SCOPE OF WORK

- 1. Grantee agrees to expend grant funds provided by the Commission only for and in accordance with project activities as described under the Scope of Work attached hereto as EXHIBIT A.
- 2. The Project representatives during the term of this agreement, and the person authorized to sign grant amendments and RFFs on behalf of the grantee, will be:

State Agency:	Grantee:
California Coastal Commission	City of San Clemente
Name: Kelsey Ducklow	Name: Cecilia Gallardo-Daly, Community
("Grant Manager")	Development Director
Address:	Address:
455 Market St. Suite 300	910 Calle Negocio
San Francisco, CA 94105	San Clemente, CA 92673
Phone: (415) 904-2335	Phone: (949) 361-6106
Fax: (415) 904-5400	Fax: (949) 366-4741
Email: kelsey.ducklow@coastal.ca.gov	Email: Gallardo-DalyC@san-
	<u>clemente.org</u>

3. Primary project contact:

State Agency:	Grantee
California Coastal Commission	City of San Clemente
Section/Unit: Statewide Planning	Section/Unit: Community Development
	Department
Name: Brittney Cozzolino ("LCP Grant	Name: Cecilia Gallardo-Daly,
Coordinator")	Community Development Director
Address:	Address:
455 Market St. Suite 300	910 Calle Negocio
San Francisco, CA 94105	San Clemente, CA 92673
Phone: (415) 904-5271	Phone: (949) 361-6106
Fax: (415) 904-5400	Fax: (949) 366-4741
Email:	Email: Gallardo-DalyC@san-
brittney.cozzolino@coastal.ca.gov	clemente.org

SCOPE OF WORK

Name of Local Government: City of San Clemente

Name of Project: LCP Nature Based Coastal Resiliency Pilot Project

Funding Source: General Fund

Specific Program: Local Coastal Program Local Assistance Grant Program

Federal Tax ID#: 95-6000775

Budget Summary:

 CCC funding:
 \$570,000

 Other funding:
 \$320,000

 Total project cost:
 \$890,000

Term of Project: June 1, 2022 (or Grant execution date) through December 31, 2025

A. PROJECT DESCRIPTION The focus of this Project is to enable the City to move forward with implementing key recommendations contained in the City's Coastal Resiliency Plan including (Task 1) re-establishing an ongoing, annual shoreline monitoring program to document the condition of the City's public beaches and to establish baseline conditions, against which future sea level rise effects can be quantified and to prepare a feasibility study focused on critical erosion hot spots and opportunities to (Task 2) develop nature-based pilot project(s) that provide multiple public benefits. The Project also includes (Task 3) a focused LCP Amendment to incorporate the Project findings and recommendations, as applicable.

B. TASKS

Task 1. Re-Establish Beach and Shoreline Monitoring Program

The City will re-establish a shoreline monitoring program to address a historic gap. The data to be generated by the City's program will be important locally and regionally, as it will inform and enable a bigger picture view of shoreline management activities and information taking a regional/littoral cell approach instead of a local or city-centric approach. The general objective of this first Task is to build a sustainable database of nearshore beach changes in the San Clemente vicinity, thereby providing a basis for evaluating the impacts of natural events (e.g., sea level rise and El Niño conditions) and human intervention (e.g., beach nourishment). The data will be used to develop a comprehensive understanding of seasonal, annual, and long-term coastal changes in the region. The program results will provide

planners and engineers with the data needed to make informed decisions for coastal preservation, enhancement, coastal construction, and sea level rise adaptation. The specific subtasks that are proposed include the following:

