

Appendix E

Funding and Financing Options

Funding and Financing Options

Overview

Funding beach nourishment and dune enhancement living shoreline creation along the City of Carpinteria's (City's) City Beach and potentially Carpinteria State Beach will require combined local, state and federal funding sources if this project is to be completed and maintained. Several federal, state and local programs administered by multiple agencies may have funding that could support beach nourishment and dune/ living shoreline creation and maintenance. In order to inform decision-makers and the public about funding options, a general summary of potential local funding sources, State and federal grant programs, and options for needed state or federal legislation are discussed below. Details on this range of funding options, funding availability, and contact information for grant program administrators are provided. The programs are summarized below, along with preliminary information on how best to combine the available programs and potential legislation to fund planned improvements.

Introduction

There are currently no significant local funding sources dedicated to beach nourishment or creation of a living shoreline in the City such as the proposed project. Although the Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) compiled local funds and grants to perform several beach nourishment projects primarily during the 1990s, funding for such projects and the necessary planning support and regulatory documents has been largely unavailable for almost two decades, leaving shorelines vulnerable and funding opportunities for local agencies limited. While recent allocation of State funds to address climate change and improve resiliency may help fund such projects, dedicated State programs for beach nourishment are extremely limited and the only State program that specifically addresses beach nourishment through the California State Parks, Division of Boating and Waterways (DOBW) has been unfunded since 2019. Aside from sand bypass operations at Santa Barbara Harbor and a focused study of the Santa Monica Creek Debris Basin, federal funding and an active role for the U.S. Army Corps of Engineers (USACE) in beach nourishment has been lacking in the County of Santa Barbara (County).

Beach nourishment costs vary by location and type of project, but key cost components in general order of magnitude include sand transport, construction, maintenance, and regulatory permitting. Basic sand transport costs in the County are roughly \$20 per cubic yard (cy) of sand, which may not include sorting to remove material not suitable to place on beaches or required testing for grain size and chemical compatibility or contamination. Construction of the planned beach nourishment of 100,000 cy of sand and 10,000 cy of cobble along 2,300 feet of Goleta Beach was estimated to be \$3,168,000, including trucking, mobilization, construction monitoring, and clean up (County of Santa Barbara 2020). Maintenance estimates for this project were not determined.

Regulatory permitting and environmental review was estimated to be \$150,000, although this did not include a full Environmental Impact Report (EIR) prepared pursuant to the California Environmental Quality Act (CEQA) which would likely be required for the Carpinteria Living Shoreline Project.

The City of Encinitas developed a living shoreline project at Cardiff State Beach that cost \$3.8 million for beach nourishment, construction, and the planned 5-year monitoring. Construction included a rip rap and cobble-based dune system along approximately 2,900 linear feet of shoreline as well as native plantings (U.S. Fish and Wildlife Service 2019). If sea level rise proceeds as currently projected, the volume of sand needed to support beach nourishment could continue to increase. There would also be costs associated with acquiring permits from California Coastal Commission pursuant to requirements of the California Coastal Act, from USACE pursuant to the Clean Water Act Section 404 Program, Clean Water Act Section 401 Certification from California Regional Water Quality Control Board (RWQCB), the U.S. Fish and Wildlife Service (USFWS), and local permits, such as for grading. Additional maintenance costs are also required, typically in the range of \$10,000 per acre per year without the inclusion of labor for dune maintenance. If the City were to implement a vegetated dune system covering 2 acres, this would result in a cost estimate of approximately \$20,000 per year for maintenance of a living shoreline (California Natural Resources Agency 2018).

While initial implementation and ongoing maintenance costs of living shorelines are substantial, interests in their use as a coastal protection strategy has increased in recent years due to regulatory restrictions on hard structures such as rock revetments and potential ecosystem and recreational benefits. Coastal communities including the City of Ventura, City of Encinitas, and Marin and Humboldt counties are in the process of constructing or planning for living shoreline systems to improve resiliency to sea level rise. State agencies, such as the California State Coastal Conservancy and California Natural Resources Agency have provided funding for these past/ongoing living shorelines projects. Federal funding opportunities are also available through agencies such as the National Oceanic and Atmospheric Administration (NOAA) and the National Fish and Wildlife Foundation (NFWF) for projects providing co-benefits to aquatic habitats and ecosystems.

Federal, State, and Local Grant Funding Opportunities

As noted above, due to scope and estimated cost, the Living Shoreline Project would likely require a mix of local, State and federal funding sources for completion as it would be well beyond the City's existing financial means to implement, even with assistance from BEACON. The following list of potential state and federal programs and grant opportunities includes information on major potentially suitable funding and financing sources for project planning, final design, environmental review, permitting and construction/implementation costs. Funding sources and amounts vary annually for coastal resiliency and are dependent on State and federal funding

allocations. Therefore, the following information is preliminary and would have to be reviewed during assembling a project funding package. Following discussion of these grant funding opportunities is a discussion of potential additional steps the City can take to fund shoreline management using existing measures without grant funding.

Federal Grant Funds

Only two ongoing federal grant funding programs are currently available to local agencies that could present suitable funding opportunities for the City for beach nourishment and construction and maintenance of a living shoreline. Though each of these grant funding opportunities are highly competitive, projects similar to those proposed by the City have been partially or fully funded through these grant programs, and the City appears to be highly eligible

National Oceanographic and Atmospheric Administration (NOAA)

<https://www.fisheries.noaa.gov/funding-opportunities>

National Coastal Resilience Fund

<https://www.nfwf.org/programs/national-coastal-resilience-fund/national-coastal-resilience-fund-2021-request-proposals>

Program Summary:	The NOAA Coastal Resilience Grants program implements projects that build resilient U.S. coastal communities and ecosystems
Eligibility Requirements:	Eligible applicants are institutions of higher education, nonprofit and for-profit organizations, U.S. territories and states, Native American tribes, and local governments including counties, municipalities, and cities. Projects must be in coastal areas
Funding Cycle:	The last cycle was in 2018.
Funding Source and Amount (Max/Min):	Source: NOAA No minimum or maximum listed. Two-to-one match required for non-federal funds (e.g., \$500,000 from NOAA requires \$250,000 in matching funds)
Applicability to Beach Nourishment and Living Shoreline	Program may be suitable to pursue to fund both beach nourishment and construction of a living shoreline. The most recent grant awards for the 2021 grant cycle included funding for at least four living shoreline projects across the nation.
Contact Information/ Notes:	Melanie Gange Acting Program Manager (301) 427-8664 Melanie.gange@noaa.gov

