



Institute of Marine Sciences
Earth & Marine Sciences Bldg
Ph. (831) 459-2464 • fax (831) 459-4882

Santa Cruz, California 95064

September 28, 2016

California Ocean Protection Council
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Dear Ocean Protection Council members,

Sea-level rise may be the greatest challenge that human civilization has ever faced, with 150 million people on Earth living within three feet of high tide and eight of the world's ten largest mega-cities sited on coastlines. In California, millions of people and billions of dollars in infrastructure and development now lie within a few feet of a sea level that is rising. About two-thirds of California's 38 million people live in coastal counties.

This threat is not going to go away and the risks will increase in the decades ahead, regardless of anything we do. California needs to adapt to both long-term sea-level rise, as well as short-term or extreme events. These include large El Niños and the combined effects of very high (King) tides and large storm waves. Coastal communities need assistance in responding to these hazards and the USGS Coastal Storm Modeling System (CoSMoS) is a tool that has been developed, refined and tested and has been shown to provide a solid basis for cities and counties in their future coastal planning.

While sea-level rise and coastal hazard maps have now been developed for southern California, the central coast has no such maps so adaptation efforts are limited by the available data and staffing. I encourage the Ocean Protection Council's support of funding for the United States Geological Survey to extend their Coastal Storm Modeling System to the Central Coast.

Thank you for your consideration.

Sincerely,

A handwritten signature in black ink, reading "Gary Griggs".

Gary Griggs
Professor of Earth and Planetary Sciences
Director Institute of Marine Science



420 Capitola Avenue
Capitola, California 95010
Telephone: (831) 475-7300
FAX: (831) 479-8879
Website: www.cityofcapitola.org

California Ocean Protection Council
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

September 30, 2016

Dear Ocean Protection Council members,

I am writing on behalf of Department of Public Works for the City of Capitola to express our support of OPC's consideration of a funding award to the USGS to develop sea-level rise and coastal hazard maps using the Coastal Storm Modeling System (CoSMoS) for the Central Coast and update coastal change rates statewide for the outer California coast. We are also supportive of OPC funding Point Blue Conservation Science to develop an online Our Coast, Our Future mapping tool for the Central Coast.

The City of Capitola is already planning today for many impacts from climate change and are in the process of completing a sea level rise vulnerability study for the coastal area within the City. This study does not include the effects of coastal storms and we believe the development of CoSMoS model for our jurisdiction would be beneficial. We feel that this is a critical need for our community. Having CoSMoS developed for our region would allow us to better understand our true vulnerability and develop more robust climate vulnerability assessments.

We are fully supportive of this funding recommendation. Please feel free to contact me by phone at 831-475-7300 or by email at sjesberg@ci.capitola.ca.us if you have any further questions.

Sincerely,

Steven Jesberg
Public Works Director

CALIFORNIA COASTAL COMMISSION

45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE (415) 904-5200
FAX (415) 904-5400
TDD (415) 597-5885



California Ocean Protection Council
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

October 4, 2016

Dear Ocean Protection Council Members,

I am writing on behalf of the California Coastal Commission staff to express strong support of OPC's recommendation to fund the USGS to develop sea-level rise and coastal hazard maps using the Coastal Storm Modeling System (CoSMoS) for the Central Coast to inform climate vulnerability assessments, and to update coastal change rates statewide for the outer California coast. Staff are also supportive of OPC funding Point Blue Conservation Science to develop an online *Our Coast, Our Future* mapping tool for the Central Coast.

Understanding the impacts of both sea level rise and coastal storms is critically important in assessing the true vulnerability to hazards along the California coast and allowing the Coastal Commission staff and other local agencies to be better prepared for impacts today and into the future. CoSMoS resources have supported the Coastal Commission staff's work by providing a user-friendly and technically sophisticated source of information about potential future coastal hazards that can be used in staff analysis and research in both our regulatory and planning programs. Many local governments also use CoSMoS data in coastal hazard vulnerability assessments, adaptation planning, and Local Coastal Program policy development—many of which are funded through grants from the Ocean Protection Council, Coastal Commission, and Coastal Conservancy. These efforts have helped further the Coastal Commission's goal to work with local governments to update and certify Local Coastal Programs with an emphasis on planning for sea level rise and climate change. Therefore, expanding the CoSMoS modeling to the Central Coast and making the data available through an online tool will support and improve these important efforts.

By funding CoSMoS for the Central Coast, you would fill this gap in coverage, allowing the Coastal Commission staff to continue to work with local governments on this currently understudied region of California.

Coastal Commission staff are fully supportive of this funding recommendation. Please feel free to contact me [John.Ainsworth@coastal.ca.gov | (415) 904-5202] if you have any further questions.