- Subtask 1.1 Transect Recovery / Re-establishment The consultant will conduct a one-day monument re-establishment effort prior to the first beach profile survey. An attempt will be made to recover each of the historical survey monuments. If a monument is found to be missing or destroyed, it will be reestablished using RTK-GPS techniques. To the extent possible, permanent markers will be placed at locations outside of the railroad right-of-way. This is a one-time task that will not be required for future efforts. All survey control will be updated to the current horizontal datum: California State Plane Zone 6, NAD83(2011) 2010.00 epoch. The vertical datum will be National Ocean Service (NOS) Mean Lower Low Water (MLLW) for the 1983-2001 Tidal Datum Epoch.
- Subtask 1.2 Fall & Spring 2022 2025 Field Survey Activities The consultant will acquire beach profile data along 12 shore-perpendicular beach profile transects located between Doheny State Beach and Cotton's Point. The data acquired along each transect will form a continuous profile from the back beach to the offshore terminus of the transect (the 45 ft, MLLW isobath). Bathymetric data will be collected from the offshore terminus (~-45 ft, MLLW) to the surfzone with a digital acoustic echo sounder operated from a shallow-draft inflatable survey vessel. The consultant will survey the beach and surf zone (back beach to ~-10 ft, MLLW) using a total station and a survey rodman. The total station will be operated from the beach to determine the position and elevation at each location occupied by the rodman. The rodman will gather data from the back beach through the surf zone to the calmer waters offshore to obtain data overlap with the survey vessel. To the extent possible, the Fall surveys will be conducted during October each year and the Spring surveys will be conducted during May each year. It should be noted that field operations must be limited to periods of favorable weather conditions, including light winds and waves less than about three feet.
- Subtask 1.3 Fall & Spring 2022– 2025 Data Reduction and Reporting The consultant will take data collected with the total station and convert it to x,y,z coordinates based on the position of the survey markers. The bathymetric data acquired from the survey vessel will be processed using Hypack software to merge the GPS positions with the measured depths (soundings). The depths will be adjusted to MLLW datum utilizing tide measurements collected by the U.S. Department of Commerce, NOAA, at La Jolla. The water levels recorded in La Jolla will be adjusted to the San Clemente site using the time and height differences published by NOAA. The processed soundings will be merged with the wading (total station) data, and the resulting information will be used to create a continuous beach profile. In developing the cost estimate, it was assumed that the survey crew will be able to access the beach with an ATV. It also is assumed that a railroad flagperson will not be required This assumption was verified in December 2017 by engaging SCRRA to confirm that beach profile surveys would not require special access even though

portions of several transects are located within the railroad right-of- way. A concise report will be prepared for each Fall and Spring survey which documents the survey methods and results. The survey data will be submitted in both tabular and graphical form for each surveyed transect. The graphical plots will include selected historical data, where applicable. In addition, the report will include tabulations of Mean Sea Level and Mean High Water beach widths, and general observations based on the profile plots and Mean Sea Level beach widths. The final letter report will be delivered to the City no more than 90 days after completing each survey.

Task 1 Outcomes/Deliverables

- Fall and Spring surveys in 2022 2025
- Survey reports
- Annual PowerPoint Presentation made to the City's Beaches, Parks and Recreation Commission, Planning Commission and/or City Council.

The City will also make the information publicly available by publishing it on the City's LCP webpage and key deliverables will be provided to the Commission as well.

Task 2: Nature Based Coastal Resiliency Pilot Project(s) Feasibility Study

This Task builds on, and utilizes, the information collected by Grant Task 1 (Shoreline Monitoring Program) and is intended to facilitate key recommendations contained in the City's 2021 Coastal Resiliency Plan, funded in part by a Commission Round 5 LCP Grant and the 2019 Sea Level Rise Vulnerability Assessment (SLRVA) partially funded by a Commission Round 3 LCP Grant. The Coastal Resiliency Plan (Plan) identifies the actions, strategies, plans, and programs that the City can implement to improve long-term coastal resiliency in San Clemente. A key recommendation in the Plan (see Executive Summary, Page 7) is to "Prepare a feasibility study to identify critical erosion hot spots in the City and develop one or more pilot projects that provide multiple benefits (e.g., sand retention and ecosystem benefits) such as a living shoreline, coastal dune system or cobble berm structure." This Task will implement this high priority SLR adaptation measure. Based on a January 2016 biological inventory report prepared for the City as part of the comprehensive update to the LUP, fore dunes on the sandy beach were identified as were remnants of scrub dunes. One of the Coastal Resiliency Projects will be to evaluate the potential to restore or rebuild these coastal dune systems to function as shoreline protection and to provide educational opportunities and ecosystem enhancement. Task 2 subtasks are summarized below.

• Subtask 2.1 Contractor Onboarding and Project Kickoff - This task will be wholly conducted by City staff/contractors following standard City practices. A kickoff meeting will be organized by City staff/contractors as soon as possible in 2022 once the Grant paperwork is completed and signed by all parties. In this meeting the scope and schedule

will be refined as needed and the City will define overall goals and objectives for this pilot project.