National Fish and Wildlife Foundation (NFWF)

<https://www.nfwf.org/programs>

National Coastal Resilience Fund

<https://www.nfwf.org/programs/national-coastal-resilience-fund/national-coastal-resilience-fund-2021-request-proposals>

Program Summary:	The Fund will make investments in planning, design, and restoration of natural and nature-based solutions to help protect coastal communities from the impacts of storms, floods, and other natural hazards and enable them to recover more quickly and enhance habitats for fish and wildlife. The Fund will accept projects that fit into one of four phases: community capacity building and planning, site assessment and preliminary design, final design and permitting, and restoration and monitoring. Funding for planning is only allowed under the Community Capacity Building and Planning program.
Eligibility Requirements:	Eligible applicants include non-profit organizations, state and territorial government agencies, local governments, municipal governments, Tribal governments and organizations, educational institutions, or commercial organizations. Projects must be within coastal areas. Applicants must submit an application that fits into one of the four phases.
Funding Cycle:	The 2021 cycle ended in August 2021. This was anticipated to be the last round of funding.
Funding Source and Amount (Max/Min):	Source: NOAA Funding varies annually but was funded in 2021 for \$34 million. No minimums or maximums, but project sizes are usually \$250,000 for Community Capacity Building and Planning or Site Assessment and Preliminary Design, \$350,000 for Final Design and Permitting Projects, or \$1 million to \$5 million for Restoration and Monitoring. 50% match in cash or in-kind services expected
Applicability to Beach Nourishment and Living Shoreline	Program may be suitable to pursue to fund both beach nourishment and construction of a living shoreline. The most recent grant awards for the 2021 grant cycle included funding for at least four living shoreline projects across the nation.
Contact Information/Notes:	Femke Freiberg Femke.Freiberg@nfwf.org

State of California Grant Funds

The State currently has only one ongoing program specifically dedicated to beach nourishment that is managed by DOBW. This program was largely unfunded from 2019-2021. Other grant programs may be applicable to living shoreline construction, but it is unclear if such programs would fund beach nourishment, a major portion of project costs and effectiveness in shoreline protection.

In addition to the programs listed below, the California State Lands Commission (CLSC) may have access to funding for a beach nourishment and living shoreline project in the City through payment of mitigation fees from the currently dormant Chevron Shell Mounds Project. The CLSC is not an agency that typically administers grants and thus does not typically fund beach nourishment or living shoreline creation projects. However, between 2013-2015, as part of the plan for abandonment of four offshore oil platforms (referred to as the "Chevron 4H Platforms

Shell Mounds Project”), two of which are located within City offshore lands, Chevron proposed payment of \$3,000,000 in mitigation fees to CSLC in order to leave the “shell mounds” in place around the base of abandoned platforms to provide a rare complex of hard bottom habitats within a naturally occurring soft bottom habitat area. These funds were proposed to be allocated for the removal of tens of thousands of cubic yards of potential beach quality sediment to enhance fish habitat in the Carpinteria Salt Marsh. The project appears to be on hold and the status of any mitigation payments, which could support delivery of significant sand to the City’s beach, is unclear.

Ocean Protection Council (OPC)

<https://www.opc.ca.gov/solicitations/>

OPC Prop 1 Grant Program

<https://www.opc.ca.gov/prop1/>

Program Summary:	The Program funds restoration and habitat enhancement projects, including projects that address habitat loss and environmental degradation. It also funds projects that promote risk reduction in the face of sea level rise, including living shorelines, green infrastructure, and other projects that reduce risk of flooding and water quality problems. Prop 1 requires that funding supports multi-benefit ecosystem and watershed protection, improves water quality, and addresses communities entitled to environmental justice.
Eligibility Requirements:	All public agencies are eligible to apply, as well as universities, nonprofits, trips, and utility companies. The program can fund acquisition, construction, planning, design, and engineering. These efforts may include project development, implementation strategy development, watershed assessments, and project-specific activities such as design, baseline data collection, permitting, and environmental review.
Funding Cycle:	The 2021 cycle ended in August 2021. This was anticipated to be the last round of funding. However, OPC’s strategic priorities are focused on providing equitable distribution of funds to communities and ensuring investments are allocated for those areas most affected by environmental injustice. Potential for future funding cycles remains uncertain.
Funding Source and Amount (Max/Min):	Source: Prop 1 Min: \$100,000, but strongly encourages projects over \$250,000 Max: \$5,000,000 Matching funds are not required, but priority will be given to projects that leverage local, federal, or private funding or in-kind resources.
Applicability to Beach Nourishment and Living Shoreline	Program may be more focused on habitat restoration such as the Living Shoreline. The City’s application would need to focus on potential impacts to the environment if Carpinteria’s beaches were damaged, and DAC need for coastal access.
Contact Information/ Notes:	OPC_Prop1grants@resources.ca.gov

California Governor's Office of Emergency Services (Cal OES)

<https://www.caloes.ca.gov/cal-oes-divisions/grants-management/search-for-grants>

Hazard Mitigation Grant Program (HMGP)

<https://www.caloes.ca.gov/cal-oes-divisions/recovery/disaster-mitigation-technical-support/404-hazard-mitigation-grant-program>

