



OCEAN PROTECTION COUNCIL

John Laird • Secretary for Natural Resources • Council Chair
Matt Rodriguez • Secretary for Environmental Protection
Betty Yee • State Controller • State Lands Commission Chair
Ben Allen • State Senator
Mark Stone • State Assemblymember
Michael Brown • Public Member
Jordan Diamond • Public Member

October 25, 2018

Dear Councilmembers and Partners,

This year marks the 15th Anniversary of the signing of the California Ocean Protection Act and the creation of the Ocean Protection Council. To celebrate our shared successes, OPC staff created a 15 Year Anniversary Accomplishments Report, which I invite you to read.

This year also marks the end of an era of outstanding leadership by our Chair, Secretary Laird and our Vice Chair, Secretary Rodriguez. As we transition to a new administration, it seems appropriate to update the priorities in our existing Strategic Plan to reflect both the evolution of OPC over the past five years, and the vision we have for this organization for the next five years. In this letter, I would like to provide the Council, our partners, and the public with a conceptual framework on the approach and themes we expect to integrate into our updated strategic plan.

Proposed updates from previous strategic plan:

- **Science:** OPC integrates best available science throughout all our work. Rather than calling out a specific section devoted to scientific inquiry, the updated strategic plan will recognize that science is integrated throughout all we do. Under each portfolio we will describe the types of scientific questions we are asking, the types of research we have supported and are looking for, and the regulatory and management application of such research.
- **Climate change:** Just as science informs and infuses all the work that we do at OPC, climate change is the lens through which we view the vast majority of our work. Here we propose to take both these threads, which were explicitly called out in the previous strategic plan, and make them the warp and the weft of our new strategic plan. As a result, while our climate team will continue to build out California's responses to ocean acidification and sea level rise, we will also be looking at the impacts of climate change on fisheries and the implications for fishing and subsistence communities, for fish populations, for fisheries management, for aquaculture. We will be supporting the marine protected area network as a means of eliminating certain stressors, and thereby potentially increasing resilience to climate change. We will continue to explore the potential for offshore renewable power and the ability of seagrasses and kelp to sequester carbon. We will be exploring broader questions of hypoxia, temperature, salinity, and the impacts of changing ocean chemistry on the health of the ocean and coastal ecosystems as well as on human society. The moment is now to demonstrate the nexus between climate and ocean.

- **Marine protected areas:** When the last strategic plan was written and adopted, the state's Marine Protected Area (MPA) network was still quite nascent. Consequently, it was nested within OPC's sustainable fisheries program. The MPA program is now sufficiently robust and warrants its own stand-alone section. In addition, OPC'S MPA program recently expanded to encompass our new Once-Through Cooling Interim Mitigation Program, which leverages \$5.4 million annually for projects that increase marine life associated with MPAs.
- **Marine pollution:** Over the past few years, OPC has significantly reinvigorated and expanded its marine debris program. We updated the state's Ocean Litter Strategy and broadened it to address not only plastic litter, but microplastics and derelict fishing gear. We also changed the focus of the portfolio from just litter to marine pollution, which enables us to explore the impacts of pollution, chemicals of emerging concern, microplastics and microfibers, and other sources of ocean and coastal degradation. The updated strategic plan will reflect this broadened scope for our marine pollution program.
- **Land-Sea Interface:** OPC recognizes the importance of addressing the critical connection between our terrestrial activities and their impacts on the ocean and coastal environments. Over the past few years, we have used our Proposition 1 funds to amplify our work on water quality and restoration, with projects focused on coastal wetland, estuary, and dune restoration; fish habitat and fish passage restoration; low impact development, green infrastructure and stormwater runoff management; living shorelines and coastal adaptation; targeted water quality infrastructure; and seagrass restoration to mitigate ocean acidification. In addition, we are actively engaging with frontline communities to ensure that all Californians, including those from low-income communities, benefit from our work. We are partnering with non-traditional state agencies to address emerging threats to the marine environment, such as our work with the Department of Public Health and the Office of Environmental Health Hazard Assessment on harmful algal blooms and the associated risks posed to public health and safety.
- **Sustainable ocean economy:** The ocean economy is critically important to the state of California and represents 2% of our GDP. Pressures on the ocean as a resource will only continue to increase as we look to it as a source of food, energy, and resilience against climate change. The updated strategic plan will recognize these increasing pressures, and the need to plan for them appropriately, keeping in mind OPC's mission to protect and conserve the ocean ecosystem. Under the newly established program portfolio of the sustainable ocean economy, OPC will continue working with partners and scientists to explore sectors such as aquaculture, offshore renewable energy, tourism, and recreation.
- **New partnerships:** Over the past few years, OPC has significantly expanded its network of local, regional, federal, and international partners. We recognize the strength of collaborating across jurisdictional and sectoral boundaries – local, regional, state, subnational, international, and industrial. All our work remains grounded in California-specific priorities and is reflective of California-specific policies, but we acknowledge the

