Item 5

Staff Recommendation
February 16, 2021

Consideration of Authorization to Disburse Proposition 68 Funds for Projects Advancing Statewide Coastal Resilience

Michaela Miller, Climate Change Sea Grant Fellow

RECOMMENDED ACTION: Staff recommends that OPC approve the disbursement of $8,056,761 to various grantees for projects advancing statewide coastal resilience through implementation, planning and design, adaptation planning and coordination, and research, as follows:

$2,957,901 for Implementation Projects:

5a. $1,667,000 to the Port of San Francisco for "Heron's Head Park Shoreline Resilience"

5b. $1,290,901 to the Elkhorn Slough Foundation for "Elkhorn Slough Tidal Marsh Restoration: Phase III"

$784,000 for Planning and Design Projects:

5c. $339,000 to Marin County Parks for "Bolinas Lagoon Wye Wetlands Project"

5d. $445,000 to the City of Imperial Beach for "Bayshore Bikeway Resiliency Project – Creation of a Coastal Resilience Corridor in Imperial Beach"

$3,275,170 for Adaptation Planning and Coordination Projects:

5e. $250,000 to the Wiyot Tribe for "Wiyot Climate Change Adaptation Plan Phase 1".

5f. $214,500 to Orange County Parks for "South Orange County Regional Coastal Resilience Strategic Plan"

5g. $607,376 to Coastal Quest for "Planning Regional Coastal Resiliency for California State Parks and Piloting in San Diego Coast District"

5h. $591,813 to San Diego Regional Climate Collaborative for "Establishing a San Diego Regional Coastal Resilience Roadmap to Enable Project-Based Action and Investment"

5i. $396,000 to the County of Marin Community Development Agency for "Stinson Beach ARC: Adaptation and Resilience Collaboration".

5j. $440,000 to the City of Trinidad for "Trinidad Community Coastal Resiliency Planning Project"

5k. $450,800 to Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) for "BEACON Regional Coastal Resilience Sediment Pilot Program"

5l. $324,681 to Richardson's Bay Regional Agency (RBRA) for "Richardson's Bay Eelgrass Protection & Management Plan – Phase 1 Implementation"

$1,039,690 for Research Projects:

5m. $346,290 to University of California Santa Cruz (UCSC) for "Quantifying the social and economic benefits of nature-based adaptation solutions to protect San Mateo County from storms and sea-level rise"

5n. $294,798 to Audubon California for "Eelgrass Habitat Suitability Model Update for Targeted, Climate-Smart Eelgrass Restoration in San Francisco Bay"

5o. $398,602 to University of California Santa Barbara (UCSB) for "Evaluating Adaptation Planning in Coastal California"

LOCATION: Statewide; see Exhibits for more detailed project specific locations.

STRATEGIC PLAN OBJECTIVE(S): 1.1: Build Resiliency to Sea-Level Rise, Coastal Storms, Erosion, and Flooding; 2.1: Enhance Engagement with Tribes; 2.2: Enhance Engagement with Underserved Communities; 2.3: Improve Coastal Access; and 3.1: Protect and Restore Coastal and Marine Ecosystems.

EXHIBITS:

Item 5a: Heron's Head Park Shoreline Resilience
- 5a1 Project Location Map and Project Area Map
- 5a2 Notice of Exemption
- 5a3 Draft Design Plans
- 5a4 Letters of Support

Item 5b: Elkhorn Slough Tidal Marsh Restoration: Phase III
- 5b1 Project Location Map and Project Area Map
- 5b2 Notice of Determination
- 5b3 Letters of Support

Item 5c: Bolinas Lagoon Wye Wetlands Project
- 5c1 Project Location Map and Project Area Map
- 5c2 Letters of Support

Item 5d: Bayshore Bikeway Resiliency Project – Creation of a Coastal Resilience Corridor in Imperial Beach
- 5d1 Project Location Map and Project Area Map
- 5d2 Letters of Support

Item 5e: Wiyot Climate Change Adaptation Plan Phase I
- 5e1 Project Location Map
- 5e2 Letters of Support

Item 5f: South Orange County Regional Coastal Resilience Strategic Plan
- 5f1 Project Location Map
- 5f2 Letters of Support

Item 5g: Planning Regional Coastal Resiliency for California State Parks and Piloting in San Diego Coast District
- 5g1 Project Location Map
- 5g2 Letters of Support

Item 5h: Establishing a San Diego Regional Coastal Resilience Roadmap to Enable Project-Based Action and Investment
- 5h1 Project Location Map
- 5h2 Letters of Support

Item 5i: Stinson Beach: Adaptation and Resilience Collaboration
- 5i1 Project Location Map
- 5i2 Letters of Support

Item 5j: Trinidad Community Coastal Resiliency Planning Project
- 5j1 Project Location Map
- 5j2 Letters of Support

Item 5k: BEACON Regional Coastal Resilience Sediment Pilot Program
- 5k1 Project Location Map
- 5k2 Letters of Support

Item 5l: Richardson's Bay Eelgrass Protection & Management Plan – Phase I Implementation
- 5l1 Project Location Map
- 5l2 Letters of Support

Item 5m: Quantifying the social and economic benefits of nature-based adaptation solutions to protect San Mateo County from storms and sea-level rise
- 5m1 Project Location Map
- 5m2 Letters of Support

Item 5n: Eelgrass Habitat Suitability Model Update for Targeted, Climate-Smart Eelgrass Restoration in San Francisco Bay
- 5n1 Project Location Map
- 5n2 Letters of Support

Item 5o: Evaluating Adaptation Planning in Coastal California
- 5o1 Letters of Support

FINDINGS AND RESOLUTION:

Staff recommends that the Ocean Protection Council (OPC) adopt the following findings and direct it to file relevant notices of determination or exemption:

"Based on the accompanying staff report and attached exhibit(s), OPC hereby finds that:

1) The proposed projects are consistent with the purposes of Division 26.5 of the Public Resources Code, the Ocean Protection Act.
2) The proposed projects are consistent with OPC's Proposition 68 Grant Guidelines, adopted May 2019.
3) The proposed projects address the California Environmental Quality Act (CEQA), as follows:

   Heron's Head Park Shoreline Resilience: OPC has determined that this project is a small habitat restoration project which is categorically exempt from CEQA pursuant to Public Resources Code section, section 15333. A Notice of Exemption (Categorical Exemption 15333) was filed with the State CEQA Clearinghouse on November 12, 2020 (Case number 2019-003714ENV). OPC has reviewed and considered this exemption and agrees that the exemption satisfies CEQA requirements.

   Elkhorn Slough Tidal Marsh Restoration: Phase III: OPC has reviewed CEQA documents as follows: A Mitigated Negative Declaration for this project was prepared by the California Department of Fish and Wildlife, which is the lead agency for CEQA compliance, and it was certified in August 2015. OPC staff recommends that the mitigation and avoidance measures identified in the MND (Exhibit 2b3) be adopted as a condition of OPC's approval.

   Bolinas Lagoon Wye Wetlands Project: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

   Bayshore Bikeway Resiliency Project – Creation of a Coastal Resilience Corridor in Imperial Beach: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA."