Program Summary:	HMGP funds plans and projects that reduce the effects of future natural disasters, including loss of life and property damage. In California, these federal funds, managed by the Federal Emergency Management Agency (FEMA), are administered by the Cal OES HMGP Unit. Subapplicants must have a FEMA approved and adopted Local Hazard Mitigation Plan to be eligible for project funding; otherwise grant funds can be used to draft a Mitigation Plan.
Eligibility Requirements:	Eligible subapplicants include state agencies, local governments, special districts, and some private non-profits. Eligible activities relevant to Carpinteria: Localized flood risk reduction projects, including installation or modification of culverts and other stormwater management facilities, detention basins, and floodwalls, dams, and weirs Non-localized flood risk reduction projects, including construction or modification of dikes, levees, floodwalls, seawalls, groins, jetties, breakwaters, and sand dunes (<i>unique to HMGP</i>) Soil stabilization, including installing geotextiles, vegetative buffers, or preserving mature vegetation
Funding Cycle:	This program is regularly funded and there will likely be additional cycles. Current cycle: Notice of Intents due December 31, 2021 Subapplications due March 10, 2021 As this program is regularly funded, future cycles are expected to follow similar deadlines.
Funding Source and Amount (Max/Min):	Source: federal No min/max listed Match: 25%
Applicability to Beach Nourishment and Living Shoreline	The City is currently updating its Local Hazard Mitigation Plan which when completed would make the City eligible for funding under this program. The City would apply as a subapplicant to the State's application. This program may be applicable to both beach nourishment and the living shoreline. The City's application would need to focus on potential flood hazard reduction benefits.
Contact Information/Notes:	Jennifer Hogan State Hazard Mitigation Officer HMA@CalOES.ca.gov

Building Resilient Infrastructure and Communities (BRIC) and Flood Mitigation Assistance (FMA) Grant Programs

<https://www.caloes.ca.gov/cal-oes-divisions/hazard-mitigation/pre-disaster-flood-mitigation>

Program Summary:	<p>BRIC: Supports states, local communities, tribes and territories as they undertake hazard mitigation projects, reducing the risks they face from disasters and natural hazards. Funds are intended to reduce risks to the population and structures from future hazard events, while also reducing reliance on federal funding in future disasters. BRIC is a new FEMA program that replaces the existing Pre-Disaster Mitigation (PDM) program.</p> <p>FMA: Aims to reduce claims under the National Flood Insurance Program. Funds flood hazard mitigation projects and plan development.</p> <p>The City would apply as a subapplicant to the state's application. Subapplicants must have a FEMA approved and adopted Local Hazard Mitigation Plan to be eligible for project funding; otherwise grant funds can be used to draft a Mitigation Plan.</p>
Eligibility Requirements:	<p>Eligible subapplicants include state agencies, local governments, special districts, and some private non-profits.</p> <p>Eligible activities relevant to Carpinteria:</p> <p>Localized flood risk reduction projects, including installation or modification of culverts and other stormwater management facilities, detention basins, and floodwalls, dams, and weirs</p> <p>Soil stabilization, including installing geotextiles, vegetative buffers, or preserving mature vegetation</p>
Funding Cycle:	<p>This program is regularly funded and there will likely be additional cycles.</p> <p>Most recent cycle:</p> <p>Notice of Intents due September 20, 2021</p> <p>Subapplications due December 1, 2021</p> <p>As this program is regularly funded, future cycles are expected to follow similar deadlines.</p>
Funding Source and Amount (Max/Min):	<p>Source: National Flood Insurance Fund</p> <p>Min/max:</p> <p>BRIC: \$3 million max</p> <p>FMA: Individual planning grants using FMA funds cannot exceed \$50,000 to any Applicant or \$25,000 to any subapplicant.</p> <p>No match requirement listed in guidelines</p>
Applicability to Beach Nourishment and Living Shoreline	<p>Program may be applicable to both beach nourishment and the living shoreline. The City's application would need to focus on potential hazard reduction benefits.</p>
Contact Information/ Notes:	<p>Jennifer Hogan</p> <p>State Hazard Mitigation Officer</p> <p>HMA@CalOES.ca.gov</p>

California Coastal Conservancy

<https://scc.ca.gov/grants/>

Coastal Resource and Public Access Program

<https://www.grants.ca.gov/grants/coastal-resource-and-public-access-program/>

Program Summary:	The State Coastal Conservancy issues grants on an on-going basis for projects that restore and protect the California coast, increase public access to it, and increase communities' resilience to climate change. The Conservancy will fund most stages of a capital improvement project, including pre-project feasibility studies, property acquisition, project planning, community involvement, design, environmental review, permitting, construction, and monitoring. Projects that achieve multiple objectives and serve DACs will receive higher priority for funding.
Eligibility Requirements:	All levels of government agencies (federal, state, local, and special districts), as well as tribes and nonprofits, are eligible to apply. Projects must be located on the coast.
Funding Cycle:	Pre-applications are accepted on an ongoing basis. Applicants must contact the regional manager (contact info below) in order to determine eligibility and prepare a letter of intent.
Funding Source and Amount (Max/Min):	Source: California Coastal Conservancy No min/max listed No match required
Applicability to Beach Nourishment and Living Shoreline	The Coastal Conservancy has funded portions of "green" shoreline management projects such as Surfers Point in Ventura and the Cardiff Living Shoreline in Encinitas (beach nourishment component funded separately). So, at least the living shoreline portion of the project may be eligible and possibly portions of the beach nourishment component. On September 23, 2021, Governor Newsom signed a budget bill that includes a total of \$500 million for coastal resilience to be appropriated to the State Coastal Conservancy in Fiscal Years 2022-23 and 2023-24.
Contact Information/ Notes:	Trish Chapman Central Coast Regional Manager Trish.chapman@scc.ca.gov

Climate Ready Program

<https://scc.ca.gov/climate-change/climate-ready-program/>

Program Summary:	This program aims to help natural resources and human communities along California's coast adapting to the impacts of climate change and capture greenhouse gases from the atmosphere through the conservation of natural and working lands through multi-benefit projects that use natural systems. Living shorelines are noted as a supported technique in adapting to climate change. Must fund preparation for climate change such as sea level rise adaptation planning, living shorelines, and carbon sequestration. 61% of funds went to DACs or low-income areas in past grant rounds.
Eligibility Requirements:	Eligible grantees include government agencies, non-profit organizations, and federally recognized tribes.
Funding Cycle:	The most recent grant rounds were in 2018 and 2019; there was no funding cycle in 2020, and no future cycle posted.
Funding Source and Amount (Max/Min):	Source: California Coastal Conservancy No min/max listed No match required
Applicability to	The Coastal Conservancy has funded portions of "green" shoreline management projects such