value and power of coordinating and collaborating beyond state boundaries. As examples, we worked with our West Coast partners in Oregon, Washington, and British Columbia to found the International Alliance to Combat Ocean Acidification. We have applied to the International Union for Conservation of Nature to have our network of MPAs recognized on the Green List of Protected and Conserved Areas. We organized, along with a team of conservation and climate partners, the first ocean-focused program to be fully integrated into an international climate event at the Governor's Global Climate Action Summit. We sponsored an innovative program bringing together entrepreneurs, investors, and the fishing community to support novel approaches to sustainable fishing. We anticipate working with partners to move California closer to a circular economy on the issue of plastics. We will continue to foster new collaborative efforts across sectoral and geographic boundaries.

Preliminary thinking on OPC's program priorities and goals over the next five years include:

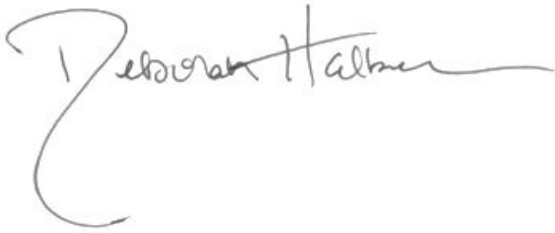
- **Climate Change:** Prepare for and reduce harmful impacts of climate change on coastal development and infrastructure, public health and safety, the economy, and ocean and coastal ecosystems.
- **Marine Protected Areas:** Safeguard California's Marine Protected Area network with an MPA management program that includes sound policy, vigilant enforcement, well-designed monitoring, and effective outreach.
- **Sustainable Fisheries:** Enhance the sustainability of California's ocean fisheries to protect marine ecosystems, port communities, and coastal economies in the face of a changing climate.
- **Marine Pollution:** Support research and policy to ensure clean water for ocean uses, including recreation and fishing, that is protective of the environment and human health.
- **Sustainable Ocean Economy:** Ensure that commercial and industrial uses of the ocean balance social and economic benefits with long-term protection and sustainability of marine and coastal resources.
- **Organizational Strength:** Cultivate organizational effectiveness and longevity to promote and support a healthy, sustainable ocean for generations to come.

Next steps:

OPC staff will draft the strategic plan in coordination with the Council and OPC's Science Advisory Team. We will provide opportunities for public review and comment, vetting our approach and priorities with stakeholders and partners. To ensure that future spending is strategic and leveraged among our priority programs we will also develop an investment plan that will advance scientific and policy solutions to protect California's coast and ocean.

We have achieved so much together. Thank you for your leadership. I look forward to our continued collaboration.

Best regards,

A handwritten signature in dark ink, appearing to read "Deborah Halberstadt". The signature is fluid and cursive, with a large initial "D" and a long horizontal stroke at the end.

Deborah Halberstadt
Executive Director



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Executive Director's Report – October 25, 2018

The Executive Director's Report provides an update on OPC outcomes and accomplishments since the previous OPC meeting. This report covers August 2018 – October 2018.