Sincerely,

A handwritten signature in dark ink, appearing to read "John Ainsworth".

John Ainsworth
Acting Executive Director

DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791



California Ocean Protection Council
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

October 5, 2016

Dear Ocean Protection Council members,

The California Department of Water Resources would like to express support for OPC's recommendation to fund the USGS to develop sea-level rise and coastal hazard maps using the Coastal Storm Modeling System (CoSMoS) for the Central Coast. This will inform climate vulnerability assessments, and update coastal change rates statewide for the outer California coast. The Department is also in support of OPC funding Point Blue Conservation Science to develop an online *Our Coast, Our Future* mapping tool for the Central Coast.

Understanding the impacts of both sea level rise and coastal storms are critically important in managing the State's water resources. This information could be utilized by the Department in the following ways:

- California Water Plan Updates
- Integrated Regional Water Resources Management activities
- Climate Change Program data, science and vulnerability assessments
- Bay-Delta Modeling for future water supply scenarios

By funding CoSMoS for the Central Coast, gaps in coverage would be filled, allowing the Department to expand climate change work in coastal areas of California.

Please feel free to contact me if you have any further questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Elissa Lynn".

Elissa Lynn
DWR Climate Change Program Manager
elynn@water.ca.gov
916-651-0211



Local Government Commission

980 9th Street • Suite 1700 • Sacramento, CA 95814 • (916) 448-1198

Board of Directors California Ocean Protection Council
1416 Ninth Street, Suite 1311

Vice Mayor Jake Mackenzie
Chairman
City of Rohnert Park

October 6, 2016

Councilmember Pam O'Connor
Vice-Chair
City of Santa Monica

Dear Ocean Protection Council members,

Supervisor Deidre Kelsey
Secretary/Treasurer
County of Merced

Mayor Thomas Butt
City of Richmond

Councilmember Miguel Canales
City of Artesia

I am writing on behalf of the Local Government Commission to express our strong support of OPC's recommendation to fund the USGS to develop sea-level rise and coastal hazard maps using the Coastal Storm Modeling System (CoSMoS) for the Central Coast to inform climate vulnerability assessments, and to update coastal change rates statewide for the outer California coast. We are also supportive of OPC funding Point Blue Conservation Science to develop an online Our Coast, Our Future mapping tool for the Central Coast.

Mayor Pro Tem Dominic Farinha
City of Patterson

Councilmember Abel Guillén
City of Oakland

Councilmember Steve Hansen
City of Sacramento

Mayor Pro Tem Jon Harrison
City of Redlands

Councilmember Beth Krom
City of Irvine

Councilmember Michele Martinez
City of Santa Ana

Supervisor Jennifer Montgomery
County of Placer

The Local Government Commission (LGC) is a non-profit organization that works to build livable communities and local leadership by connecting leaders via innovative programs and network opportunities, advancing policies through participation at the local and state level, and implementing solutions as a technical assistance provider and advisor to local jurisdictions. We have a strong history of working with communities to help them advance their climate adaptation planning initiatives. As an example, in 2010 we co-authored one of first adaptation strategies in the state for San Luis Obispo County. We also are the lead on CivicSpark - a Governor's Initiative AmeriCorps program dedicated to building capacity for local governments to address climate change and water management issues in California. Over the last two years, six CivicSpark fellows have worked to provide climate capacity support to communities in the Central Coast and will continue to do so in the years to come. From these and other initiatives, we have built a strong connection to coastal communities in that region and feel we are attuned to their needs.

Vice Mayor Susan Ornelas
City of Arcata

Supervisor Jane Parker
County of Monterey

Supervisor Leticia Perez
County of Kern

Understanding the impacts of both sea level rise and coastal storms is critically important in helping Central Coast communities understand their true vulnerability to hazards along our coast. This information will allow them to be better prepared for impacts today and into the future. To date, there is very limited sea level rise information for this region, and none that considers the impacts of concurrent coastal storms. By funding CoSMoS for the Central Coast, you would fill this gap in coverage.

Executive Director
Kate Meis

We are fully supportive of this funding recommendation. Please feel free to contact me if you have any further questions.

Sincerely,

Kate Meis
Executive Director
kmeis@lgc.org, 916-448-1198



October 6, 2016

Ms. Deborah Halberstadt, Executive Director
California Ocean Protection Council
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Dear Ms. Halberstadt:

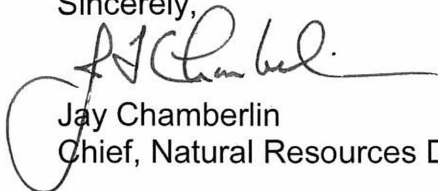
California State Parks is writing to express our strong support of the Ocean Protection Council staff recommendation to fund the USGS to develop sea level rise and coastal hazard maps using the Coastal Storm Modeling System (CoSMoS) for the Central Coast. We also support for funding Point Blue Conservation Science to develop an online *Our Coast, Our Future* mapping tool for the Central Coast.