Beach Nourishment and Living Shoreline	as Surfers Point in Ventura and the Cardiff Living Shoreline in Encinitas (beach nourishment component funded separately). So, at least the living shoreline portion of the project may be eligible and possibly portions of the beach nourishment component. On September 23, 2021, Governor Newsom signed a budget bill that includes a total of \$500 million for coastal resilience to be appropriated to the State Coastal Conservancy in Fiscal Years 2022-23 and 2023-24.
Contact Information/Notes:	Trish Chapman Central Coast Regional Manager Trish.chapman@scc.ca.gov

Explore the Coast

<https://scc.ca.gov/grants/explore-the-coast-grants/>

Program Summary:	The State Coastal Conservancy's Explore the Coast (ETC) grant program seeks to provide coastal experiences for people and communities who face challenges to accessing or enjoying the coast ("ETC Priority Communities"). ETC Priority Communities include but are not limited to lower-income individuals and households, people with disabilities, people of color, immigrant communities, and foster youth, among others. At least 50% of participants served by the ETC grant must be from an ETC Priority Community. In addition to meeting this requirement, projects must also meet one or more of the following program priorities: <ul style="list-style-type: none"> • Provides an enjoyable experience at the coast. • Reduces economic, physical, operational, or societal barriers to accessing or enjoying the coast. • Inspires ongoing coastal resource stewardship ethic through active learning and interactive activities.
Eligibility Requirements:	Eligible grantees include public agencies, tribes, and nonprofit organizations.
Funding Cycle:	This program is offered annually. No information about the next round has been posted yet.
Funding Source and Amount (Max/Min):	Source: California Coastal Conservancy No minimum, \$50,000 maximum No match required
Applicability to Beach Nourishment and Living Shoreline	The Coastal Conservancy has funded portions of "green" shoreline management projects such as Surfers Point in Ventura and the Cardiff Living Shoreline in Encinitas (beach nourishment component funded separately). So, at least the living shoreline portion of the project may be eligible and possibly portions of the beach nourishment component. The project would preserve access to the shoreline including that for Disadvantaged Communities, including some enhanced protection for low-cost overnight campsites. On September 23, 2021, Governor Newsom signed a budget bill that includes a total of \$500 million for coastal resilience to be appropriated to the State Coastal Conservancy in Fiscal Years 2022-23 and 2023-24.
Contact Information/Notes:	Trish Chapman Central Coast Regional Manager Trish.chapman@scc.ca.gov

California Division of Boating and Waterways

https://dbw.parks.ca.gov/?page_id=28715

Shoreline Erosion Control & Public Beach Restoration Grants

https://dbw.parks.ca.gov/?page_id=28766

Program Summary:	<p>The Shoreline Erosion Control Program can assist in the planning and construction of all types of beach erosion control and shoreline stabilization measures, including hard structures like seawalls.</p> <p>The Public Beach Restoration Program can assist in the planning and construction of engineered placement of sand on the beach or in the nearshore environment.</p> <p>There is a separate application for each program. Applicants choose which program to apply to based on the type of solution the applicant seeks to implement and the amount of funding the applicant intends to contribute to the project. Potential applicants are encouraged to contact Casey Caldwell (contact info below) prior to submitting to apply for the appropriate program.</p>
Eligibility Requirements:	<p>Eligible applicants include public agencies at all levels, including cities, counties, federal and state agencies, and special districts. Projects must be located on the open coastline to be eligible for program funds.</p> <p>As the programs are funded through the annual state budget process, future cycles are anticipated.</p>
Funding Cycle:	<p>Current: Applications are due December 15 2021 for FY 2023-2024 funding. Most recent cycle: Applications were due Feb 1 2021 for FY 2022-2023 funding, with a 3-year period of performance.</p>
Funding Source and Amount (Max/Min):	<p>Source: program is authorized in State statute, Harbors and Navigation Code sections 65-67.4 (Shoreline Erosion) and 69.5-69.9 (Public Beach)</p> <p>No min/max, but small grants for studies typically range from \$40,000 to \$50,000, and large grants for restoration typically range from \$5 million to \$6.5 million</p> <p>Match: Shoreline Erosion: 50%, Public Beach: 15%</p> <p>Note: For the Shoreline Erosion program, many projects are funded 50% by the U.S. Army Corps of Engineers with the State paying up to 50% of the cost of the local sponsor's required 50% project cost share for construction. However, it should be noted that these programs have not received funding for three years (2018-2021) and future funding remains uncertain, and the State does not currently direct general funds toward this program.</p>
Applicability to Beach Nourishment and Living Shoreline	<p>The Shoreline Erosion Control and Beach Restoration Programs are highly suitable funding sources for the proposed living shoreline and beach nourishment program. These programs formed a key component of major past beach restoration projects in San Diego sponsored by the San Diego Association of Governments. However, funding has not been available in recent years and its future funding levels are unclear.</p>
Contact Information/Notes:	<p>Casey Caldwell Project Manager, California State Parks, Division of Boating and Waterways casey.caldwell@parks.ca.gov (916) 902-8824</p>

California Department of Water Resources

<https://water.ca.gov/Programs>

Floodplain Management, Protection, and Risk Awareness Grant Program

<https://water.ca.gov/Work-With-Us/Grants-And-Loans/Flood-Management-Protection-Risk-Awareness-Program>