   Wiyot Climate Change Adaptation Plan: Phase I: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

   South Orange County Regional Coastal Resilience Strategic Plan: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Planning Regional Coastal Resiliency for California State Parks and Piloting in San Diego Coast District: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Establishing a San Diego Regional Coastal Resilience Roadmap to Enable Project-Based Action and Investment: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Stinson Beach ARC: Adaptation and Resilience Collaboration: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA**.**

Trinidad Community Coastal Resiliency Planning Project: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

BEACON Regional Coastal Resilience Sediment Pilot Program: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Richardson's Bay Eelgrass Protection and Management Plan: Phase I Implementation: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Quantifying the social and economic benefits of nature-based adaptation solutions to protect San Mateo County from storms and sea-level rise: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA**.**

Eelgrass Habitat Suitability Model Update for Targeted, Climate-Smart Eelgrass Restoration in San Francisco Bay: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Evaluating Adaptation Planning in Coastal California: This project does not trigger CEQA, pursuant to CEQA guidelines section 15262, Feasibility and Planning Studies are statutorily exempt from CEQA.

Staff further recommends that OPC adopt the following resolution pursuant to Sections 35500 *et seq.* of the Public Resources Code:

"OPC hereby approves the disbursement of $8,056,761 up to the following amounts to the following grantees:

- $1,667,000 to the Port of San Francisco for “Heron’s Head Park Shoreline Resilience”
- $1,290,901 to the Elkhorn Slough Foundation for “Elkhorn Slough Tidal Marsh Restoration: Phase III”
- $339,000 to Marin County Parks for “Bolinas Lagoon Wye Wetlands Project”.
- $445,000 to the City of Imperial Beach for “Bayshore Bikeway Resiliency Project – Creation of a Coastal Resilience Corridor in Imperial Beach”
- $250,000 to the Wiyot Tribe for “Wiyot Climate Change Adaptation Plan Phase 1”
- $214,500 to Orange County Parks for “South Orange County Regional Coastal Resilience Strategic Plan”
- $607,376 to Coastal Quest for “Planning Regional Coastal Resiliency for California State Parks and Piloting in San Diego Coast District”
- $591,813 to San Diego Regional Climate Collaborative for “Establishing a San Diego Regional Coastal Resilience Roadmap to Enable Project-Based Action and Investment”
- $396,000 to the County of Marin Community Development Agency for “Stinson Beach ARC: Adaptation and Resilience Collaboration”
- $440,000 to the City of Trinidad for “Trinidad Community Coastal Resiliency Planning Project”
- $450,800 to Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) for “BEACON Regional Coastal Resilience Sediment Pilot Program”
- $324,681 to Richardson’s Bay Regional Agency (RBRA) for “Richardson’s Bay Eelgrass Protection & Management Plan – Phase 1 Implementation”
- $346,290 to University of California Santa Cruz (UCSC) for “Quantifying the social and economic benefits of nature-based adaptation solutions to protect San Mateo County from storms and sea-level rise”
- $294,798 to Audubon California for “Eelgrass Habitat Suitability Model Update for Targeted, Climate-Smart Eelgrass Restoration in San Francisco Bay”
- $398,602 to University of California Santa Barbara (UCSB) for “Evaluating Adaptation Planning in Coastal California”

This authorization is subject to the condition that prior to disbursement of funds, all of the above-referenced grantees shall submit for the review and approval of the Executive Director of the OPC detailed work plans, schedules, staff requirements, budgets, and the names of any contractors intended to be used to complete the projects, as well as discrete deliverables that can be produced in intervals to ensure the projects are on target for successful completion. All projects will be developed under a shared understanding of process, management and delivery.”

IMPLEMENTATION PROJECT SUMMARIES:

5a: Heron's Head Park Shoreline Resilience, Port of San Francisco

Project Description
This project will use a nature-based shoreline approach to protect and restore wetland habitat, improve ecological function of diverse intertidal habitats, and enable the shoreline to adapt to sea-level rise (SLR). The major components of this project are to construct a dynamically stable coarse beach along the eroding shoreline; fabricate and install oyster reef structures; restore tidal salt marsh plant habitat; and monitor project outcomes, share findings, and take adaptive management.

Heron's Head Park is owned and managed by the Port of San Francisco and located in the economically disadvantaged Bayview Hunters Point neighborhood. It is an approximately 21-acre peninsula comprised of 14 acres of public open space, including an environmental education center (The EcoCenter), and approximately 7 acres of tidal wetlands, tidal ponds, mudflats, and rocky intertidal shoreline. Heron's Head Park provides valuable tidal marsh habitat for wildlife and equitable, convenient, and affordable access to natural coastal open space, education, and recreation in a neighborhood where such resources are scarce.

This project will engage the surrounding community in implementation through partnership with Literacy for Environmental Justice (LEJ) which is a community-based non-profit environmental education organization created specifically to address the ecological and health concerns of Bayview Hunter's Point and the surrounding communities. The Port has partnered with LEJ to restore the tidal salt marsh, and restoration activities will be conducted by LEJ's "Eco-Apprentices", low-income, predominantly minority transitional-age youth (ages 18-26) with an interest in habitat restoration. This project demonstrates how marsh-fringing beach and other living shoreline elements can be integrated to create a resilient shoreline, thereby contributing to statewide efforts to develop technical understanding and implementation of natural systems-based approaches to shoreline stabilization.

This project meets the criteria of providing benefits to a severely disadvantaged community.

Refer to Exhibit 5a1 for a map of the project location.

Project Timeline
Construction of the shoreline would begin in August of 2021 and continue through January of 2022. The fabrication and installation of Oyster Reef Balls will begin in August 2021 and continue through August 2022. Restoration of tidal marsh plants, funded by the San Francisco Bay Restoration Authority, has already begun in November of 2020 and will continue through October 2025. Data collection, monitoring, and adaptive management

funded by the San Francisco Bay Restoration Authority and the Port will begin in February of 2022 and continue for 10 years through January 2032.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $1,667,000 to The Port of San Francisco for the Heron's Head Park Shoreline Resilience Project. The proposed project may not require expenditure of the full $1,667,000.

Ocean Protection Council Prop 68	**$1,667,000**
OPC Total	**$1,667,000**
Hansen Aggregates Mid-Pacific Inc.	$417,000
Port of SF	$708,000
SF Bay Restoration Authority	$297,000
Total Non-OPC Match	**$1,431,000**
TOTAL	**$3,098,000**

5b: Elkhorn Slough Tidal Marsh Restoration: Phase III, Elkhorn Slough Foundation

Project Description
This project will restore lost habitat, improve water quality, reduce tidal scour, sequester carbon, enhance climate change resilience, and restore foundational species and vital coastal habitats in Elkhorn Slough. This integrated ecosystem-based approach to restoration will benefit the entire Elkhorn Slough ecosystem and provide long-term benefits and build resilience for multiple habitat types. Specifically, the project will complete the last 30 acres of a 119-acre tidal marsh restoration project by adding approximately 130,000 cubic yards of sediment; restoring three acres of coastal grassland in areas where topsoil was removed for marsh restoration; planting at least 800 eelgrass shoots for restoration and monitoring in the main channels; and restoring at least 50,000 juvenile Olympia oysters to bring back the population from extinction. All the restoration will take place on the Elkhorn Slough National Estuarine Research Reserve, which is owned by the California Department of Fish and Wildlife and managed in partnership with the National Oceanic and Atmospheric Administration.

