water from entering storm drains.

Based on the proposed measures, Amigos de los Rios anticipates that the project will increase the campus's stormwater infiltration capacity four-fold. Aside from water capture and quality enhancements, this project will provide multiple co-benefits. Native landscaping will benefit wildlife and encourage students to discover and appreciate nature. Multiculturally appropriate watershed discovery interpretive elements will engage students, teachers, and community members. Planting trees and shrubs around the park perimeter will provide cooling shade to school buildings and sidewalks, mitigating heat island build-up and need for energy-intensive air conditioning and will improve air quality. Significant social benefits also result from urban greening, as urban forests create a sense of place that encourages cleaner living spaces, positive mental health, active lifestyles involving outdoor recreation and play, civic engagement, and lower crime. Research also specifically indicates that urban forestry on school campuses is linked to students' academic performance in areas like science, math, and physical fitness, and promoting mental health outcomes, including reducing stress, anxiety, depression, and attention deficit symptoms, while promoting happiness and wellbeing.

The project also includes community science events will take place to monitor and evaluate project success promoting long term stewardship of the new green space. Amigos de los Rios and stewards will perform tree indexing to track data regarding new and existing trees on-site and calculate benefits over time including water quality enhancements, water infiltration capacity, enhanced air quality, and urban heat island mitigation. They will also perform permeable pavement infiltration testing to measure performance of the new permeable pavement technology.

Monrovia Unified School District has been actively involved in the development of the project. Amigos de los Rios and school community are working in collaboration on the development and implementation of the project. The school community will also be engaged in project monitoring by participating in community science events.

Site Description: The project site is the 28-acre Monrovia High School campus, which is an historic site that was established in 1893 with its front portion designed in 1928 by noted Los Angeles architect John C. Austin. The campus is nestled against the San Gabriel Mountains and has a commanding view of the Angeles National Forest 3 miles to the north, and it drains to the

Rio Hondo River, a tributary to the Los Angeles River, and from there to the Pacific Ocean. The site characteristics make it a prime location for watershed discovery, celebrating cultural history, and fostering ecosystem awareness.

The site is owned and operated by Monrovia Unified School District (MUSD), which allows the surrounding community joint use of the grassy park area in the front portion of the campus year-round after school, serving 1,600 students and 7,800 disadvantaged community residents within a one-half mile radius. The campus landscape is composed of a mix of conventional turf lawn, concrete pathways, sports fields, and asphalt parking areas.

Grant Applicant Qualifications: The proposed project is part of the Emerald Necklace network, which seeks to create a sustainable, healthy L.A. through multi-objective, water-sensitive parks in underserved urban communities. Amigos de los Rios completed the Emerald Necklace Expanded Green Infrastructure Plan in 2014, funded in part by the Strategic Growth Council. To date, Amigos de los Rios has completed over forty Emerald Necklace projects. The Coastal Conservancy has provided support for the Emerald Necklace Alhambra Oasis, the El Monte Youth Recreation Center Urban Greening Project and the Hollydale Regional Park Green Infrastructure Project. The Emerald Necklace aligns with the Conservancy's efforts to boost urban greening in the South Coast region to address climate change impacts for human and wildlife communities.

The MUSD has given Amigos de los Rios and its contractors and partners permission to host green infrastructure enhancement events on the campus, as well as to conduct post-planting establishment care, after which MUSD has agreed to maintain the project area as part of its site operations and maintenance in perpetuity.

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 below.
2. **Consistency with purposes of the funding source:** See the "Project Financing" section below.
3. **Promotion and implementation of state plans and policies:**
 - a. *California Water Action Plan.*

The project helps meet the California Water Action Plan's objectives to create "more reliable water supplies, the restoration of important species and habitat, and a more resilient, sustainably managed water resources system (water supply, water quality, flood protection and environment) that can better withstand inevitable and unforeseen pressures in the coming decades" expanding urban water conservation and efficiency,

promoting projects with multiple benefits, restoring important ecosystems (coastal watersheds) and encouraging healthy soils.

- b. The proposed project will implement the *California @ 50 Million: The Environmental Goals and Policy Report* (Governor's Office of Planning and Research, 2015)

The proposed project will help achieve the goals listed below:

- Build a Resilient and Sustainable Water System, prioritizing watershed protection and health in ecosystem management;
- Steward and Protect Natural and Working Landscapes, building resilience into natural systems and prioritize natural and green infrastructure solutions; and
- Incorporate Climate Adaptation into all Planning and Investment, prioritizing GHG emission reduction actions that provide climate resilience benefits, especially in the natural resource sector.