Program Summary:	The Floodplain Management, Protection and Risk Awareness (FMPRA) Grant Program supports local agency efforts to prepare for flooding by providing financial assistance for flood risk reduction activities related to stormwater flooding, mudslides, and flash floods. The Program prioritizes projects in DACs and multi-benefit project features. 10% of funds available will be allocated for planning and monitoring projects. If a planning project is funded, it cannot also be funded for implementation. Priority will be given to project within FEMA special flood hazard areas.
Eligibility Requirements:	<p>Eligible funding recipients include any California public agency, nonprofit, public utility agency, tribe, or mutual water company.</p> <p>Projects must be located in a California watershed including coastal, alluvial fan, and riverine basins.</p> <p>Additional eligibility criteria:</p> <p>Projects must promote state planning priorities, including floodplain management</p> <p>Stormwater Resource Plans are required, except for DACs with less than 20,000 residents</p> <p>Projects must address risks arising from climate change</p> <p>Applicants must demonstrate whether the project is located within an area that may be subject to change significantly due to adopted plans</p> <p>Examples of eligible implementation projects:</p> <p>Structural projects like retention or detention basins</p> <p>Stormwater management system upgrades</p> <p>Floodwalls</p> <p>Channel widening</p> <p>Nature-based projects like runoff reduction / stormwater infiltration basins and bioswales</p> <p>Administrative projects such as acquisition and relocation program</p>
Funding Cycle:	<p>Current cycle: concept proposals due October 27, 2021, full proposals due February 9, 2022. It is not clear if future cycles will be available.</p> <p>Period of performance: 3 years</p>
Funding Source and Amount (Max/Min):	<p>Source: Prop 68</p> <p>No min/max listed</p> <p>Match: 25%</p>
Applicability to Beach Nourishment and Living Shoreline	It is unclear if the proposed project would be eligible for funding under this program. The City's eligibility would need to be further explored.
Contact Information/ Notes:	<p>Mehdi Mizani</p> <p>Program Manager, Floodplain Management, Protection, and Risk Awareness Program</p> <p>916-480-5351</p>

Mehdi.Mizani@water.ca.gov
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California Wildlife Conservation Board

<https://wcb.ca.gov/Grants>

Habitat Enhancement and Restoration Program

<https://wcb.ca.gov/Programs/Habitat-Enhancement>

Program Summary:	This grant funds habitat restoration, wildlife corridors, and fishery enhancements. Habitat restoration can include wetlands and coastal ecosystems.
Eligibility Requirements:	Eligible grant recipients include public agencies, nonprofits, resource conservation districts, and private landowners.
Funding Cycle:	Pre-applications are accepted on a continuous basis. Applicants just need to submit a 4-page Word document available on their website.
Funding Source and Amount (Max/Min):	Source: Habitat Conservation Fund No min/max listed No match required
Applicability to Beach Nourishment and Living Shoreline	This program is focused on habitat restoration such as the Living Shoreline. The City's application would need to focus on potential habitat restoration benefits to be eligible for funding under this program.
Contact Information/ Notes:	Judah Grossman (916) 926-8829 Judah.Grossman@wildlife.ca.gov

California Coastal Commission

<https://www.coastal.ca.gov/lcp/grants/>

Whale Tail Grants

<https://www.coastal.ca.gov/whaletailgrant/>

Program Summary:	Grants support experiential education and stewardship of the California coast and its watersheds. Grant projects can engage youth or adults and can take place anywhere in California. Projects must relate to the coast and ocean and may fall into one or more of the following categories: 1) youth education programs, 2) programs for educating the general public, 3) climate change education and stewardship, 4) shoreline cleanup and enhancement programs.
Eligibility Requirements:	Eligible applicants include non-profit organizations, projects of a non-profit fiscal sponsor, schools or districts, government entities, Federally Recognized Tribes and other California Native American Tribes.
Funding Cycle:	The most recent cycle had a submission deadline of November 5, 2021. This grant is offered annually. Projects have a two-year period of performance (in the last funding round, projects had to start before June 2022 and end before April 2024).

Funding Source and Amount (Max/Min):	Source: Whale Tail Coastal Protection License Plate and donations No minimum, \$50,000 maximum. At least 25% of funding is allocated to small grants up to \$20,000. No match
Applicability to Beach Nourishment and Living Shoreline	The proposed project does not appear suitable for funding under this program.
Contact Information/Notes:	Annie Kohut Frankel Annie.Frankel@coastal.ca.gov

California Natural Resources Agency

<https://resources.ca.gov/grants>

Urban Greening Program

<https://resources.ca.gov/grants/urban-greening>

Program Summary:	This program supports urban greening and urban forestry projects that reduce greenhouse gas emissions and provide multiple benefits. The program will give priority consideration to projects located within and benefitting disadvantaged communities, with 75% of funding allocated for DACs. Additional points will be given to projects that meet two of the following: <ul style="list-style-type: none"> • Provides park or recreational benefits to a critically underserved community or disadvantaged community • Proposed by a critically underserved community or disadvantaged community • Develops partnerships with local community organizations and businesses in order to strengthen outreach to disadvantaged communities, provides access to quality jobs for residents of disadvantaged communities, or provides access to workforce education and training Uses interagency cooperation and integration • Uses existing public lands and facilitates the use of public resources and investments, including schools
Eligibility Requirements:	Eligible applicants include non-profit organizations, cities, counties, and special districts. Eligible urban greening projects will reduce GHG emissions, mitigate the effects of extreme heat, and provide multiple additional benefits, including, but not limited to, a decrease in air and water pollution or a reduction in the consumption of natural resources and energy. Eligible projects will result in the conversion of an existing built environment into green space that uses natural and green infrastructure approaches to create sustainable and vibrant communities. Projects must do at least one of the following: <ul style="list-style-type: none"> • Acquire, create, enhance, or expand community parks and green spaces, and/or • Use natural systems or systems that mimic natural systems to achieve multiple benefits.
Funding Cycle:	The current cycle is active. From November to December, public comments were accepted on the draft guidelines. Approximately \$47.5 million is available.
Funding Source and Amount (Max/Min):	Source: \$50 Million Specified General Fund appropriation No min/max

Applicability to Beach Nourishment and Living Shoreline	Under this program, the living shoreline portion of the project may be eligible due to its habitat restoration/ "greening" benefits. The project would preserve access to the shoreline including that for Disadvantaged Communities, including some enhanced protection for low cost overnight campsites.
Contact Information/ Notes:	(916) 653-2812 urbangreening@resources.ca.gov

Local Grant Funds

There is only one ongoing funding program available to local agencies that could present a funding opportunity for the City for beach nourishment and construction and maintenance of a living shoreline. However, funding under this program has been extremely limited in recent years and is highly competitive, due to a broad category of eligible projects and competing needs of local agencies within the County that are facing similar issues as the City.