Over the past 150 years, human actions have altered the tidal, freshwater, and sediment processes that are essential to sustain Elkhorn Slough, leading to a reduction of over 50% of tidal marsh and eelgrass beds and near decimation of the native Olympia oyster population in the slough. Restoration of these estuarine habitats along this section of the California coast carries particular significance due to their rarity in the region. Elkhorn Slough is a regional conservation priority as it hosts the greatest extent of estuarine wetlands on the 600+ mile stretch of coast between San Francisco and Mexico. It supports remarkable biological diversity and is an important breeding area for many species. Portions of Elkhorn Slough are a designated Ramsar site, Marine Protected Area,

State Ecological Reserve and Wildlife Management Area. Elkhorn Slough also supports ecotourism in the region. The execution of this grant is dependent on all permits being in place.

This project meets the criteria of providing benefits to a disadvantaged community.

Refer to Exhibit 5b1 for a map of the project location.

Project Timeline
Tidal marsh and coastal grassland restoration and monitoring will begin in Fall 2021 and continue through Fall 2024. Eelgrass restoration and monitoring will begin in Spring 2022 and continue through Fall 2024. Oyster restoration with aquaculture will begin in Spring 2021 and continue through Fall 2024, and conservation aquaculture experiments and modelling will happen throughout the same time period. Education, outreach, and training will begin in Fall 2022 and continue through Fall 2024.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $1,290,901 to The Elkhorn Slough Foundation for the Elkhorn Slough Tidal Marsh Restoration: Phase III Project. The proposed project may not require expenditure of the full $1,290,901.

Ocean Protection Council Prop 68	**$1,290,901**
OPC Total	**$1,290,901**
National Coastal Wetlands Program	$980,000
Total Non-OPC Match	$980,000
TOTAL	$2,270,901

PLANNING AND DESIGN PROJECT SUMMARIES

5c: Bolinas Lagoon Wye Wetlands Project, Marin County Parks

Project Description
This project will fund advanced and final designs for the Bolinas Wye Wetlands Resiliency Project, which will protect this site's unique ecosystems, restore geomorphic and hydrologic processes, and improve ecologic function. Its focus is addressing the three roads and culvert that bisect the Project area's wetlands. Recent studies have found the lagoon will see significant wetland habitat loss and increased road flooding with SLR unless water can spread into areas now cut off by the roads and culvert. Restoration at this site is critical, as it is the only place in the lagoon that can accommodate wetland migration and where contiguous public lands will be protected in perpetuity.

Bolinas Lagoon is located in Marin County, California, just north of San Francisco. This

1,100-acre tidal estuary is one of only four Ramsar-designated Wetlands of International Importance on the West Coast. It is a vital stopping point along the Pacific Flyway and has been designated an Audubon Important Bird Area in recognition of its valuable open water, mudflat, and marsh habitats. The northern end of Bolinas Lagoon's creeks and marshes have been impacted by historical land use and by roads, undersized culverts, and channelization that disconnect creek and floodplain, block water and sediment movement, and prevent wetland migration with SLR. The project area includes habitat for listed species such as steelhead, California red-legged frogs, and California black rails.

This is a multi-benefit project which will protect an important coastal estuary from the future impacts of climate change; enhance wetland biodiversity by removing non-native invasive species; prevent the loss and improve the resiliency of the wetlands complex by restoring hydrologic and geomorphic processes; safeguard the main community access road from flooding; and, improve habitat for anadromous and other locally important fisheries species.

Refer to Exhibit 5c1 for a map of the project location.

Project Timeline
Advanced design plans (60%-90%) will begin in March 2021 and finish in June 2021. The Technical Advisory Committee will review design plans in June 2021, and final design will be approved in June 2021. Baseline monitoring studies that will inform the design and sequential permitting will begin in March 2021 and continue through June 2021.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $339,000 to Marin County Parks for the Bolinas Lagoon Wye Wetlands Project. The proposed project may not require expenditure of the full $339,000.

Ocean Protection Council Prop 68	**$339,000**
OPC Total	**$339,000**
Marin County Parks – Measure A	$872,000
Golden Gate Parks Conservancy	$10,000
State Coastal Conservancy – Prop 1	$160,000
Total Non-OPC Match	$1,052,000
TOTAL	$1,391,000

5d: Bayshore Bikeway Resiliency Project – Creation of a Coastal Resilience Corridor in Imperial Beach, City of Imperial Beach

Project Description
The Bayshore Bikeway Resiliency Project will retrofit a 1.2-mile segment of the San Diego

Bayshore Bikeway (Bikeway) to provide multiple benefits to the disadvantaged communities of Imperial Beach including flood protection, SLR resilience, enhanced coastal access, and ecosystem resilience. The Bikeway is a heavily used recreational corridor adjacent to the coastal communities of National City, Chula Vista, San Diego, Coronado, and Imperial Beach. The project area is one of the most vulnerable segments of Imperial Beach to coastal flooding and is currently prone to flooding during existing extreme tides.

The Bikeway alignment presents a unique opportunity to repurpose the existing path into a multi-benefit coastal resilience corridor that protects multiple vulnerable communities, a state highway, and the Bikeway from current and future coastal flooding while improving coastal access and adding transitional habitat areas. To accomplish these objectives, the project will develop concepts using a variety of nature-based features and adaptation strategies including a living levee; coastal trail enhancements; habitat enhancements; and stormwater treatment wetland.

Development of resilient strategies within this 1.2-mile reach will provide a proof-of-concept that could be applied along other segments of the 24-mile bikeway corridor to protect communities with similar needs.

This project meets the criteria of providing benefits to a severely disadvantaged community.

Refer to Exhibit 5d1 for a map of the project location.

Project Timeline
Concept developing and feasibility will begin in July 2021 and continue through February 2022, where conceptual design drawings and alternatives will be created and presented. Outreach to the community and local stakeholders will begin in Fall 2021 and continue through March 2022. Preliminary engineering plans (30% design drawings) and a preliminary basis of the design report will begin in March 2022 and be completed in August 2022, which will provide sufficient detail for permit applications, CEQA analyses, and cost estimating for the next phase of the project.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $445,000 to The City of Imperial Beach for The Bayshore Bikeway Resiliency Project - Creation of a Coastal Resilience Corridor in Imperial Beach. The proposed project may not require expenditure of the full $445,000.

Ocean Protection Council Prop 68	**$445,000**
OPC Total	**$445,000**
City of Imperial Beach In-Kind Contributions	$60,000
Total Non-OPC Match	$60,000
TOTAL	$505,000

ADAPTATION PLANNING AND COORDINATION PROJECT SUMMARIES

5e: Wiyot Climate Change Adaptation Plan: Phase I, Wiyot Tribe Natural Resources Department

Project Description
This Phase 1 Adaptation Planning Project will allow the Wiyot to begin identifying priorities and assets important to Tribal members, to best assess and focus future resiliency planning efforts. The Table Bluff Reservation (TBR), and most of Wiyot Ancestral Territory are listed as severely disadvantaged communities and the Tribe has only just begun the process of building its capacity to develop a future Climate Change Adaptation Plan (CCAP) and assess its vulnerability to SLR and plan for resilience and adaptation. Much of Wiyot territory and many cultural sites are within or adjacent to critical community infrastructure and transportation corridors. The goal of this phase of the Tribe's CCAP project is to identify cultural and natural resources within its ancestral lands and waters vulnerable to SLR and climate change.

