

COASTAL CONSERVANCY

Staff Recommendation
January 18, 2018

MAPLE CANYON PLANNING

Project No. 17-030-01
Project Manager: Julia Elkin

RECOMMENDED ACTION: Authorization to disburse up to \$200,000 to San Diego Canyonlands to prepare plans to address sediment management, streambed stabilization, and native habitat restoration in Maple Canyon, City of San Diego.

LOCATION: Maple Canyon, City of San Diego, San Diego County

PROGRAM CATEGORY: Integrated Coastal and Marine Resources Protection

EXHIBITS

- Exhibit 1: [Project Location](#)
 - Exhibit 2: [Current Site Conditions](#)
 - Exhibit 3: [Conceptual Plan](#)
 - Exhibit 4: [Project Letters](#)
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RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Section 31220 of the Public Resources Code:

“The State Coastal Conservancy hereby approves the disbursement of an amount not to exceed two hundred thousand dollars (\$200,000) to San Diego Canyonlands to prepare plans to address sediment management, streambed stabilization, and native habitat restoration in Maple Canyon, an urban canyon owned by the City of San Diego. Prior to the disbursement of funds, San Diego Canyonlands shall submit for review and written approval of the Conservancy’s Executive Officer a work program, including budget and schedule, and any contractors to be employed for these tasks.”

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 5.5 of Division 21 of the Public Resources Code, regarding integrated coastal and marine resources protection.

2. The proposed project is consistent with the current Conservancy Project Selection Criteria and Guidelines.
 3. The San Diego Canyonlands is a nonprofit organization existing under section 501(c)(3) of the U.S. Internal Revenue Code, and whose purposes are consistent with Division 21 of the Public Resources Code.”
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PROJECT SUMMARY:

Staff recommends that the Conservancy provide a grant of up to \$200,000 to San Diego Canyonlands (SDCL) to prepare plans to address sediment management, streambed stabilization and native habitat restoration in Maple Canyon, an urban canyon owned by the City of San Diego. This project aims to achieve multiple benefits by developing design plans that address the significant erosion issues within Maple Canyon and restore the canyon bed’s ecological functions, improve the quality of its water drainage, reduce the velocity of storm water flows, and increase local climate change resiliency by restoring native habitat.

While the canyon provides natural storm water drainage and open space for native species and passive recreation, the canyon floor exhibits appalling erosion and ever-increasing sediment loss as a result of storm water flows. Sediment chronically clogs the storm drain inlet at the foot of the canyon, causing flooding along West Maple Street. The canyon was added to FEMA’s National Flood Hazard Layer in May 2012.

An overarching goal of the project is to create a new, standardized methodology produced by SDCL in coordination with City of San Diego staff that can address erosion issues and restore healthy stream functions in San Diego’s dynamic coastal canyon environments (see “Project History” below). The Maple Canyon project will serve as a pilot project to develop and demonstrate a new approach to managing sediment and streambed incision that can potentially be applied to canyons throughout the City.

Project construction will very likely require both state and federal permits. To support these permit applications, SDCL needs to produce significant upfront project documentation including geotechnical investigations, hydrologic analysis of existing conditions and peak flow rates for Maple Canyon, endangered species surveys of the site, engineering drawings, and implementation and maintenance guidelines.

Site Description: Owned and managed by the City of San Diego, Maple Canyon is a coastal canyon located west of Balboa Park, within the Pueblo San Diego watershed. The canyon extends coastward over a 0.4 linear mile stream-course with a total canyon area of approximately 20 acres. Maple Canyon drains a larger watershed of about 90 acres, the majority of which is in urban development, exacerbating both the runoff load experienced by Maple Canyon during rainstorms as well as elevating the pollutant load in that runoff. With highly erosive soils in the canyon, these large runoff loads have stripped native vegetation from the stream course and deeply incised the canyon bottom, further aggravating sedimentation and streambed instability. Existing vegetation in the canyon bottom is almost entirely invasive nonnatives, apart from a few mature oaks, *Quercus agrifolia*.

Project History: In 2015, the Coastal Conservancy awarded San Diego Canyonlands a grant to complete the *San Diego Canyons Plan* project, which included preparation of public access and restoration design plans for twelve urban canyons in San Diego, including Maple Canyon. The *San Diego Canyons Plan* project also provided for developing feasible and cost-effective low impact development (LID) conceptual designs to reduce polluted runoff reaching natural drainage systems and/or provide streambed stabilization, runoff velocity reduction, and potential wetlands expansion opportunities.