Funding

All funding opportunities are designed to address the priority issue areas identified in OPC's Strategic Plan.

Water Quality, Supply and Infrastructure Improvement Act of 2014 (Proposition 1): At its July 2018 meeting, OPC authorized a disbursement of \$8,416,409 to support seven projects throughout the state that will provide multiple ecosystem benefits and water quality improvements consistent with the requirements of Proposition 1. At this meeting, staff is recommending approval of one additional project in the amount of \$1,680,000 for the Newport Bay Water Wheel Project, [Item 8b](#). If this project is approved, OPC will have awarded a total of \$10,096,409 in Round 2 of its Proposition 1 funding and will have approximately \$1 million remaining to award, with an additional (and final) appropriation of \$9,300,000 in Proposition 1 funding expected in July 2019.

Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84): At its August 2017 meeting, OPC authorized a disbursement of \$7 million to the two Sea Grant programs in California to fund and administer a competitive grant process for scientific research projects to support OPC priorities. Recommended projects are before the Council for consideration and approval at the October 25, 2018 meeting; details can be found in the staff recommendations [here](#). If the Council approves these projects, OPC will have approximately \$1 million of Proposition 84 funds remaining.

California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access for All Act of 2018 (Proposition 68): Passed by voters in June, Proposition 68 provides a total of \$56.2 million to OPC - \$35 million to support projects that restore marine wildlife and healthy ocean ecosystems and an additional \$21.2 million to fund projects that increase community and ecosystem resilience to climate change. In July 2018, OPC received the first appropriation of Proposition 68 funds totaling \$20 million, \$10 million for marine ecosystems projects and \$10 million for climate change projects. OPC staff are in the process of developing grant guidelines for Proposition 68 funds and anticipate releasing a draft for public review in the fall, hosting public workshops through late fall, and bringing final guidelines for Council consideration and approval at the February 2019 meeting.

Staffing

Tinya Hoang's last day with OPC was on September 12. We thank her for her work during her time with OPC.

Cyndi Dawson's last day with OPC will be on October 30. Cyndi has helped lead OPC's Marine Protected Areas program for the last four years and has created a foundation of science and partnerships that will guide the state's efforts around MPA management, helping ensure that our MPAs have long-term durability and can provide their expected ecological benefits. We wish Cyndi the best of luck in her new role as Executive Director of O'Neill Odyssey in Santa Cruz.

Jenn Phillips's last day with OPC will be on November 2. Jenn has been helping lead OPC's climate change work for the last three-plus years and her strategic and innovative efforts have resulted in many scientific and policy efforts to address sea-level rise and ocean acidification and the state, national and international level. In addition, Jenn played a lead role in ensuring that oceans were elevated on the main stage at the Governor's Global Climate Action Summit. Jenn will continue to work on developing solutions to combat climate change as a Senior Scientist at Governor's Office of Planning and Research. We wish her success in this next endeavor.

With these vacancies and an additional position associated with Proposition 68 funding, OPC is hiring for two Environmental Scientist positions and one Senior Environmental Scientist position. We received a total of over 60 applications for these three positions and will be holding interviews over the next few weeks. An additional job announcement for a Senior Environmental Scientist in our climate change program will be posted shortly.

On October 30 and 31, 2018, OPC will be participating in matching interviews with finalists for upcoming Sea Grant fellowships in 2019. In 2019, OPC will host two fellows and provide financial support for an additional 6 fellows at the Coastal Conservancy, State Water Resources Control Board, State Parks, Fish and Game Commission, State Lands Commission and the Coastal Commission.

Strategic Plan Issue Area 1: Science-Based Decision-making

Science-based decision-making is integrated into all priority program areas; see below for more details.

Strategic Plan Issue Area 2: Climate Change

Global Climate Action Summit

On September 12-14, politicians, business leaders and climate advocates from around the world gathered at the Global Climate Action Summit in San Francisco. The Summit's goal was to deepen commitments and accelerate action from countries – and all sectors of society – to slow climate change and to realize the Paris Agreement. Central to that conversation was the nexus between climate change and ocean ecosystems.