To meet the objectives, the following two tasks are proposed: 1) interviews and meetings with Tribal elders, youth, and community members to share experiences, and collect cultural and natural resources information, stories, traditional knowledges (TK), traditional ecological knowledge (TEK), and advice. This task will develop a TEK/TK use protocol in collaboration with neighboring coastal Tribes and colleagues at the Humboldt State University (HSU) SLR Initiative and Native American Studies Department, in order to develop a model that can be applied to other coastal TEK projects; and 2) an inventory and collection of existing Geographic Information System (GIS) data and mapping of cultural and natural resources and assets of interest that are vulnerable to climate change within Wiyot ancestral lands and waters. The final outcome of creating the GIS database of existing and at risk natural and cultural resources would be an invaluable dataset and toolbox for the Tribe to use for the development of a future CCAP in phase two, and for the greater Humboldt Bay community to use in prioritizing planning for future vulnerability assessments, coastal resilience, and site adaptation.

The efforts from this project will enable the Wiyot Tribe to collaborate with land management and resource agencies with land holdings within its Ancestral lands in the development of SLR and climate change adaptation strategies. Development of the TEK protocol will provide guidance on how to appropriately and respectfully proceed with

knowledge exchange to ensure that coastal and Tribal cultural resources are protected. The Tribe's input in Humboldt Bay's future is crucial to its resiliency.

This project meets the criteria of providing benefits to a severely disadvantaged community.

Refer to Exhibit 5e1 for a map of the project location.

Project Timeline
Community participation and climate change impact identification, which involves creating a TK use protocol and TK and TEK interviews, will begin in Spring 2021 and carry out through Fall 2021. Community outreach will begin in Spring 2021 and continue through Fall 2022. Creating a GIS Database will begin in Spring 2021 and continue through Summer 2022. Summarizing GIS data in order to prepare the Wiyot Ancestral Lands Vulnerability Assessment and Adaptation Strategies Report to prepare for Phase 2 of the CCAP will begin in Spring 2022 and be completed in Fall 2022.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $250,000 to the Wiyot Tribe for the Wiyot Climate Change Adaptation Plan Phase I. The proposed project may not require expenditure of the full $250,000.

Ocean Protection Council Prop 68	**$250,000**
OPC Total	**$250,000**
Bureau of Indian Affairs Tribal Resiliency Program	$45,500
Total Non-OPC Match	$45,500
TOTAL	**$295,500**

5f: South Orange County Regional Coastal Resilience Strategic Plan, County of Orange

Project Description
This project will fund the development of a regional, collaborative Strategic Plan (Plan) to facilitate the implementation of regional shoreline management activities to address chronically eroding shorelines in the southern portion of Orange County. Many beaches in southern Orange County have chronic erosion problems, such as the beaches southeast of Dana Point, projected to be exacerbated by SLR. Erosive events occurring along Orange County coastlines are causing beaches and coastal habitats to narrow and eventually be washed away if resilience strategies are not implemented. The proposed Plan will address the long-term shoreline erosion from Dana Point Harbor to San Clemente State Beach covering approximately 7 miles of eroding sandy beach shoreline. The Plan's main objective is to comprehensively assess, prioritize and advance resilience opportunities to reduce the risk to thousands of residents across the region, and increase the viability of south Orange County beaches.

The County of Orange (OC Parks) is identified as the lead planning agency and will develop a more comprehensive governance structure which will include other implementation agencies and their roles. Key successes expected include priority projects integrated into capital expenditure efforts for responsible parties to implement. OC Parks will collaborate closely with the State, local cities, other agencies, adjacent homeowner groups, and other entities to develop the Plan.

Refer to Exhibit 5f1 for a map of the project location.

Project Timeline
Existing data will be evaluated and collected beginning in August 2021 through December 2021. Stakeholder meetings to prioritize Plan needs and activities will begin in September of 2021 and continue through December 2021. Cost estimates and a funding plan will be developed December 2021 through May 2022. A draft Regional Strategic Plan will be developed September 2021 through May 2022. The Plan will be finalized and Cooperative Agreements will be drafted in June 2022 through May 2023.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $214,500 to The County of Orange for the South Orange County Regional Coastal Resilience Strategic Plan. The proposed project may not require expenditure of the full $214,500.

Ocean Protection Council Prop 68	**$214,500**
OPC Total	**$214,500**
County of Orange In-Kind Contributions	$35,500
Total Non-OPC Match	$35,500
TOTAL	$250,000

5g: Planning Regional Coastal Resiliency for California State Parks and Piloting in San Diego Coast District, Coastal Quest

Project Description
In late 2020, the California Department of Parks and Recreation (State Parks) adopted an internal SLR Adaptation Strategy. The SLR Adaptation Strategy calls for the completion of holistic vulnerability assessments and adaptation planning for unique State Park assets (i.e. access, recreation, cultural and natural resources, and facilities) at all coastal park units. This project will implement and pilot this process in the San Diego Coast District of the State Park System. This district already experiences the destructive impacts of waves and storm surge - yet a comprehensive assessment of park unit vulnerabilities to SLR and adaptation planning has not occurred. The project will begin to address SLR for San

Diego's individual park units and the region while also catalyzing State Parks' SLR adaptation work statewide.

The project will conduct SLR vulnerability assessments and identify adaptation pathways for 9 SDCD park units; develop a regional (district-scale) summary report to inform regional investment and the selection of 1-2 feasibility resiliency project site(s); conduct feasibility studies; enhance engagement at key stages with underserved communities; develop a vulnerability assessment "toolkit" and/or template that provides a recommended methodology for performing holistic vulnerability assessments, identifying adaptation pathways, and prioritizing SLR adaptation needs and investments

Following the completion of the proposed project, State Parks will seek funding and collaboration to proceed with completing any additional studies, engineering and design, environmental review and CEQA documents, permitting, stakeholder engagement and implementation of the resiliency project(s) identified in the feasibility study. The Regional Report and individual assessments will also inform the development of a new type of long-term coastal resiliency planning document outlined in State Parks' SLR Adaptation Strategy. The SDCD will serve as a pilot, with the developed toolkit/template and lessons learned guiding future vulnerability assessments and long-term adaptation planning for the remaining 12 coastal districts in the State Park System.

Refer to Exhibit 5g1 for a map of the project location.

Project Timeline
The project will begin in April 2021 and continue through June 2024. A request for proposals from State Parks will be developed to hire a consultant to perform the analysis and assessments which will take place from April 2021 through June 2021. The hired consultant will draft the Comprehensive "Toolkit Methodology" and seek input from Stake Parks management from August 2021 through November 2021. Vulnerability Assessments and Adaptation Pathways in 9 coastal park units will begin in April 2021 and be completed in June 2022. The SDCD Regional Report and identification of potential resiliency project sites will begin in July 2022 and be completed in September 2022. A feasibility study and alternatives analysis in 1-2 sites will begin in January 2023 and continue through June 2023. The "Toolkit" development and dissemination will begin in July 2023 and be completed in March 2024.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $607,376 to Coastal Quest for Planning Statewide Coastal Resiliency for California State Parks and Piloting in San Diego Coast District. The proposed project may not require expenditure of the full $607,376.