Both sea level rise (SLR) and flooding from coastal storms will have significant impacts on park resources and infrastructure; understanding those impacts is essential to managing coastal parks. The approach developed for CoSMoS has been particularly useful for understanding and visualizing the impacts of multiple potential contributors to coastal flooding and inundation. At State Parks, we have incorporated the existing CoSMoS datasets into our coastal project evaluation process: planners and project managers use maps that display CoSMoS model outputs to evaluate whether projects are likely to be impacted by flooding, allowing us to be better prepared for impacts today and into the future. We will be integrating the USGS's Southern California dataset into our plans in the near future, and we support the development of a dataset for the Central Coast, where some 60 State Park units are located.

At State Parks, we have a strong interest in providing the best available science to staff that manage the resources on the ground. Models of coastal flooding are essential for understanding factors that affect our coastal park units, and the associated maps are vital for communicating this information to planners and managers. The CoSMoS data are thus extremely valuable and a critical decision support tool for our coastal managers.

Please feel free to contact me at jay.chamberlin@parks.ca.gov or (916) 653-6725 if you would like to discuss this letter in greater detail.

Sincerely,



Jay Chamberlin
Chief, Natural Resources Division

COUNTY OF SAN MATEO
COUNTY MANAGER'S OFFICE
OFFICE OF SUSTAINABILITY

Jim Eggemeyer
Director

County Government Center
455 County Center, 4th Floor
Redwood City, CA 94063
www.green.smcgov.org

California Ocean Protection Council
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

October 4, 2016

Dear Ocean Protection Council members,

I am writing on behalf of the San Mateo County Office of Sustainability to express our strong support of the Ocean Protection Council's consideration to fund the US Geological Survey to develop sea-level rise and coastal hazard maps using the Coastal Storm Modeling System (CoSMoS) for the Central Coast and update coastal change rates statewide for the outer California coast. We are also supportive of Ocean Protection Council funding Point Blue Conservation Science to develop an online Our Coast, Our Future mapping tool for the Central Coast.

San Mateo County is already planning today for many impacts from climate change. The County is leading the development of a sea level rise vulnerability assessment for the Bayshore and Coastal San Mateo County using the existing CoSMoS modeling and Our Coast Our Future mapping tool. However, since the CoSMoS modeling and Our Coast Our Future tool is not available for the area south of Half Moon Bay, our current effort is limited to that area. Our sea level rise program, known as SeaChange SMC, includes a collaborative process with all 20 cities and other stakeholders. We plan to release the vulnerability assessment document later this fall and then will work with the cities to develop an adaptation plan framework, which will help prioritize areas for action and provide policy update templates.

Because we do not currently have the CoSMoS model for the southern portion of coastal San Mateo County, we have not yet had the opportunity to assess our vulnerability to sea level rise in combination with coastal storms for the south coast portion of the county. We feel that completing the vulnerability assessment for the entire county is a critical need for our community. In addition, this area includes Highway 1, the community of Pescadero, and Pescadero Marsh, which are all vulnerable to impacts from sea level rise. Having CoSMoS developed for our region would allow us to better understand our true vulnerability and develop more robust climate vulnerability assessments.

We are fully supportive of this funding recommendation. Please feel free to contact me at hpapendick@smcgov.org | 650-363-4168 if you have any further questions.

Sincerely,



Hilary Papendick

Climate Change & Adaptation Program Manager





October 6, 2016

Ms. Deborah Halberstadt
Executive Director
California Ocean Protection Council
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Dear Ms. Halberstadt,

On behalf of the Coastal Conservancy, I am writing to express support of the Ocean Protection Council (OPC) staff's recommendation to fund the USGS to develop sea-level rise and coastal hazard maps using the Coastal Storm Modeling System (CoSMoS) for the Central Coast. The proposed project will continue to improve understanding of the impacts of both sea level rise and coastal storms along our coast, allowing California to prepare for impacts today and in the future.

The Coastal Conservancy provided funding for the development of CoSMoS in Southern California and we are very supportive of completing the mapping for California. By funding CoSMoS for the Central Coast, OPC will fill a critical information gap regarding impacts of sea level rise and coastal hazards along the coast of California.

The Coastal Conservancy is also supportive of OPC's recommended funding for Point Blue Conservation Science to develop an online *Our Coast, Our Future* mapping tool for the Central Coast. This tool has proven to be very useful in other regions. Providing access to these maps to local planners, decision makers and the public is a very important part of the project. This tool has been used in other communities to incorporate information about future sea level rise and storms into local planning processes.