OPC staff worked closely with the advisory committee and organizers of the Global Climate Action Summit to integrate global ocean and coastal action ambition into this global climate dialogue. OPC organized two High Level Ocean Sessions at the Summit, and staff, along with an advisory committee on oceans that OPC staff stood up, integrated the oceans and related commitments, statements of achievement and action into other elements of the Summit program. For more information on oceans at the Global Climate Action Summit see Appendix 1.

Fourth California Climate Change Assessment: California's Ocean and Coast Summary Report

The California Fourth Climate Change Assessment (4th Assessment) was released in late August and is the first inter-agency effort to implement a substantial portion of California's Climate Change Research Plan. The research projects of the 4th Assessment were made possible through two funding sources, one managed by the California Energy Commission (CEC) and another by the California Natural Resources Agency. In addition to the research projects, with the support of the Ocean Science Trust and OPC's Science Advisory Team, OPC led the topical assessment focused on ocean and coasts. The ocean and coastal assessment – California's Ocean and Coast Summary Report - aims to support, bolster, and synthesize funded research projects most relevant to climate change impacts to the ocean and coast. This report synthesizes current scientific understanding about the impacts of climate change on California's coast and ocean and presents a forward-looking summary of challenges and opportunities for the future. It can be downloaded [here](#).

International Alliance to Combat Ocean Acidification

OA Alliance members are working together to elevate the issue of ocean acidification and develop OA Action Plans that contain practicable, implementable steps to mitigate causes, to adapt to unavoidable change and to build resiliency in marine ecosystems and the coastal communities impacted by changing ocean conditions. Government members of the OA Alliance are encouraged to create an OA Action Plan that describes their own unique contribution to advancing some or all the goals of the OA Alliance as written in the Call to Action. OA Action Plans will help governments create actionable responses to threats in their regions and will help affiliate members best leverage their expertise and resources on this issue. California's OA Action Plan will be considered at this meeting, [Item 5a](#), and more information can be found [here](#).

At the Global Climate Action Summit, the OA Alliance hosted an affiliate event titled, "Protecting Coastal Communities and Livelihoods from a Changing Ocean." This panel provided the opportunity to hear directly from OA Alliance members, including those who are most affected from climate-related changes to ocean conditions and those who have already experienced impacts of ocean acidification directly and have taken proactive steps to mitigate and adapt.

As of the Global Climate Action Summit, the OA alliance currently has 31 government members and 43 affiliate members. Recent joiners of the Alliance include the Netherlands, Virginia, Hawaii, City of Seattle, Gullah-Geechee Nation, and Latin American Ocean Acidification Network.

Other successes from this past year include:

- New Zealand, Chile, Tokelau, California, Oregon, British Columbia, City of Vancouver British Columbia, SPREP and NWIFC have begun to initiate the development of OA Action Plans.
- So far in 2018, the OA Alliance has hosted 7 member webinars bringing diverse members together in dialogue to share updates on their progress towards developing OA Action Plans and share technical tools and approaches to implementation.
- In February, the government of New Zealand invited OA Alliance membership from the State of California to attend their first ever nationally convened OA Action Planning meeting
- In April, the OA Alliance collaborated with graduate students at the School of Marine and Environmental Affairs (SMEA) at the University of Washington in Seattle to develop a series developing tools and resources to assist members in the development of OA Action Plans.
- In May, West Coast leadership of the OA Alliance convened an in-person meeting to evaluate and identify long-term goals of the OA Alliance and recommend best approaches to governance, organizational structure, and capacity building that best support the strategic vision of the initiative.
- In September, the OA Alliance contributed to and was featured prominently at the Global Climate Action Summit in San Francisco, hosting an affiliate event attended by more than 100 people that: 1) showcased national and subnational commitments to addressing ocean acidification; 2) presented approaches for responding to the science of ocean acidification through the creation of OA Action Plans; and 3) invited Global Climate Action Summit participants to make commitments to address ocean acidification and other changing ocean conditions within climate agreement frameworks.
- Later this month, the OA Alliance will attend the 2018 Our Ocean Conference and increased a commitment to support the development of twenty OA Action Plans by June of 2019.