Ocean Protection Council Prop 68	**$607,376**
OPC Total	**$607,376**
State Parks In-Kind	$108,500
Anonymous Donor Advised Fund – The Chicago Community Foundation	$100,000
Other private donors	$150,000
Total Non-OPC Match	$358,500
TOTAL	$965,876

5h: Establishing a San Diego Regional Coastal Resilience Roadmap to Enable Project-Based Action and Investment, San Diego Regional Climate Collaborative

Project Description
This project will develop a Coastal Resilience Roadmap (Roadmap) to mobilize and accelerate aligned, project-based action and investment that prioritizes benefits to disadvantaged communities in the San Diego region. While building capacity for the region, this design approach will create a unique model for equitable, cross-sectoral stakeholder collaboration that aligns local planning priorities to advance shovel-ready projects that build coastal resilience on a regional scale.

The project will be led by the San Diego Regional Climate Collaborative (SDRCC) which serves as a vital regional coordinating entity and partners closely with a set of influential organizations catalyzing climate action at the regional, state, federal and international scales. The San Diego region includes 18 cities, the County and many special jurisdictions (e.g., Port of San Diego, The San Diego Association of Governments, San Diego Regional Airport Authority, etc.) with an invested interest in coastal resilience. As individual communities grapple with how to plan for greater risk and damages to infrastructure from coastal flooding, annual storm surges, and king tides, there is growing recognition of the need for regionally scaled, interjurisdictional collaboration. This project serves to operationalize tangible opportunities to regionally align climate action planning efforts through the implementation of policies and projects that demonstrate measurable benefits in reducing vulnerabilities to local climate change impacts. In addition to development of the Roadmap, work will include a Network Analysis of coastal resilience assets and a coastal resilience communications campaign.

Refer to Exhibit 5h1 for a map of the project location

Project Timeline
The Network Analysis of coastal resilience assets will begin in April 2021 and continue through December of 2021. Coastal resilience ambassadors to ensure broad, multi-sectoral engagement will be established April 2021 through March 2023. Creating the Resilience Communication Toolkit to communicate risk and cost of inaction will begin in

October 2021 and continue through September 2022. Regional outreach and engagement will begin in October 2021 and continue through March 2023. The Resilience Roadmap and Goals will be developed starting in January 2022 and continue through March 2023. This process will be documented, and templates will be developed for statewide scalability, which will occur April 2022 through March 2023.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $591,813 to The University of San Diego, The San Diego Regional Climate Collaborative for the Establishing a San Diego Regional Coastal Resilience Roadmap to Enable Project-Based Action and Investment. The proposed project may not require expenditure of the full $591,813.

Ocean Protection Council Prop 68	**$591,813**
OPC Total	**$591,813**
Local Government Partnership	$91,000
Resilient Cities Catalyst	$750,000
Total Non-OPC Match	$841,000
TOTAL	$1,432,813

5i: Stinson Beach: Adaptation and Resilience Collaboration, County of Marine Community Development Agency

Project Description
The Marin Ocean Coast Adaptation Report outlined a process for community-scale planning for each of West Marin's seven coastal communities; the Plan for Adaptation to Coastal Hazards (PATCH) approach. This project will pilot the PATCH approach in Stinson Beach, the community most immediately at risk. This process will anchor the development of a long-term, implementable adaptation plan addressing critical infrastructure, natural resources, and community assets and risks in the Stinson Beach area.

Stinson Beach is a large public beach within Golden Gate National Recreation Area that provides coastal access and multiple recreational opportunities about an hour north of San Francisco. SLR and flooding are existential threats to the Stinson community and its resources. These threats demand comprehensive engagement of the whole community by placing the community at the center of the process, including community residents, disadvantaged community members in Marin and throughout the Bay Area who utilize Stinson Beach as a free/low-cost recreation option, non-government organizations , landowners, and other interested parties.

County staff will provide technical and organizational support, but ownership and direction of the work be the responsibility the community. The project will identify specific adaptation measures and place them in strategic adaptation pathways that identify

sequencing, triggers and decision points for the long-term, with greater detail on near and medium-term adaptation solutions. A suite of potential adaptation measures for specific sites and timing will be analyzed, nature-based options will be evaluated, along with structural and managed retreat alternatives. The County will work with stakeholders to develop and apply evaluation criteria, including economic benefit-cost analysis to both individual adaptation measures and adaptation pathways to assess feasibility, efficacy, environmental impact, equity, and economic factors. The project will inform the County's Local Coastal Plan update and West Marin Adaptation Planning processes, as well as ongoing updates to Marin's Multi-jurisdictional Local Hazard Mitigation Plan and the Safety Element of the Countywide Plan.

Refer to Exhibit 5i1 for a map of the project location.

Project Timeline
This project will take begin in May 2021 and continue through June 2024. The public engagement process will be carried out throughout the entire duration of the project. The C-SMART Vulnerability assessment update will begin in May 2021 and continue through January 2022. The Stinson Beach Visitation and Use Survey will be developed and executed starting in May 2021 and continuing through December 2021. The PATCH Process will begin in February 2022 and continue through April 2022. The final Adaptation Plan and Project Documentation and Dissemination will begin in January 2024 and be completed in June 2024.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $396,000 to The County of Marin Community Development Agency for The Stinson Beach ARC: Adaptation and Resilience Collaboration. The proposed project may not require expenditure of the full $396,000.

Ocean Protection Council Prop 68	**$396,000**
OPC Total	**$396,000**
County of Marin Community Development Agency	$80,000
County of Marin Community Development Agency In-Kind	$133,000
FEMA Hazard Mitigation Planning	$42,000
Total Non-OPC Match	$282,000
TOTAL	$678,000

5j: Trinidad Community Coastal Resiliency Planning Project, City of Trinidad

Project Description
This project will develop the Trinidad Community Climate Resilience Action Plan for the benefit of its coastal and marine ecosystems, coastal economy, visitors, and local residents. The City of Trinidad will collaborate with planning partners, stakeholders and the public to engage in coastal hazards and coastal resilience planning, and concept design of several implementation projects. Collaboration and partnerships for coastal resilience will be a foundation moving forward with this planning project.

Trinidad is a small coastal city in Humboldt County located adjacent to an Area of Special Biological Significance (ASBS) in Trinidad Bay. Since time immemorial, Trinidad Bay has contributed to the quality of life and livelihoods of the Yurok people including Tsurai village residents, inland tribal peoples engaging in coastal trade, and more recently, new settlers. Trinidad Bay provides a range of values and beneficial uses to this marine dependent community. SLR, climate change, bluff instability, and ensuring the protection of cultural resources while providing coastal access are priorities for the management of this area. Trinidad's bluffs have been gradually slipping toward the beach within areas of specific deep, concern identified in the Tsurai Management Plan. This project will address the geological, climate and SLR induced hazards to develop a plan for coastal resilience and address these serious issues.

The Trinidad Community Climate Resilience Action Plan is intended to serve as a path to future implementation of identified adaptation projects and align with the Local Coastal Program update to guide the City into the future. Taking this proactive approach will help avoid the need for emergency, reactive measures to hazards in the future.

This project meets the criteria of providing benefits to a severely disadvantaged community.

Refer to Exhibit 5j1 for a map of the project location.

Project Timeline
This project will begin in March 2021 and continue through February 2024. Community engagement will carry out throughout the entire duration of the project. The Integrated Coastal Resilience Action Plan will be developed starting in May 2021 and be completed by December 2023. Concept designs for 2-3 high priority implementation projects will start in June 2023 and be completed by January 2024.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $440,000 to City of Trinidad for the Trinidad Community Coastal Resilience Planning Project.
The proposed project may not require expenditure of the full $440,000.