- c. *CA Climate Adaptation Strategy: Safeguarding California (2108)*

The proposed project will advance the following goals in the plan:

- Biodiversity and Habitat: B-2 Enhance habitat connectivity and protect climate refugia through strategic acquisition and protection activities and B-3 Increase restoration and enhancement activities to increase climate resiliency of natural and working lands;
- Ocean and Coast: O-2 Design and implement nature-based projects to protect and enhance the adaptive capacity of coastal and marine ecosystems;
- Water: W-5 Prepare California for hotter and drier conditions and improve water storage capacity; and
- Parks, Recreation and California Culture: PC-3 Maximize opportunities to connect urban populations to natural spaces through urban parks, wetlands, and river parkways.

- d. *CA Wildlife Action Plan*.

The proposed project will help achieve the plan's statewide conservation goals below:

- Goal 1 – Abundance and Richness: Maintain and increase ecosystem and native species distributions in California while sustaining and enhancing species abundance and richness.
- Goal 2 - Enhance Ecosystem Conditions: Maintain and improve ecological conditions vital for sustaining ecosystems in California.
- Goal 3 - Enhance Ecosystem Functions and Processes: Maintain and improve ecosystem functions and processes vital for sustaining ecosystems in California.

4. **Support of the public:** The project enjoys support from an extensive network of state, local and regional community organizations, elected officials, and community members,

including State Senator Portantino, Los Angeles County Supervisor Barger, Nature for All, the MUSD, several school principals and students.

5. **Location:** See the “Project Summary”.
6. **Need:** Local resources are limited and without Conservancy support the proposed project would not happen in the foreseeable future, despite the community’s enthusiasm for the project.
7. **Greater-than-local interest:** The proposed project will expand the region’s urban forest, sequestering carbon, mitigating heat impacts, and creating native wildlife habitat islands for linkages throughout the region. As part of the Emerald Necklace network, the project will have a cumulative impact on the region and the plan could serve as a model for other cities across the state and nationwide to create a healthier, more sustainable urban ecosystem.
8. **Sea level rise vulnerability:** The proposed project is not located in an area that is vulnerable to sea level rise.

Additional Criteria

9. **Resolution of more than one issue:** The proposed project is a multi-benefit urban greening project that will address several issues associated with climate change including increasing native wildlife habitat, improving water quality and supply, attenuating urban heat island effects and air pollution, which all in turn have quality of life and public health benefits for a disadvantaged community.
10. **Innovation:** Re-greening urban areas with nature-based strategies is innovative in maximizing the benefits of a small-scale project.
11. **Readiness:** The applicant has the permission and cooperation of the MUSD and other partnerships in place to carry out the project in a timely manner and is ready to begin immediately.
12. **Realization of prior Conservancy goals:** See the “Project Summary”.
13. **Cooperation:** MUSD has been actively involved in the development of the project. The project will be designed and implemented collaboratively with school community. In addition, the project includes a community science monitoring component.
14. **Vulnerability from climate change impacts other than sea level rise:** See the “Project Summary”.
15. **Minimization of greenhouse gas emissions:** The proposed project itself and the construction methods are designed to avoid or minimize greenhouse gas emissions to the extent feasible, consistent with the project objectives.

PROJECT FINANCING

Coastal Conservancy

\$330,040

Monrovia Unified School District	\$20,206
Project Total	\$350,246

The expected source of funding for this authorization is 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 Section 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 thirteen specific purposes of Chapter 6; the proposed project will help achieve four of the purposes:

- Implement watershed adaptation projects to reduce the impacts of climate change on California’s communities and ecosystems (subsection (a)(2)) by implementing green infrastructure elements to reduce impacts of climate change in the watershed;
- Protect and restore urban watershed health to improve watershed storage capacity, forest health, protection of life and property, storm water resource management, and greenhouse gas reduction (subsection (a)(9)) by implementing green infrastructure elements to increase carbon sequestration through tree planting and capture storm water in a more natural and efficient manner that provides public health and water quality benefits;
- Reduce pollution or contamination of rivers and coastal waters, prevent and remediate contamination, and protect or restore natural system functions that contribute to water supply, water quality, or flood management (subsection (a)(11)) by naturally cleaning storm water and recharging the groundwater via soil infiltration; and
- Assist in the recovery of endangered, threatened, or migratory species by improving watershed health... (subsection (a)(12)) by restoring native habitat to a highly fragmented urban landscape and providing wildlife habitat linkages between disparate native habitat islands across the region.