- Subtask 2.2 Data Collection to identify critical erosion areas/hot spots This task will be conducted by the consultant(s) with support from City staff/contractors. This task will support an opportunities and constraints analysis and involve a literature review for data on the sediment budget in this part of the littoral cell, field reconnaissance and resource mapping, compilation of wind and wave run-up data. This task also involves interviews with City staff and others for known/historic areas of erosion.
- Subtask 2.3 Public Outreach Program This task will involve both City staff/contractors and the consultant team and will be initiated shortly after project kickoff to ensure meaningful opportunities for public engagement occur regularly throughout the process. The first public outreach meeting will likely be held via a City Beaches, Parks and Recreation Commission meeting to maximize stakeholder engagement. The City will conduct up to four (4) public outreach meetings as part of this Task to obtain feedback from the community and interested stakeholders on locations and project types that should be considered as well as opportunities for public review and comment and contributions of citizen science, on the Draft Reconnaissance Study Report.
- Subtask 2.4 City staff and CCC staff Coordination This task will be led by City staff/contractors and will be initiated shortly after the consultant team is under contract and at regular check in points (at least twice per year) for the duration of the contract. The consultant will participate in these coordination meetings (virtual or in person) as required.
- Subtask 2.5 Develop Nature Based Resiliency Concept Designs This task involves the preparation of schematic conceptual designs for multiple, nature-based solutions for the City's publicly- and privately- owned beaches depending on the outcomes of previous tasks. Task 2.2, above, will inform what works and/or is desired in San Clemente. These preliminary design concepts will be evaluated for function and performance as well as for potential impacts upcoast and downcoast and will be at an approximately 30% design level to support future additional technical analyses and a future environmental review phase as appropriate/necessary. Consideration for scaling and replicating other example nature-based resiliency projects, elsewhere in California will be included.
- Subtask 2.6 Identity Permit Requirements, Data Needs and Funding Opportunities Based on the outcome of the previous task, this list would be developed to identify all potential permit/ approvals needed as well as the agencies responsible for issuing permits. This task will also identify the anticipated level of CEQA/NEPA review for the pilot projects, as appropriate and any data gaps or additional technical studies and outline performance goals and a monitoring program required to support project advancement and community buy-in. A preliminary list of funding sources will also be identified as part of this subtask.

• Subtask 2.7 Prepare Preliminary Design & Feasibility Report — This task involves preparation of an internal draft, public review draft and final report compiling/encompassing the information obtained from all previous tasks. There will be a minimum 30-day public and CCC staff comment period for the public review draft. The final report will be revised to address public and CCC staff comments, and will summarize all opportunities and constraints and include project recommendations for implementation and next steps for consideration. The final report will be submitted to the Commission as a final deliverable for this Task.

Task 2 Outcomes / Deliverables

- Public review draft(s) of the Preliminary Design & Feasibility Report
- Final draft of the Preliminary Design & Feasibility Report
- PowerPoint Presentations made to the City's Beaches, Parks and Recreation Commission,
 Planning Commission and/or City Council.

The City will also make the information publicly available by publishing it on the City's LCP webpage and key deliverables will also be provided to Coastal Commission staff.

- Task 3. Prepare a focused LCP Amendment to incorporate the findings and recommendations from Task 1 and Task 2 deliverables. City Staff will prepare and submit a focused Local Coastal Program (LCP) Amendment (involving LUP Amendments and/or IP Amendments if the IP has been certified) to the California Coastal Commission incorporating the findings and recommendations contained in the Task 1 Beach & Shoreline Monitoring Program and Task 2 Nature Based Coastal Resiliency Pilot Project Feasibility Study. Related desired and/or necessary LCP amendments may be bundled with this effort, as needed based on ongoing coordination with California Coastal Commission staff. Task 3 subtasks are summarized below.
 - Subtask 3.1 Preparation of Draft LCP Amendment. The City will initiate this task as early in the process as possible; however, the specific content of the LCP Amendment is dependent on the outcomes, findings and recommendations of Tasks 1 & 2 and may include additional desired or necessary LCP Amendments, as noted above under the Task 3 description.
 - Subtask 3.2 Public Outreach and Public Comment Period. Public outreach will be conducted and the City will publish the draft LCP amendment for a six-week public review and comment period. The draft LCP amendment will concurrently be submitted to CCC staff for a six-week review and comment period. The City will schedule at least one meeting with CCC staff after CCC staff comments are received and before the City revises the draft LCP Amendment(s) as part of Subtask 3.3. The City will conduct at least two (2) public outreach/community engagement meetings, anticipated to be held in conjunction

with the City's Beaches, Parks and Recreation Commission and the City's Planning Commission.