Santa Barbara County Planning & Development

<https://www.countyofsb.org/plndev/projects.sbc>

Coastal Resource Enhancement Fund (CREF)

<https://www.countyofsb.org/plndev/projects/energy/CREF.sbc>

Program Summary:	CREF uses funds from permitted offshore oil and gas projects to provide the required mitigation for residual and cumulative impacts offshore drilling. Program funds are designed to mitigate impacts to coastal recreation, aesthetics, tourism, and/or sensitive environmental resources. Priority will be given to projects that fund coastal acquisition and capital improvement projects. The County Planning & Development office recommends projects for funding to the Board of Supervisors every year, except during the years when the Point Arguello and Santa Ynez Units are not operating, the recommendations will be made every other year.
Eligibility Requirements:	Project proposals may be solicited from members of the public, public agencies, municipalities, special districts, and non-profit organizations, all within Santa Barbara County. All project applicants must demonstrate that their project is for a broad public purpose and be located in a coastal area. Eligible projects must emphasize one or more of the following categories: Coastal land acquisition for public use Coastal recreation or habitat protection Coastal tourism or recreation Coastal quality of life Some example projects relevant to Carpinteria include: Improving conditions or facilities at existing recreational areas Restoring or enhancing degraded habitat areas
Funding Cycle:	Most recent cycle applications were due December 14, 2020, following workshops in October. The next cycle will begin in the summer of 2022, when the County will begin reassessing funds and soliciting proposals in the fall.
Funding Source	Source: offshore drilling permits

and Amount (Max/Min):	No min/max listed, but funds available would depend on the fees collected from offshore drilling permits. The guidelines project that \$449,350 will be collected in fees in 2021 and in 2022. Matching is not required, but projects that utilize matching funds or in-kind services will be prioritized.
Applicability to Beach Nourishment and Living Shoreline	The program is theoretically applicable to the proposed project; however, funding has been extremely limited in recent years and is highly competitive.
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Potential City Measures for Future Funding

Expand City Assessment District No. 5

Every winter, the City implements a winter protection berm located along the entire length of Carpinteria City Beach between Linden Avenue and the western limits of the City along the coastline. The berm consists of approximately 13,200 cubic yards of sand, stretching from 1,440 linear feet between Linden and Ash avenues. The City created Assessment District No. 5 to fund the Winter Protection Berm Program through Resolution Number 3061 on December 14, 1992 (City of Carpinteria 2020a). Assessment District No. 5 was enacted in order to fund the annual storm wave damage reduction program. In the past few years, strong storms have generated flood and erosion along the beach, and the berm has effectively reduced and prevented damage. The berm was intended to serve as a temporary solution, facilitated by USACE, until an alternate optimal solution could be devised. In Fiscal Year 2019/2020, Assessment District No. 5 collected \$20,228.34 from ocean front landowners along Carpinteria City Beach and \$15,271.66 from the City for its coastal parcel for a total revenue of \$35,500.00.

Property owners with parcels fronting the shoreline pay into Assessment District No. 5 depending on the length of beach frontage for their parcels (City of Carpinteria 2020a). The annual fees paid the property owners range from \$193.80 to \$500.92, with most annual payments being around \$200. Each property owner pays into fixed and variable costs: fixed costs are spread evenly amongst all parcels equally and include permit compliance, biological monitoring, administration, and maintenance; variable costs are distributed to parcels proportionally to their beach frontage and include actual machine time required to move the sand.

There are a few options for adjusting Assessment District No. 5 to support a living shoreline and beach nourishment project. First, the funds from Assessment District No. 5 could be used for living shoreline construction and maintenance. If the living shoreline were implemented, an annual winter berm would not need to be constructed. Second, rates could be increased for existing property owners within Assessment District No. 5, as the cost of annual maintenance of a living

shoreline is expected to be much larger than what is currently collected from Assessment District No. 5. Finally, Assessment District No. 5 could be expanded to include parcels projected to be threatened by flooding under sea level rise projections because more than just beach front properties would receive benefits from beach nourishment. Similar to the existing fee structure for variable costs, parcels closer to the coast could be charged more than those further away.

An expansion of Assessment District No. 5 over the entire Beach Neighborhood, the neighborhood most threatened by sea level rise induced flooding, would benefit those City residents projected to be most impacted by sea level rise. However, such an expansion, even with adjusted or increase assessment rates, would likely generate insufficient revenue to fund construction of the proposed project's beach nourishment and living shoreline components, but could provide substantial matching funds for construction as well as maintenance revenues. In addition, maintaining wider and accessible City beaches would generate direct and indirect benefits to residents throughout the City who use the beach or receive benefit from business or employment opportunities generated by beach visitors. In summary, expansion of Assessment District No. 5 would be a highly suitable funding source for the proposed project, but would almost certainly need to be combined with other local, State, or federal funding sources.

Establish New Geologic Hazard Abatement or Coastal Hazard Assessment District

Assessment districts are common funding mechanisms for utilities, such as water supply, park and recreation, lighting and utility providers and more than thirty such districts exist throughout the county, including the County Flood Control and Water Conservation District. City Assessment District No. 5, if expanded, would provide an important, but potentially limited local funding source. Because shoreline management and beach nourishment are regional issues that affect all coastal communities dealing with sea level rise, consideration of regional funding mechanisms may make sense as all jurisdiction and regional groups such as BEACON will require new funding sources to actively manage the shoreline in response to projected sea level rise. The existing Countywide Flood Control Benefit Assessment District discussed below is one potential regional vehicle that could be modified to address coastal flood and sea level rise impacts rather than just riverine flooding. The Flood Control District is already actively involved in targeted shoreline management and beach nourishment in the Goleta Slough and adjacent Goleta Beach and within the Carpinteria Salt Marsh and adjacent beaches; this District also periodically performs emergency desilting of flood control debris basins along area creeks and frequently deposits portions of this sediment at Goleta Beach and Carpinteria City Beach at Ash Avenue.

