

COASTAL CONSERVANCY

Staff Recommendation
November 30, 2023

CONNECTED COASTLINES ENCINITAS

Project No. 23-082-01
Project Manager: Danh Lai

RECOMMENDED ACTION: Authorization to disburse up to \$300,000 to the City of Encinitas for the Connected Coastlines Encinitas project, consisting of installing a 4G private mesh network to increase communications capabilities for fire and marine safety personnel across 3.5 miles of Encinitas coastline.

LOCATION: City of Encinitas, San Diego County

EXHIBITS

Exhibit 1: [Project Location Map](#)

Exhibit 2: [Project Photos](#)

Exhibit 3: [Project 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 thousand dollars (\$300,000) to the City of Encinitas (“the grantee”) to install a 4G private mesh network that will increase communications capabilities for fire and marine safety personnel across 3.5 miles of Encinitas coastline. 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.

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 9 of Division 21 of the Public Resources Code, Section 31400.3 regarding providing assistance as is required to aid public agencies in establishing a system of public coastal accessways, and related functions necessary to meet the objectives of this division.
2. The proposed project is consistent with the current Conservancy Project Selection Criteria.

STAFF RECOMMENDATION

PROJECT SUMMARY:

Staff recommends the Conservancy authorize a \$300,000 grant to the City of Encinitas (City) to install a 4G private mesh network that will increase communications capabilities for the City's fire and marine safety personnel across 3.5 miles of Encinitas coastline.

The City currently uses 800MHz radios for all field communications that, while providing simple and concise communication, have several notable limitations. The following factors impede the radio's effectiveness: weather, environmental features such as beach bluffs and coves, or heavy traffic utilizing the same frequency at a time. This presents communications challenges for lifeguards during rescue efforts.

The project consists of procurement, configuration, and installation of a 4G private mesh network consisting of antennae, radios, solar panels, batteries, and telephone equipment needed to allow communications between 8 existing remote Lifeguard towers and the Encinitas Marine Safety Center at Moonlight Beach. The antennae and solar panel will be installed at the top of each tower while the cabinet holding the components of the system will be placed inside each tower. This solar powered system allows the towers to maintain mobility and will not have any attachment to the ground. This new equipment will provide a dedicated means of communication between the City's fire and marine safety staff to ensure public safety at Encinitas beaches. The continued availability of a stable communications platform will allow for increased intel and coordination among Marine Safety/First Responders during lifesaving dispatch calls.

Site Description: The project will take place on 8 mobile lifeguard towers located on City-owned property throughout the Encinitas coastline and the Encinitas Beach Marine Safety Center (see Exhibit 1). The City of Encinitas Fire Department's Marine Safety Division provides lifeguard services along 3.5 miles of the City-owned coastline. Connectivity gaps and wireless dead zones due to bluffs and cove topology result in unreliable communication between remote lifeguard towers and the Marine Safety Headquarters at Moonlight Beach. This inhibits the lifeguard services and poses a safety risk for recreation in those locations.

Grant Applicant Qualifications: The City of Encinitas has obtained grants in the past for the Fire and Marine Safety, Parks and Recreation, and Development Services departments. Past and

current grant funders include Coastal Conservancy, California Department of Parks and Recreation, Urban Area Security Initiative through the San Diego Office of Emergency Services and California Governor’s Office of Emergency Services, and the State Homeland Security Program grant through federal Homeland Security Grant Program among others.

CONSISTENCY WITH CONSERVANCY’S PROJECT SELECTION CRITERIA:

The proposed project is consistent with the Conservancy’s Project Selection Criteria, last updated on September 23, 2021, in the following respects:

Selection Criteria

1. Extent to which the project helps the Conservancy accomplish the objectives in the Strategic Plan.

See the “Consistency with Conservancy’s Strategic Plan” section below.

2. Project is a good investment of state resources.

The project has a feasible budget and relatively short timeline that will deliver long term public safety benefits. Lifeguard services statewide struggle with communication, specifically with connectivity gaps, and these systems have become standard solutions. The grantee notes that the California Department of Parks and Recreation lifeguards and City of Newport Fire Department currently use similar systems. The system has eliminated the need for trenching and ground disturbance required for land line systems as well as reduced viewshed issues with newer technologies that are smaller, compact and do not need additional power lines or cabling.

3. Project benefits will be sustainable or resilient over the project lifespan.

TeamSOS, an information technology support company, will procure, program, install and maintain all communications equipment related to the proposed project. The City of Encinitas Information Technology division will handle the project management phase of installation and serve as technology liaisons between the implementation team and the fire and marine safety staff who will utilize the equipment. The hardware installed at the initial implementation has the capacity to serve the lifeguards for at least 5 years and the grantee will be responsible for the equipment replacements and maintenance thereafter.

4. Project delivers multiple benefits and significant positive impact.

This project will eliminate communication barriers and provide invaluable enhancement to public safety by reducing incident response times. Non-coastal communities may be hesitant to visit the beach due to perceived safety concerns that naturally stem from unfamiliarity with coastal recreation. The community and beachgoers would be able to enjoy the Encinitas coast with the confidence that they and their loved ones are safe.

PROJECT FINANCING

Coastal Conservancy

\$300,000

City of Encinitas	\$19,097
Project Total	\$319,097

The anticipated source of funding for the proposed project is from an appropriation to the Conservancy from the FY 2022-23 General Fund specifically for the City of Encinitas for the “Marine Safety Connected Coastlines” project. (Budget Act of 2022, SB 154, as amended by AB 178, Chapter 45, Statutes of 2022 and AB 100, Chapter 3, Statutes of 2023.) The City of Encinitas plans to contribute \$19,097 toward the project.

Unless specifically identified as “Required Match,” the other sources of funding and in-kind contributions described above are estimates. The Conservancy does not typically require matching funds or in-kind services, nor does it require documentation of expenditures from other funders or of in-kind services. Typical grant conditions require grantees to provide any funds needed to complete a project.

CONSISTENCY WITH CONSERVANCY’S ENABLING LEGISLATION:

The proposed project is consistent with Chapter 9 of Division 21 of the Public Resources Code, Sections 31400.3 regarding providing assistance as is required to aid public agencies in establishing a system of public coastal accessways, and related functions necessary to meet the objectives of this division. The proposed project will install equipment in eight mobile lifeguard stations and the Encinitas Marine Safety Center at Moonlight Beach to establish a reliable communications network among the City’s fire and marine safety personnel to allow the necessary safety functions for these public coastal areas.

CONSISTENCY WITH CONSERVANCY’S [2023-2027 STRATEGIC PLAN](#):

Consistent with **Goal 2.3 Expand Accessibility**, the proposed project will increase public safety by improving lifeguard communication capabilities, thus increasing their capacity to serve more beachgoers.

CEQA COMPLIANCE:

The proposed project is categorically exempt from California Environmental Quality Act (CEQA) pursuant to Title 14 California Code of Regulations Section 15301, which exempts minor alteration of existing public structures or facilities involving negligible or no expansion of existing or former use and section 15303, which exempts installation of small new equipment and facilities in small structures. The proposed project consists of installing 4G network enabling equipment to existing structures with no expansion of existing or former use.

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