• Subtask 3.3. Revise Draft LCP Amendment(s), Local Adoption, and CCC Submittal. City staff/contractor will revise the Draft LCP Amendment(s) to address public review comments and CCC staff review comments. As part of this task, City staff/contractor will take the revised draft LCP Amendment(s) to the City Council for adoption with a request to authorize formal submittal to the CCC for processing. Following Council authorization, City staff/contractor will formally submit the LCP Amendment(s) to the CCC.

Task 3 Outcomes/Deliverables

- Draft LCP Amendment(s)
- Public outreach meetings (at least 2) which may be combined with public outreach efforts listed above due to timing considerations
- Revised LCP Amendment(s) and relevant staff reports as presented to the City's Beaches, Parks and Recreation Commission, Planning Commission and/or City Council.
- Locally adopted LCP Amendment(s) submitted to the Coastal Commission

The City will also make the information publicly available by publishing it on the City's LCP webpage.

C. SCHEDULE

Project start/end dates: June 1, 2022 (or Grant Execution Date) / December 31, 2025

Task 1. Beach & Shoreline Monitoring Program	Projected start/end dates:
1.1 Transect Recovery / Re-establishment	June 2022 – September 2022
1.2 Fall & Spring 2022-2025 Field Survey Activities	September 2022 - October 2025
1.3 Fall & Spring 2022-2025 Data Reduction and Reporting	October 2022-December 2025
Outcome/Deliverables:	
a. Fall and Spring Surveys	a. Annually 2022-2025
b. Fall and Spring Reports	b. Annually 2023-2025
c. Annual Reports and Presentations	c. Annually 2022-2025
Task 2. Nature Based Coastal Resiliency Pilot	Projected start/end dates:
Project Feasibility Study	Projected start/end dates.
2.1 Contractor Onboarding & Project Kickoff	June 2022 – September 2022
2.2 Data Collection – identify critical erosion areas	September 2022 – December 2022
2.3 Public Outreach	June 2022 – December 2025

2.4 City and CCC Coordination	June 2022 – December 2025		
2.5 Develop Nature Based Solution Concepts	January 2023 – December 2023		
2.6 Identity Permit Requirements & Data Needs	January 2024 – December 2024		
2.7 Preliminary Design & Feasibility Report	January 2025 – December 2025		
Outcome/Deliverables:			
 a. Identify Critical Erosion Areas in City b. Resiliency Concepts Developed c. Draft Preliminary Design & Feasibility Report d. Final Preliminary Design & Feasibility 	a. December 2022b. December 2023c. December 2024d. December 2025		
Report Complete	Drainstad start land dates:		
·	Projected start/end dates:		
Task 3. LCP Amendment(s) 3.1 Preparation of Draft LCP Amendment(s)	Projected start/end dates: January 2024 – December 2024 January 2025 – June 2025		
Task 3. LCP Amendment(s)	1		
Task 3. LCP Amendment(s) 3.1 Preparation of Draft LCP Amendment(s) 3.2 Public Outreach and Public Comment Period 3.3 Revise LCP Amendment(s), Local Adoption, and	January 2024 – December 2024 January 2025 – June 2025		

D. BENCHMARK SCHEDULE

ACTIVITY	COMPLETION DATE(S)
Shoreline Transect Recovery / Re-Establishment	June 2022 – September 2022
Annual Shoreline Monitoring Report Presentation	February 2023, 2024 & 2025
City Issues RFP for Coastal Resiliency Pilot Project	Spring/Summer 2022
City & Contractor Kickoff Meeting	Summer 2022
1st Public Meeting with Stakeholders	Summer/Fall 2022
Identification of Critical Erosion Areas in City	December 2022
Coastal Resiliency Concept Report completed	December 2023
Initiate Preparation of Draft LCP Amendment	January 2024