Ocean Protection Council Prop 68	**$440,000**
OPC Total	**$440,000**
City of Trinidad	$90,000
Total Non-OPC Match	$90,000
TOTAL	$530,000

5k: BEACON Regional Coastal Resilience Sediment Pilot Program, The Beach Erosion Authority for Clean Oceans and Nourishment (BEACON)

Project Description
The Beach Erosion Authority for Clean Oceans and Nourishment (BEACON) is a Joint Powers Authority (JPA), consisting of Santa Barbara and Ventura counties, and the six coastal cities of Goleta, Santa Barbara, Carpinteria, Ventura, Oxnard, and Port Hueneme. The BEACON landscape covers 144 miles of the California Coastline. This project will develop an innovative regional coastal resilience sediment management pilot program focused on SLR adaptation and coastal resiliency.

This program is designed to capitalize on opportunities to obtain beach-quality material from the watershed as surplus material from upland sources (opportunistic material). This regional SLR adaptation program will keep important sediment within the system that would otherwise be hauled to an upland disposal site. Much work has been done to address barriers to regional SLR adaptation and regional sediment management and there have been several recent efforts documenting the role of regional sediment projects, including beach nourishment and beach and dune restoration, in providing greater resilience to projected SLR impacts. This project seeks to build on and advance this work and involves capacity building, planning and science assessment, project site assessment, and preliminary and final project design. This project will complete necessary data collection, scientific assessment, and development of sediment deposition protocols using the best available science to complete final design of two pilot sediment deposition projects at two selected nearshore sites at Goleta and Carpinteria beaches.

Refer to Exhibit 5k1 for a map of the project location.

Project Timeline
This project will begin in June 2021 and continue through June 2023. The development of the engagement process and technical materials will begin in June 2021 and continue through the entire duration of the project. Sediment sampling and analysis plan will begin in June 2021 and continue through December 2021. Sediment transport and fate analysis will begin in June 2021 and continue through December 2021. Regional beach SLR analysis will begin in June 2021 and continue through December 2021. Beach typology

characterization will begin in June 2021 and continue through December 2021. Pilot sit ecological assessment framework will begin in January 2022 and continue through September 2022. Sediment placement protocols and criteria will begin in March 2022 and continue through October 2022. Pilot project preliminary designs and final designs will begin in March 2022 and be complete by December 2022. A final project report will begin being developed in March 2022 and be completed by June 2023.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $450,800 to BEACON for BEACON Regional Sediment Management SLR Adaptation Pilot Program.
The proposed project may not require expenditure of the full $450,800.

Ocean Protection Council Prop 68	**$450,800**
OPC Total	**$450,800**
BEACON In-Kind	$46,000
Santa Barbara County Flood Control District	$50,000
United States Geological Survey In-Kind	$24,000
Total Non-OPC Match	$120,000
TOTAL	$570,800

5l: Richardson's Bay Eelgrass Protection and Management Plan: Phase I Implementation, Richardson's Bay Regional Agency

Project Description
Using an innovative spatial planning approach to protect and restore the second largest eelgrass bed in the San Francisco Bay Estuary, the Richardson's Bay Regional Agency (RBRA) aims to increase coastal resilience to climate change, improve biodiversity, bolster the local and regional economy through commercial fisheries support and expand access to water-based recreation. To better protect the Richardson's Bay and public health while providing recreational boating opportunities for the public, RBRA developed a "Transition Plan" for Richardson's Bay which includes an Eelgrass Protection and Management Plan. This project will finalize the draft Eelgrass Protection and Management Plan and implement Phase 1 which includes regulatory changes to codify zoning updates in the Bay, wildlife and habitat monitoring to track resulting changes, and active outreach and education to disadvantaged communities on and off the water.

Boats have been anchoring and mooring in the calm, protected anchorage of Richardson's Bay since at least the 1890s. The attributes that make Richardson's Bay attractive to boaters are also those that contribute to ideal habitat for eelgrass. Unfortunately, minimal capacity for enforcement and the closure of other regional anchorages left Richardson's Bay as a last stop for abandoned and derelict vessels, leading to damage of the eelgrass beds. The number of anchor-out boats rose from about 90 boats in the 1970s to over 240

boats in 2016, with many boats experiencing disrepair and abandonment. By 2019, up to 80 acres of eelgrass had been directly removed from the bay floor due the scraping of anchors, chains, and other ground tackle. It is clear that active eelgrass protection is needed for Richardson's Bay. This project is expected to achieve up to 80 acres of on-the-ground eelgrass improvement and up to 200 acres of eelgrass habitat protection by resolving a long-standing resource use conflict.

Refer to Exhibit 5l1 for a map of the project location.

Project Timeline
This project will begin in April 2021 and continue through June 2023. The Eelgrass Protection Management Plan finalization will begin in February 2021 and be completed by June 2021. Regulatory changes will be updated to reflect the new plan starting in July 2021 continuing through December 2022. Wildlife and habitat monitoring will begin in April 2021 and continue through June 2023. Outreach and education will begin in October 2021 and continue through December 2023.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $324,681.31 to the Richardson's Bay Regional Agency for the Richardson's Bay Eelgrass Protection and Management Plan – Phase I. The proposed project may not require expenditure of the full $324,681.31.

Ocean Protection Council Prop 68	**$324,681.31**
OPC Total	**$324,681.31**
Richardson's Bay Regional Agency	$89,330.58
Total Non-OPC Match	$89,330.58
TOTAL	$414,011.88

RESEARCH PROJECT SUMMARIES

5m: Quantifying the social and economic benefits of nature-based adaptation solutions to protect San Mateo County from storms and sea-level rise, University of California, Santa Cruz (UCSC)

Project Description
San Mateo County is the most vulnerable county in California to SLR and storms. Over 128,000 people and $45 billion in built assets and infrastructure are exposed to flooding, erosion and sea level rise in the county. However, salt marshes in the county provide a natural buffer to flooding and erosion, in addition to other co-benefits. This project will quantify the socio-economic benefits of salt marshes for flood risk reduction in San Mateo County to inform innovative implementation and financing of nature-based

adaptation. The project will focus on the risk reduction services of salt marsh restoration projects, marsh-levee designs, and managed realignment.

The analyses will include both economic considerations and prioritization of where adaptation strategies would have the greatest benefits to socially vulnerable communities. This work will result in the most rigorous assessment of the value of these nature-based projects for risk reduction anywhere. In partnership with the insurance industry and local and state stakeholders, new financing mechanisms (e.g. resilience insurance) will also be explored that can support nature-based and sea level rise adaptation strategies.

The outputs of the flood and economic modeling will ultimately be used to assess pathways for implementing and financing nature-based adaptation. This project will be integrated with the Strategy to Advance Flood protection, Ecosystems and Recreation along the Bay (SAFER Bay) Phase 1 project in the disadvantaged communities of East Palo Alto and Menlo Park, which is funded through construction. The approaches and outputs of the proposed project have direct applicability for the entire Bay Area, with replication potential in similar areas across California and estuaries world-wide. The project will be developed in close collaboration with local stakeholders and policy makers to identify pathways to invest in and mainstream nature-based adaptation for their benefits to people and nature.

Refer to Exhibit 5m1 for a map of the project location.