Geologic Hazard and Abatement Districts (GHADs) are also opportunities for beach and bluff front property owners to establish an assessing entity to implement one or more of the priority adaptation strategies described above. There are over 35 GHADs in California that address a variety of hazards. GHADs can be used to address broad based geological hazards, including

coastal erosion. GHADs are often formed to fund repairs to address landslides such as that at La Conchita in Ventura County but have been used to address coastal erosion and potential beach nourishment such as at Broad Beach in the City of Malibu. By accumulating a funding reserve for future maintenance and rehabilitation, GHADs can provide the financial resources necessary for potential future expansion, maintenance, or repairs of flood or erosion control structures. Further, because of the relative safety of GHAD revenues, which are typically financed through the collection of supplemental tax assessments, such districts can borrow from lenders or issue bonds with very attractive credit terms. Because the impacts of projected sea level rise affect all coastal communities in the County, a multi-jurisdictional GHAD could be established between the City, BEACON, the County, cities of Santa Barbara and Goleta, and other stakeholders (e.g., Ventura County coastal communities) to better raise funds for improvements for issues that affect a larger regional area, resulting in greater reserves of funding for improved shoreline management and adaptation to improve resilience and ongoing maintenance or repair. Given the threat from coastal hazards extends well beyond the City, the possibility exists for establishment of a GHAD that includes particularly at-risk areas of the City, as well as threatened adjacent unincorporated communities or neighborhoods, such as the Sandyland Cove Neighborhood. Similar to potential expansion of Assessment District No. 5 described above, different zones could pay different rates depending on their risk level (i.e., properties near or on the coast could pay fees higher than properties farther away).

Formation of a local or regional GHAD would require careful interagency coordination, a public outreach campaign to inform voters and taxpayers of the need for such an action, and consideration of its relationship to other service providing/ taxing districts (e.g., Assessment District No. 5). Most such GHADs have a direct relationship to addressing a problem that immediately threatens a limited number of homes or a single neighborhood such as active landslides with a clear nexus to a direct and immediate threat, even such as beach erosion at Broad Beach. The boundaries of a GHAD would need to be carefully considered such as whether it would be confined to ocean front properties only or be expanded more broadly a wider range of properties potentially impacted by sea level rise induced flooding or bluff erosion over the long term. Further, if used for funding the proposed project, depending on boundaries and configuration, using a GHAD may grant undue authority over managing public beaches to a limited number of property owners as opposed to a public agency. A GHAD would need to be crafted so as not to overlap with Assessment District No. 5 as well.

Coordinate with County Flood Control and Water Conservation District

Santa Barbara County Public Works – Water Resources Division oversees the County Flood Control and Water Conservation District (Flood Control District). In general, the Flood Control District was formed to provide for the control and conservation of flood and stormwaters, the protection of watercourses, watersheds, public highways, life, and property from damage or destruction from

such waters, and the prevention of waste, degradation, or diminution of the water supply, and the development and importation of water for beneficial use within the Flood Control District. The primary service provided by the Flood Control District is operating and maintaining the existing flood protection system and correcting existing problem areas as required.

The Flood Control District implements a program of creek and river channel maintenance and capital improvements to mitigate the threat to life and property from riverine flooding, but does not specifically address coastal oceanic flooding. As part of this program, the Flood Control District maintains more than 13 foothill debris basins along South Coast streams as well as removing sediments from channels and debris basins in the Carpinteria Salt Marsh and the Goleta South, with sediments removed from these marshes permitted for disposal on the City's Beach at Ash Avenue and at Goleta Beach. However, large quantities of sediment removed from foothill debris basins are not permitted for regular beach disposal, and are available for beach nourishment only after emergencies, such as after the 2018 Montecito Debris Flows when sediments were deposited on at Ash Avenue and Goleta Beach (Melinda Burns 2018).

In order to supplement the declining revenues after Proposition 13 was enacted in the late 1970s and to enable the Flood Control District to maintain and operate the system and construct some capital improvements on a reduced scale, the Flood Control District, under the authority of Assembly Bill 549, formed the Flood Control Benefit Assessment Program in 1980 following majority approval by County voters and levied benefit assessments on each parcel in the County (Flood Control District 2021). Assessment rates are based upon the proportionate amount of stormwater runoff generated by individual properties. These rates vary by Flood Zone and are based on the long-range cost of system operation and maintenance and of the remaining needed capital improvements for the Flood Zones. Parcels with higher stormwater runoff, determined by the size and land use of the parcel, are charged higher fees, called the Benefit Assessment Rate.

The Flood Control District's boundaries coincide with those of the County; the Board of Supervisors of the County of Santa Barbara is also the Board of Directors of the Flood Control District; and various officers, assistants, deputies and employees of the County also perform their same duties for Flood Control District. The Flood Control District is divided into ten active flood control zones; the City of Carpinteria falls into the South Coast zone.

The Flood Control District is already actively involved in targeted shoreline management and beach nourishment activities through sediment removal from the Carpinteria Salt Marsh with disposal at Ash Avenue and at the Goleta Slough and Goleta Beach. The Flood Control District has the experience with required permitting, staff and access to equipment and contractors experienced with such projects. The Flood Control District also periodically performs emergency desilting of foothill flood control debris basins on along South Coast creeks and sometimes deposits portions of this sediment at Ash Avenue in Carpinteria and at Goleta Beach. However, over the last decade alone, hundreds of thousands of cubic yards of beach quality sediment have

been sent to landfills or quarries due to a lack of permits for regular disposal of such sediment, depriving the City's beaches of a major source of sand for beach nourishment.

Restructuring the Flood Control District could provide a secure regional funding source to provide funding and technical support for beach nourishment and construction of living shoreline projects. Any such restructuring of the district would need to be done in close coordination with the County and be designed to ensure that the Flood Control District's funding for and ability to respond to riverine flooding remains undiminished. Although the City does not have authority to direct restructuring of the Flood Control District, the City could work with the County to develop a program expanding the Flood Control District's mission and funding to address shoreline management and beach nourishment as a means to address sea level rise. Any such program would need to be done in coordination with local cities and BEACON to coordinate sediment management and deposition.