Identity Permit Requirements, Data Needs & Funding	December 2024
Final Preliminary Design & Feasibility Report	December 2025
Local Public Hearings on the LCPA(s)	Jan. – Dec. 2025
Submit LCP Amendment(s) to CCC	December 2025

DEFINITIONS

- 1. The term "Agreement"; this Grant Agreement.
- 2. The term "Budget Act"; the annual enacted version of the Budget Bill which makes appropriations for the support of the government of the State of California.
- 3. The term "Chief Deputy Director"; the Chief Deputy Director of the Commission.
- 4. The terms "Commission" or "Coastal Commission" and the acronym "CCC" all refer to the California Coastal Commission.
- 5. The term "Executive Director"; the Executive Director of the Commission.
- 6. The term "Grant" or "Grant Funds"; in the case of LCP grants, the money provided by the California Climate Investments program or, in the case of Public Education grants, sales and renewals of the Whale Tail® Specialty License Plate, or California's Voluntary Tax Check-Off Program, and administered by the Coastal Commission to the Grantee pursuant to this Agreement.
- 7. The term "Grant Manager"; the representative of the Commission with authorization per the Executive Director to administer and provide oversight of the Grant.
- 8. The term "Grantee"; an applicant who has a signed agreement for Grant Funds.
- 9. The term "Project"; the activity described under the Scope of Work, attached as EXHIBIT A, to be accomplished with Grant Funds.
- 10. The term "Project Budget"; the Commission approved cost estimate submitted to the Commission's Grant Manager for the Project. The Project Budget shall describe all labor and material costs of completing each component of the Project. The Project Budget shall contain itemized amounts permissible for each item or task described in the Scope of Work. The Project Budget must include the set administrative and indirect costs agreed upon by the Parties if applicable.
- 11. The term "Public Agency"; any State of California department or agency, a county, city, public district or public agency formed under California law.
- 12. The term "Scope of Work" refers to EXHIBIT A, including the approved Project Description, Tasks, and Schedules.
- 13. The term "Termination Date"; the date by which all activity for the project must be concluded, as specified in the signature page of this Agreement. Work performed after this date cannot be reimbursed.

EXHIBIT B

BUDGET

City of San Clemente	CCC Grant Total	Match/Other Funds	Total (LCP Grant Funds + Match/ Other Funds)
	LABOR COST	S ¹	
County/City Staff Labor			
Task 1 – Beach & Shoreline Monitoring Program		\$75,000	\$75,000
Task 2 – Coastal Resiliency Pilot Project Feasibility Study		\$175,000	\$175,000
Task 3 – LCP Amendment	\$50,000	\$50,000	\$100,000
Total Labor Costs	\$50,000	\$300,000	\$350,000
	DIRECT COST	S	
Co	ounty/City Staff Proje	ect Supplies	
Task 1 – Beach & Shoreline Monitoring Program	,, ,	\$5,000	\$5,000
Task 2 – Coastal Resiliency Pilot Project Feasibility Study		\$10,000	\$10,000
Task 3 – LCP Amendment		\$5,000	\$5,000
Total		\$20,000	\$20,000
C	ounty/City Staff Trav	el in State ²	
Mileage			
Hotel, etc.			
Total			
	Consultants ³ /Pai	rtners	
Consultant A: Coastal Frontiers Corp. Task 1 – Beach & shoreline Monitoring Program	\$220,000		\$220,000
Consultant B: TBD Via RFP Process Task 2 – Coastal Resiliency Pilot Project Feasibility Study	\$300,000		\$300,000
Consultants Total	\$520,000		\$520,000
Total Direct Costs	\$520,000	\$20,000	\$560,000

¹ Amount requested should include total for salary and benefits.

² Travel reimbursement rates are the same as similarly situated state employees.

³ All consultants must be selected pursuant to a bidding and procurement process that complies with all applicable laws.

EXHIBIT B

City of San Clemente	CCC Grant Total	Match/Other Funds	Total (LCP Grant Funds + Match/ Other Funds)
OVERHEAD/INDIRECT COSTS ⁴			
Total County/City Staff Overhead/Indirect Costs			
TOTAL PROJECT COST	\$570,000	\$320,000	\$890,000

⁴ Indirect costs include, for example, a pro rata share of rent, utilities, and salaries for certain positions indirectly supporting the proposed project but not directly staffing it. Amount requested for indirect costs should be capped at 10% of amount requested for "Total Labor."