Given the robust interest and engagement from Maple Canyon-adjacent residents in Bankers Hill, as well as the dramatic nature of the erosion issues in the canyon, San Diego Canyonlands selected Maple Canyon as its first focus for developing such an LID project. The “Maple Canyon Stream Rehabilitation Plan & Design Toolkit Specifications” conceptual design plan was produced by San Diego Canyonlands in April 2017 under their *San Diego Canyons Plan* Coastal Conservancy grant and has provided a foundation for further discussions with relevant City Departments on further development and future implementation of this LID project in Maple Canyon. The concept of developing a LID project design for the incision issues in Maple Canyon was generated through sustained multi-year efforts by the Friends of Maple Canyon, a local stakeholder group who have worked for nearly a decade to bring such a project forward. The proposed project will take the next step in developing the plans necessary for ultimate permitting and construction.

PROJECT FINANCING

Coastal Conservancy	\$200,000
Resource Legacy Fund	\$52,000
Project Total	\$252,000

The expected source of Conservancy funds for this project is the fiscal year 2017-2018 appropriation to the Conservancy pursuant to the Water Quality, Supply, and Infrastructure Improvement Act of 2014 (Proposition 1, 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.” (Water Code § 79731.) Section 79732 identifies specific purposes of Chapter 6, which include implementing watershed adaptation projects in order to reduce the impacts of climate change on California’s communities and ecosystems, an anticipated outcome of this project. Section 79732 also includes protecting and restoring urban watershed health to improve watershed storage capacity and stormwater resource management, another anticipated outcome of this project.

As required by Proposition 1, the proposed project provides multiple benefits. By working to address erosion issues in Maple Canyon, the project will benefit water quality in San Diego Bay by reducing excess sediment loads during storm events. The project will increase climate change resilience of the canyon bottom by producing a low impact design engineering solution to handle climate-change exacerbated stormwater flows. The project will also provide planning of native habitat restoration and provide a valuable learning opportunity for the City of San Diego to employ flexible and green solutions to canyon erosion issues.

The proposed project was selected through a competitive grant process under the Conservancy's Proposition 1 Grant Program Guidelines adopted in June 2015 ("Prop 1 Guidelines"). (See § 79706(a)). The proposed project meets each of the evaluation criteria in the Prop 1 Guidelines as described in further detail in this Project Financing section and in the "Project Summary" and "Consistency with Conservancy's Project Selection Criteria & Guidelines" sections of this staff recommendation.

San Diego Canyonlands secured a grant from Resource Legacy Fund (\$52,000) in support of the project and are dedicating an anticipated \$68,250 in in-kind services to complete the design and planning work under this project.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

The proposed project will be undertaken pursuant to Chapter 5.5, Integrated Coastal and Marine Resources Protection (Public Resources Code §31220), of the Conservancy's enabling legislation. Section 31220(a) authorizes the Conservancy to award grants for coastal watershed projects that meet one or more criteria of Section 31220(b).

Consistent with §31220(b), the proposed project will help achieve the following subsection objectives: 1) reduce contamination of waters within the coastal zone; 2) protect and restore wildlife habitat within coastal watersheds; and 3) reduce unnatural erosion and sedimentation of coastal watersheds and contribute to the reestablishment of natural erosion and sediment cycles. The project will help achieve these objectives by producing further planning needed for permitting of Low Impact Designs to address intense stormwater incision and erosion issues in heavily-incised Maple Canyon.

Consistent with §31220(a), staff has consulted with the State Water Resources Control Board and the San Diego Regional Water Quality Control Board in the development of the project to ensure consistency with the San Diego Region Basin Plan ("Basin Plan"). This is discussed in detail below under "Consistency with Local Watershed Management Plan/State Water Quality Control Plan."

Consistent with §31220(c), this planning project will include developing quantitative parameters and site specific guidance for monitoring and evaluating project efficacy once implemented.

CONSISTENCY WITH CONSERVANCY'S 2018--2022 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S):

Consistent with **Goal 6, Objective A**, the project will develop plans to enhance a coastal draining habitat through streambed stabilization and native vegetation restoration.

Consistent with **Goal 6, Objective F**, the proposed project will develop plans to improve water quality to benefit coastal resources by addressing the sedimentation issues caused by severe canyon erosion.