Dedicated Transient Occupancy Tax Increase

Transient Occupancy Tax and Sales Tax make up a large portion of the City's General Fund. For the fiscal year ending June 30, 2020, the City received \$4,714,243 from Sales Tax and \$2,023,128 from Transient Occupancy Taxes, together making up 49 percent of the City's General Fund revenues (City of Carpinteria 2020b). Presently, the Transient Occupancy Tax is set at 12 percent on room charges in a hotel, inn, tourist home or house, motel or other lodging for a period of 30 consecutive days or less (City of Carpinteria 2021).

A dedicated tax increase could be used to fund living shoreline construction and maintenance. Transient Occupancy Taxes usually range from 8 to 15 percent in coastal cities in California. The Cities of Santa Barbara and Goleta charge a Transient Occupancy Tax of 12 percent, the City of Ventura charges 10 percent. The City of Malibu recently increased its Transient Occupancy Tax from 12 to 15 percent in 2020. Increasing the City of Carpinteria Transient Occupancy Tax from 12 to 14 percent could yield an additional \$340,000, using 2020 revenue numbers. A regionally coordinated increase in transient occupancy taxes to provide regional funding for coastal improvements, maintenance, or repairs could also be coordinated with other jurisdictions in the County. Such increases would require a vote of the residents of the City or region depending on scope.

Sand Mitigation and Public Recreational Impact Fees

Impact mitigation may be a way to generate funds for adaptation measure implementation. Certain structured fees could be established to generate revenues for covering the necessary planning, technical studies, design, and implementation of adaptation strategies for construction and maintenance of the beach and living shoreline.

The California Coastal Commission (CCC) uses Sand Mitigation Fee and Public Recreation fees to mitigate for impacts to sand supply and coastal access. The Sand Mitigation Fee mitigates for the

loss of sand supply and loss of recreational beaches in front of coastal protection structures. The Public Recreation Fee addresses impacts to the loss of public recreation based upon the loss of beach area physically occupied by the coastal structure. An additional fee for ecosystem damages is under consideration by the CCC, which could assess a fee based on the cost of restoration or replacement value of the damaged habitat.

Sand Mitigation Fee: The City could consider creation of a Sand Mitigation Fee to help fund shoreline maintenance activities such as beach nourishment. While CCC's sand mitigation fees are intended to offset loss of beach quality sand which would otherwise have been deposited on the beach, but was interrupted by a coastal protection structure. However, the City's bluffs are generally not sandy and as such are not major contributors to beach sand supply and the City has extremely limited bluff top development, all of which lies landward of the Union Pacific Railroad (UPRR). Therefore, any such fee would need to be restructured and it may not be applicable in the City.

Public Recreation Fee: Similar to the methodology used by the CCC for the Sand Mitigation Fee, the CCC has used a methodology for calculating a statewide public recreation fee. Using a similar approach, the City could require applicants to pay a mitigation fee for public access and recreation impacts caused by bluff retention devices or other coastal structures to mitigate impacts to public beach access and recreation that are expected to result from development. For example, the City of Solana Beach adopted a Public Recreation Impact Fee rate schedule based on the number of visitors, the City's usable beach area, and the monetary value of the beach (City of Solana Beach 2019). However, the City has extremely limited bluff top development, does not typically approve coastal protection structures, and most shoreline development lies landward of the UPRR. Therefore, any such fee would need to be restructured and it may not be applicable in the City. Further, the living shoreline project is specifically designed to avoid use of hard shoreline protection structures such as rock revetments.

Parking and Camping Fees

The City could consider pursuing collecting additional revenue to fund living shoreline creation and maintenance from visitors and residents who utilize the City's beaches. Much of the parking in the City is free on-street parking – the City could install parking meters, particularly on roads close to coastal access, and use the money to fund shoreline management. Such a program could generate revenue, but could be controversial with area residents. Net revenue generation, impacts to Beach Neighborhood residents, and local businesses would all need to be considered.

The City could also collaborate with State Park to levee fees on visitors to Carpinteria State Beach. State Parks currently charges \$10 for day use parking and \$70-80 per night for camping. These fees could be raised slightly, with added revenue dedicated to the shoreline management. As the state campground abuts Carpinteria State Beach, shoreline protection would greatly benefit the campground.

California Infrastructure and Economic Development Bank

The California Infrastructure and Economic Development Bank (IBank) was created in 1994 to finance public infrastructure and private development that promote a healthy climate for jobs, contribute to a strong economy, and improve the quality of life in California communities. IBank has broad authority to issue tax-exempt and taxable revenue bonds, provide financing to public agencies, provide credit enhancements, acquire or lease facilities, and leverage state and federal funds. Current IBank programs relevant to the City include the Infrastructure State Revolving Fund (ISRF) Loan Program and the Bond Financing Program, including Public Agency Revenue Bonds.

The ISRF Loan Program is authorized to directly provide low-cost public financing to government entities for a wide variety of public infrastructure and economic expansion projects. ISRF financing is available in amounts ranging from \$50,000 to \$25 million with loan terms for the useful life of the project up to a maximum of 30 years. A few examples of ISRF financed projects include water and wastewater treatment plant upgrades or construction, venue or airport construction or street repair and upgrades. Eligible applicants must be located in California and include any subdivision of a local government, including cities, counties, special districts, assessment districts, joint powers authorities and nonprofit organizations sponsored by a government entity.

Public Agency Revenue Bonds provide bond financing for various government entities' economic or public development projects and programs. These funds can be used for the furtherance of governmental and qualified purposes including the construction of transportation/transit, water/wastewater systems, power generation/transmission system, sewer system, schools as well as facilities and equipment used in providing related qualified services to such entities.

The City would need to consider the applicability of such programs and identify a revenue stream that could be used to pay off loans or bonds from either of these programs. Such funds could potentially be used to fund shoreline management, but the City would need to explore if shoreline management falls under regular City duties, similarly to how cities provide water and transportation systems. Regardless, potential revenue source such as those discussed above would need to be explored to pay off any bonds or loans.

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