Project Timeline
This project will begin in June 2021 and continue through June 2023. Meetings with stakeholders will begin in June 2021 and span throughout the entire project duration. Food risk modeling, risk reduction effects of nature-based projects, and analysis will begin in September 2021 and continue through September 2022. Socioeconomic analysis and effects on property value will begin in July 2021 and continue through April 2022. Stakeholder and community vulnerability and risk perception analysis will begin in July 2021 and continue through May 2022. Risk financing options will be explored with the insurance industry and a feasibility analysis of insurance or other risk financing mechanisms to incentivize nature-based solutions will begin in September 2021 and continue through March 2023. A final report, online maps, and model outputs will be created by June 2023.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $346,290 to The University of California, Santa Cruz for Quantifying the social and economic benefits of nature-based adaptation solutions to protect San Mateo County from storms and SLR.
The proposed project may not require expenditure of the full $346,290.

Ocean Protection Council Prop 68	**$346,290**
OPC Total	**$346,290**
The Nature Conservancy	$125,100
Total Non-OPC Match	$125,100
TOTAL	**$471,390**

5n: Eelgrass Habitat Suitability Model Update for Targeted, Climate-Smart Eelgrass Restoration in San Francisco Bay, Audubon California

Project Description
Healthy subtidal eelgrass (Zostera marina) beds are a keystone of climate resilient bays in California. This project will update the 2003 eelgrass habitat suitability model (HSM) for San Francisco Bay based on integrating new data (e.g. climate) and other model outputs (e.g. hydrodynamics and wind waves) that have become available. This will improve site selection and other considerations for protection, restoration, and mitigation efforts; improve decisions on siting development projects; improve land use and planning decisions and policies to protect priority eelgrass habitat into the future; and direct funding sources to projects with the highest impact. Furthermore, because anticipated changes in water level and salinity within the Bay and Sacramento-San Joaquin Delta are complex, interrelated, and affect other species (e.g. delta smelt), developing a revised eelgrass HSM may in turn provide valuable feedback to water resource managers tasked with balancing agricultural, municipal, and ecological water demands placed on the Delta.

This updated HSM is the first of, and will serve as the foundation for, five eelgrass HSMs planned for priority bays in California. The project's goal is to increase the acreage and resilience of eelgrass beds in California, starting with San Francisco Bay, in the face of current stressors and threats, including sea level rise and other climate change-related disturbances.

Refer to Exhibit 5n1 for a map of the project location.

Project Timeline
This project will begin in April 2021 and continue through March 2023. Model development will begin in April 2021 and continue through June 2022. Model interface and output development will begin in March 2022 and continue through September 2022. Partner communications and stakeholder outreach will begin March 2022 and continue through September 2022. Model usage monitoring will begin in September 2022 and continue through March 2023.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $294,798 to the National Audubon Society for Eelgrass Habitat Suitability Model Update for Targeted, Climate-Smart

Eelgrass Restoration in San Francisco Bay. The proposed project may not require expenditure of the full $294,798.

Ocean Protection Council Prop 68	**$294,798**
OPC Total	**$294,798**
Audubon Society In-Kind	$61,729
Total Non-OPC Match	$61,729
TOTAL	$356,527

5o:Evaluating Adaptation Planning in Coastal California, University of California Santa Barbara (UCSB)

Project Description
This project will evaluate the status, trends, processes and outcomes of SLR adaptation planning by the 76 local government jurisdictions along California's outer coast (15 counties and 62 cities). It will characterize the general coastal process, geomorphic and built environments, and socio-political-economic settings in each location; build an online inventory of coastal adaptation planning on California's outer coast; summarize and evaluate the planning and decision-making methods and processes used; assess planning and policy outcomes (strategies, methods), and evaluate the relative success of the adaptation planning process to date. The evaluation will address a variety of governance issues, including questions developed in coordination with key state agency and other stakeholders (e.g. OPC, Coastal Commission, Coastal Conservancy; regional climate collaboratives; local governments and environmental justice groups).

This project will also address the recently promulgated Principles for Alignment of State Action to build SLR resilience along the California coast and the recent "Joint Statement on Adaptation Planning" between the Coastal Commission, the California State Association of Counties, and the League of California Cities.

Research methods will include review and analysis of government administrative, legal, policy and other documents and archived public meetings, interviews with key informants, surveys and focus or working groups with participants in the planning process/interested parties. The project will result in an online inventory of the statewide adaptation planning activities on the outer coast, assessment of adaptation process and outcomes, and recommendations for how to improve California's coastal adaptation planning and Local Coastal Program policy update process to meet state coastal resilience goals.

Project Timeline
This project will begin in April 2021 and continue through March 2023. Adaptation planning inventory will begin in April 2021 and be completed by October 2021. Focus groups and surveys will start in August 2021 and continue through May 2022. Personal

interviews will take place August 2021 through August 2022. Assessing Adaptation Planning Outcomes will begin in March 2022 and be completed by September 2022. Assessing adaptation planning processes will begin in March 2022 and continue through September 2022. The development of recommendations will begin in July 2021 and continue through February 2023. Information and results will be shared through an evaluation survey starting in October 2022 and continuing through March 2023.

Project Financing
Staff recommends that OPC authorize encumbrance of up to $398,602 to The University of California Santa Barbara Ocean and Coastal Policy Center for Evaluating Adaptation Planning in Coastal California. The proposed project may not require expenditure of the full $398,602.

Ocean Protection Council Prop 68	**$398,602**
OPC Total	**$398,602**
TOTAL	**$398,602**

CONSISTENCY WITH CALIFORNIA OCEAN PROTECTION ACT:

The proposed projects are consistent with the Ocean Protection Act, Division 26.5 of the Public Resources Code, because they are consistent with trust-fund allowable projects, defined in Public Resources Code Section 35650(b)(2) as projects that achieve the following objective among others listed in this section of the statute:

- Eliminate or reduce threats to coastal and ocean ecosystems, habitats, and species
- Foster sustainable fisheries
- Improve coastal water quality
- Allow for increased public access to, and enjoyment of, ocean and coastal resources, consistent with sustainable, long-term protection and conservation of those resources
- Improve management, conservation, and protection of coastal waters and ocean ecosystems
- Provide monitoring and scientific data to improve state efforts to protect and conserve ocean resources
- Protect, conserve, and restore coastal waters and ocean ecosystems
- Provide funding for adaptive management, planning, coordination, monitoring, research, and other necessary activities to minimize the adverse impacts of climate change on California's ocean ecosystem

CONSISTENCY WITH THE OPC'S STRATEGIC PLAN:

The proposed projects implement Objectives of OPC's 2020-2025 Strategic Plan as follows:

1.1: Build Resiliency to Sea-Level Rise, Coastal Storms, Erosion, and Flooding:

All proposed projects build resiliency to SLR, coastal, storms, erosion, and flooding either through adaptation planning and community capacity building, coastal habitat restoration, or through the creation and implementation of nature-based infrastructure adaptation measures.

2.1: Enhance Engagement with Tribes:
The Wiyot Climate Change Adaptation Plan and Trinidad Community Coastal Resilience Planning Projects both support SLR vulnerability assessments of Tribal resources and support coastal and ocean access for Tribes to enhance connections to their ancestral lands and waters.