We are fully supportive of this funding recommendation and appreciate OPC's continued leadership on this issue. Please feel free to contact me if you have any further questions.

Sincerely,

Mary Small
Deputy Executive Officer

1330 Broadway, 13th Floor
Oakland, California 94612-2512
510-286-1015 Fax: 510-286-0470



COUNTY OF SAN MATEO
DON HORSLEY
SUPERVISOR, 3RD DISTRICT

County Government Center
400 County Center, 1st Floor
Redwood City, CA 94063
650-363-4569
dhorsley@smcgov.org

California Ocean Protection Council
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

October 4, 2016

Dear Ocean Protection Council members,

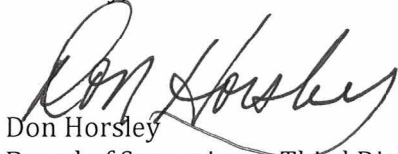
I would like to express my strong support for the Ocean Protection Council's consideration of funding for the United States Geological Service to develop sea level rise and coastal hazard maps using the Coastal Storm Modeling System (CoSMoS) for the Central Coast and update coastal change rates statewide for the outer California coast. In addition, I am very supportive of OPC funding Point Blue Conservation Science to develop an online *Our Coast, Our Future* mapping tool for the Central Coast.

San Mateo County has made considerable strides in planning for impacts anticipated from climate change. The County's Office of Sustainability has been utilizing the *Our Coast, Our Future* mapping tool as a critical component of our San Mateo County Sea Level Rise Vulnerability Assessment. One key region in my District, the south coast of San Mateo County, has not yet been included in this important assessment because data and tools from CoSMoS and *Our Coast, Our Future* are not yet available for the area south of Half Moon Bay to the border with Santa Cruz. Our County team is eager to complete the full coast of San Mateo for our sea level rise planning and would greatly benefit from the proposed project.

As there is a gap with the CoSMoS model south of Half Moon Bay, San Mateo County cannot complete the County-wide assessment to take into account both vulnerability to sea level rise and coastal storms. It is critical to assess our key assets for transit corridors like Highway 1 as well as in areas of significant biological interest like Pescadero Marsh. With support from the OPC, our many stakeholders and partners in planning for sea level rise will be better prepared to move into resilience planning to address well-supported climate vulnerability assessments when CoSMoS and *Our Coast, Our Future* are fully available for the Central Coast and updated for the entire outer California Coast.

Thank you for your consideration of the USGS and Point Blue Conservation Science proposal, and for the significant difference these tools have already made for the Bay and coast north of Half Moon Bay in our County vulnerability assessment planning.

Sincerely,



Don Horsley
Board of Supervisors, Third District Supervisor, County of San Mateo



DEPARTMENT OF TRANSPORTATION**DIVISION OF TRANSPORTATION PLANNING**

P.O. BOX 942873, MS-32
SACRAMENTO, CA 94273-0001
PHONE (916) 653-4615
FAX (916) 653-0001
TTY 711
www.dot.ca.gov



*Serious drought.
Help save water!*

October 5, 2016

California Ocean Protection Council
1416 Ninth Street, Suite 1311
Sacramento, CA 95814

Dear Ocean Protection Council Members:

I am writing on behalf of the California Department of Transportation (Caltrans) to express our strong support of the California Ocean Protection Council's (OPC) recommendation to fund the United States Geological Survey to develop sea-level rise and coastal hazard maps using the Coastal Storm Modeling System (CoSMoS) for the Central Coast to inform climate vulnerability assessments, and to update coastal change rates statewide for the outer California coast. We are also supportive of OPC funding Point Blue Conservation Science to develop an online *Our Coast, Our Future* mapping tool for the Central Coast.

Understanding the impacts of both sea level rise and coastal storms is critically important in helping us understand our true vulnerability to hazards along our coast, allowing us to be better prepared for impacts today and into the future. We have utilized CoSMoS for projects throughout the State. Our Climate Change Vulnerability Assessments rely on the data produced by CoSMoS to identify portions of the State Highway System that are likely to be impacted by sea-level rise and coastal storms. We have chosen CoSMoS with the desire of using one, high quality, consistent model for identifying these impacts for all of our coastal Districts. Without further funding, the potential impacts to the three Caltrans districts along the coast in Central California will not be fully understood.

By funding CoSMoS for the Central Coast, you would fill this gap in coverage, allowing us to continue our work in this currently understudied region of California.

We are fully supportive of this funding recommendation. Please feel free to contact me at reza.navai@dot.ca.gov or (916) 654-3330 if you have any further questions.

Sincerely,

A handwritten signature in black ink that reads "Reza Navai".

REZA NAVAI
Assistant Division Chief
Division of Transportation Planning