The proposed project was selected through a competitive grant process under the Conservancy’s *Proposition 1 Grant Program Guidelines* adopted in June 2015 (see § 79706(a)). The proposed project meets each of the evaluation criteria in the Proposition 1 Guidelines as described in detail in this section, the “Project Summary” section above, and in the “Consistency with Conservancy’s Project Selection Criteria & Guidelines” section above.

MUSD is providing cash match (\$20,206) and in-kind support in the form of labor and materials for site preparation, estimated at \$30,000. In addition, Amigos de los Rios will be providing in-kind support in the form of tools and volunteer stewards time, estimated at \$85,604.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The proposed project will be undertaken pursuant to Chapter 3 of the Conservancy’s enabling legislation (Public Resource Code Section 31113), and Chapter 5.5, integrated coastal and marine resources protection (Public Resources Code Section 31220).

Section 31113 permits the Conservancy to address the impacts and potential impacts of climate change on resources within its jurisdiction. The proposed project will increase carbon sequestration levels, reduce the urban heat island effect of an urban area, and improve water quality.

Section 31220 permits the Conservancy to provide grants for coastal watershed and coastal and marine habitat water quality, sediment management, and living marine resources protection and restoration projects. As required by Section 31220, staff has notified the State Water Resources Control Board of the nature of the project and provided the opportunity for comment, input and review. Pursuant to Sections 31220(b)(1) and (7), the Conservancy is authorized to undertake a project or award a grant for a project that reduces contamination of waters within the coastal zone or marine waters and that reduces the impact of population and economic pressures on coastal and marine resources. By transforming a conventional grass expanse into a high-functioning bioretention area, including mulched native habitat landscape, laced with bioswales, rain gardens, and permeable pavement to collect and infiltrate stormwater and prevent runoff from entering the storm drain, the proposed project will help improve water quality of coastal waters and reduce the impacts of dense population in the urban watershed. As required by Section 31220(c), the project includes a monitoring and evaluation component, described in the Project Summary section above, and is consistent with the local watershed management plan as described in the “Consistency with Local Watershed Management Plan/State Water Quality Control Plan” section below.

CONSISTENCY WITH CONSERVANCY’S [2018-2022 STRATEGIC PLAN](#) GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 6, Objective D**, the proposed project will enhance a coastal watershed by replacing impervious surfaces with soil allowing stormwater to infiltrate and planting a small urban forest to sequester carbon and provide cooler temperatures and habitat for wildlife communities.

Consistent with **Goal 8, Objective C**, the proposed project will enhance the resiliency of the community and the watershed to climate change impacts using multi-benefit, nature-based strategies to revitalize the landscape on the school campus.

Consistent with **Goal 16, Objective A**, the proposed project is located in and directly benefits a disadvantaged community.

CONSISTENCY WITH LOCAL WATERSHED MANAGEMENT PLAN/STATE WATER QUALITY CONTROL PLAN:

The proposed project will help implement the Upper Los Angeles River Watershed Management Group’s Enhanced Watershed Management Program (EWMP) approved by the Los Angeles Regional Water Quality Control Board. The Los Angeles River and its tributaries are impaired by pollutants primarily impacted by the watershed’s large, dense population and the amount of impervious ground surface that prevents large quantities of runoff from infiltrating into the soils. The EWMP identifies measures to reduce water quality impairments while

maximizing stormwater capture opportunities in the watershed. The project will improve water quality and stormwater capture by removing impervious pavement and installing green infrastructure. The State Water Resources Control Board (Water Board) has concluded that the EWMP meets the requirements of the *Storm Water Resource Plan Guidelines*, December 15, 2015, prepared by the Water Board pursuant to the Stormwater Resources Planning Act (Water Code §§ 10560 et seq.).

CEQA COMPLIANCE:

The proposed project is categorically exempt from review under the California Environmental Quality Act (CEQA) pursuant to 14 California Code of Regulations Section 15301. Section 15301 exempts repair, maintenance and minor alteration of existing public structures, facilities and topographical features involving negligible or no expansion of use. This exemption applies because the project consists of minor alteration of an existing public high school campus with no expansion of use.

Upon approval of the project, Conservancy staff will file a Notice of Exemption.