2.2: Enhance Engagement with Underserved Communities:
Heron's Head Park Shoreline Resiliency, Bayshore Bikeway Resiliency Project – Creation of a Coastal Resilience Corridor in Imperial Beach, Wiyot Climate Change Adaptation Plan, Trinidad Community Coastal Resiliency, SD Collaborative, all identify and implement actions to assist frontline and underserved communities in addressing the impacts of climate change. These projects directly benefit underserved communities.

3.1: Protect and Restore Coastal and Marine Ecosystems:
Richardson's Bay Eelgrass Protection & Management Plan and Eelgrass Habitat Suitability Model Update for Targeted, Climate-Smart Eelgrass Restoration in San Francisco Bay are projects that support protecting existing and potential eelgrass habitat. Heron's Head Shoreline Resiliency, Elkhorn Slough Tidal Marsh Restoration: Phase III, and Bolinas Lagoon Wye Wetlands Project are habitat restoration projects that account for SLR adaptation. BEACON Regional Coastal Resilience Sediment Pilot Program aims to increase opportunities for the beneficial reuse of sediment, and the Heron's Head Park Shoreline Resiliency project utilizes the reuse of sediment to construct a more resilient shoreline.

FUNDING SOURES AND CONSISTENCY WITH GRANT GUIDELINES FOR PROPOSITION 68:

The source of funds for all staff-recommended projects is the OPC's appropriation pursuant to the California Drought, Water, Parks, Climate, Coastal Protection and Outdoor Access for All Act of 2018 (Public Resources Code §80000 et. seq.) Funds appropriated to OPC derive from Chapter 10 (commencing with §80130) and may be used "for projects that plan, develop, and implement climate adaptation and resiliency projects. Eligible projects shall improve a community's ability to adapt to the unavoidable impacts of climate change, improve and protect coastal and rural economies, agricultural viability, wildlife corridors, or habitat, develop future recreational opportunities, or enhance drought tolerance, landscape resilience, and water retention". Section 80133 identifies specific purposes for Chapter 10, which includes "projects that assist coastal communities, including those reliant on commercial fisheries, with adaptation to climate change, including projects that address ocean acidification, sea level rise, or habitat restoration and protection, including, but not limited to, the protection of coastal habitat associated

with the Pacific Flyway". The proposed projects are an appropriate use of Proposition 68 funds because they each will improve coastal resiliency and adaptation to climate change.

Summary of Recommended Proposition 68 Coastal Resilience Projects:	**Prop 68 Funding:**
Heron's Head Park Shoreline Resilience	$1,667,000
Elkhorn Slough Tidal Marsh Restoration: Phase III	$1,290,901
Bolinas Lagoon Wye Wetlands Project	$339,000
Bayshore Bikeway Resiliency Project - Creation of a Coastal Resilience Corridor in Imperial Beach	$445,000
Wiyot Climate Change Adaptation Plan Phase 1	$250,000
South Orange County Regional Coastal Resilience Strategic Plan	$214,500
Planning Regional Coastal Resiliency for California State Parks	$607,376
Establishing a San Diego Regional Coastal Resilience Roadmap to Enable Project-Based Action and Investment	$591,813
Stinson Beach ARC: Adaption and Resilience Collaboration	$396,000
Trinidad Community Coastal Resilience Planning Project	$440,000
BEACON Regional Coastal Resilience Sediment Pilot Program	$450,800
Richardson's Bay Eelgrass Protection & Management Plan– Phase 1 Implementation	$324,681
Quantifying the social and economic benefits of nature-based adaptation solutions to protect San Mateo County from storms and sea level rise	$346,290
Eelgrass Habitat Suitability Model Update for Targeted, Climate-Smart Eelgrass Restoration in San Francisco Bay	$294,798
Evaluating Adaptation Planning in Coastal California	$398,602
Total:	**$8,056,761**

The recommended projects were selected through a competitive process under OPC's Proposition 68 Grant Guidelines, which were adopted in May 2019. OPC staff assembled a Proposition 68 Coastal Resilience Review Committee that consisted of OPC staff. The Review Committee scored complete eligible applications for this Proposition 68 funding round according to Scoring Criteria for Chapter 10 provided on page 16 of the Proposition

68 Grant Guidelines. After all proposals were scored and ranked, the Review Committee recommended which projects should be selected for funding. Final staff recommendation funding decisions were made by OPC's Executive Director.

COMPLIANCE WITH THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA):

The proposed projects have different statuses under CEQA as follows:

5a: Heron's Head Park Shoreline Resilience:
This project is a small habitat restoration project which is categorically exempt the California Environmental Quality Act (CEQA) pursuant to Public Resources Code section, section 15333. A Notice of Exemption (Categorical Exemption 15333) was filed with the State CEQA Clearinghouse on November 12, 2020 (Case number 2019-003714ENV).

5b: Elkhorn Slough Tidal Marsh Restoration: Phase III
A Mitigated Negative Declaration for this project was prepared by the California Department of Fish and Wildlife, which is the lead agency for CEQA compliance, and it was certified in August 2015.

5c: Bolinas Lagoon Wye Wetlands Project:
This planning-only project does not trigger CEQA but will include preparation of CEQA documents.

5d: Bayshore Bikeway Resiliency Project – Creation of a Coastal Resilience Corridor in Imperial Beach:
This planning-only project does not trigger CEQA but will include preparation of CEQA documents.

5e: Wiyot Climate Change Adaptation Plan Phase I:
This planning-only project does not trigger CEQA.

5f: South Orange County Regional Coastal Resilience Strategic Plan:
This planning-only project does not trigger CEQA.

5g: Planning Regional Coastal Resiliency for California State Parks and Piloting in San Diego Coast District:
This planning-only project does not trigger CEQA.

5h: Establishing a San Diego Regional Coastal Resilience Roadmap to Enable Project-Based Action and Investment:
This planning-only project does not trigger CEQA.

5i: Stinson Beach ARC: Adaptation and Resilience Collaboration:
This planning-only project does not trigger CEQA.

5j: Trinidad Community Coastal Resiliency Planning Project:
This planning-only project does not trigger CEQA.

5k: BEACON Regional Coastal Resilience Sediment Pilot Program:
This planning-only project does not trigger CEQA.

5l: Richardson's Bay Eelgrass Protection & Management Plan – Phase I Implementation:
This planning-only project does not trigger CEQA.

5m: Quantifying the social and economic benefits of nature-based adaptation solutions to protect San Mateo County from storms and sea-level rise:
The proposed project is categorically exempt from review under CEQA pursuant to 14 Cal. Code of Regulations Section 15306 because the project involves only data collection, research and resource evaluation activities that will not result in a serious or major disturbance to an environmental resource. Staff will file a Notice of Exemption upon approval by the OPC.

5n: Eelgrass Habitat Suitability Model Update for Targeted, Climate-Smart Eelgrass Restoration in San Francisco Bay:
The proposed project is categorically exempt from review under CEQA pursuant to 14 Cal. Code of Regulations Section 15306 because the project involves only data collection, research and resource evaluation activities that will not result in a serious or major disturbance to an environmental resource. Staff will file a Notice of Exemption upon approval by the OPC.

5o: Evaluating Adaptation Planning in Coastal California:
The proposed project is categorically exempt from review under CEQA pursuant to 14 Cal. Code of Regulations Section 15306 because the project involves only data collection, research and resource evaluation activities that will not result in a serious or major disturbance to an environmental resource. Staff will file a Notice of Exemption upon approval by the OPC.