Consistent with **Goal 8, Objective B**, the proposed project will be designed to increase resilience to bigger storm events caused by climate change.

**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:** The proposed project will promote and implement the California Water Action Plan goals by protecting and restoring important ecosystems. As designed, the proposed project will be to restore a degraded stream ecosystem to assist in natural water management and improved habitat.
4. **Support of the public:** Maple Canyon open space is beloved by the community and heavily used as a pedestrian trail between densely urbanized communities. The project enjoys support from the public sector (Senator Toni Atkins, City of San Diego Transportation and Stormwater Department), private sector (Solar Turbines), environmental nonprofits (San Diego Coastkeeper), and several local community groups (see Exhibit 4: Project Letters).
5. **Location:** The project is located within the Pueblo Watershed, a mile inland from San Diego Bay, so improvements to the canyon's extensive erosion issues will be to the direct benefit of coastal water quality downstream.
6. **Need:** The project requires sustained coordination across City Departments and local community members as well as development of further technical information; this level of effort to develop a sustainable, low impact design solution will not occur without Conservancy participation.
7. **Greater-than-local interest:** State funding of this project would provide a pilot opportunity to work with the City of San Diego to further develop and move toward permitting of a LID design that offers a repeatable, efficient methodology to addressing canyon erosion and sedimentation issues that exist throughout the San Diego region.
8. **Sea level rise vulnerability:** The project area is not located close to a shoreline and is not vulnerable to sea level rise.

Additional Criteria

9. **Urgency:** Currently, the capacity of the emergency-constructed sediment catch basin at the foot of Maple Canyon is woefully insufficient and remains overflowing with the City unable to secure RWQCB permit to empty it. Sediment flows during storms cause sandbagging and street closures at the foot of Maple Canyon on West Maple Street.

10. **Resolution of more than one issue:** The project would promote water quality improvements, improve the abundance and resilience of native riparian vegetation, and protect popular existing public access within Maple Canyon.
11. **Leverage:** See the “Project Financing” section above.
12. **Innovation:** This project would further develop planning documents and data needed for permitting and eventual implementation of a truly innovative, flexible, site-adaptable methodology to stabilizing city-owned urban canyon bottoms throughout City of San Diego.
13. **Readiness:** San Diego Canyonlands has demonstrated their readiness to dedicate staff resources to this project, and the sedimentation issues in Maple Canyon are a priority for the City. San Diego Canyonlands’ work on this project is supported by the work they have already completed under their “San Diego Canyons Plan” grant from SCC.
14. **Realization of prior Conservancy goals:** “See “Project History” above.
15. **Return to Conservancy:** See the “Project Financing” section above.
16. **Cooperation:** This project enjoys extensive cooperation with relevant City Departments (City of San Diego Stormwater, City of San Diego Development Services Department, and City of San Diego Open Space Division) that work in Maple Canyon.
17. **Vulnerability from climate change impacts other than sea level rise:** By planning for reestablishment of native species and stormwater flow management within Maple Canyon, the project would reduce fire risk within this urban canyon and increase resilience to climate change exacerbated stormwater flows.
18. **Minimization of greenhouse gas emissions:** By planning for reestablishment of native species in Maple Canyon, the project would sequester carbon.

CONSISTENCY WITH LOCAL COASTAL PROGRAM POLICIES:

Maple Canyon is located outside of the Coastal Zone and therefore there is no LCP policy covering the project area. However, the LCP for San Diego Bay, which Maple Canyon ultimately drains into, emphasizes protecting biologically sensitive slopes and canyons within each watershed for their recreation, scenic and open space values. Thus, the project’s planning for habitat restoration and stormwater management is directly consistent with and supports the intent of the San Diego Bay LCP.

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

Environmental studies and planning that will be completed as part of the project are consistent with Basin Plan *Policy Five* which states “*detailed and comprehensive knowledge of the beneficial uses, water quality, and activities affecting water quality throughout the Region shall be maintained.*” Such detailed and comprehensive knowledge will be generated through the data collected in assessing the specific site conditions within Maple Canyon.

COMPLIANCE WITH CEQA:

The proposed project is statutorily exempt from the provisions of CEQA under 14 Cal Code of Regulations Section 15262, because the project will only involve preparation of planning studies for possible future actions that have not yet been approved, adopted or funded. The planning studies will consider environmental factors. Staff will file a Notice of Exemption upon approval of the proposed project.