Strategic Plan Issue Area 3: Sustainable Fisheries and Marine Ecosystems

Sustainable Fisheries:

California Dungeness Crab Fishing Gear Working Group:

The California Dungeness Crab Fishing Gear Working Group (Working Group) continues to support thriving whale populations and a thriving and profitable Dungeness crab fishery along the West Coast. The Working Group piloted a draft Risk Assessment and Mitigation Program (RAMP) during the 2017-2018 Dungeness crab fishing season in California to support the state in working with experts—agencies, fishermen, researchers, representatives from environmental organizations (NGOs), and others—to identify and assess elevated levels of entanglement risk, explore information needs, and determine the need for management options that could be recommended to CDFW. The Working Group will advance and refine the RAMP during the upcoming 2018-2019 Dungeness crab fishing season. The RAMP includes four priority factors—forage/ocean conditions, whale concentrations, fishing dynamics, and rate of entanglements. With the passage of SB 1309 (McGuire, 2018), “[o]n or before November 1, 2020, the department, in consultation with the California Dungeness Crab Fishing Gear Working Group and other stakeholders, shall adopt regulations establishing criteria and protocols to evaluate and respond to the potential risk of marine life entanglement. The regulations shall include, but are not limited to, the risk assessment and mitigation program. Upon the effective date of the regulations, the director may restrict the take of Dungeness crab pursuant to the protocols and criteria.”

Since the last Working Group recommendations memo in January 2018, the Working Group met on April 23-24, 2018, August 1-2, 2018, and September 25-26, 2018 to consider lessons learned from the 2017-18 RAMP pilot. The Working Group's most recent [Recommendations Memo from October 2018](#), includes an overview of highlights to the RAMP for the 2018-2019 fishing season, an update on CDFW's surface gear rulemaking to minimize the risk of entanglement, and six recommendations for OPC, CDFW, Fish and Game Commission, the Joint Committee on Fisheries and Aquaculture and the Pacific States Marine Fisheries Commission. One of the recommendations requests OPC to direct General Funds for RAMP operations and support, including data gathering, gear innovation and evaluation. Specifically, this recommendation highlights RAMP operating funds, the solar logger pilot project (Item 6b1), synthesis of available whale data, automation of forage/ocean conditions data, additional RAMP information gathering efforts, and gear innovations research and development projects. For more information on the Working Group, please visit the Working Group's [webpage](#). For more information on the RAMP, please visit the RAMP [webpage](#).

Scientific Peer Review Processes for Pacific Herring and Red Abalone Fishery Management Plans:

OPC funded the Ocean Science Trust to develop [guidance and recommendations](#) for CDFW regarding a suite of scientific peer review options for California's existing and future fishery management needs, focused on review of science supporting fishery management plans (FMPs). This [report](#) was finalized in June 2017 and helped inform CDFW's process of amending the Marine Life Management Act (MLMA) [Master Plan](#), particularly Chapter 10 of the Master Plan: Best Available Information and Peer Review. As part of the aforementioned grant, OPC has funded Ocean Science Trust to facilitate the scientific peer review processes for the Pacific herring and red abalone FMPs, utilizing the guidance and recommendations from the June 2017 report. The final "Scientific Peer Review of Proposed Recreational Red Abalone Management Strategies" report is available [here](#). Two stakeholder webinars were hosted as part of this process: one webinar on August 20th was hosted to discuss questions submitted by stakeholders, provide clarification, and outline timeline considerations, and one webinar was held in October to share results from the peer review report. The "Scientific Review of the Draft Fishery Management Plan for Pacific Herring" is available [here](#). A stakeholder webinar was held in early October to share results from the peer review panel. Additional resources and information for the recreational red abalone fishery peer review process are available [here](#), and additional resources and information for the herring FMP peer review are available [here](#).

California Track of Fish 2.0:

On [July 25, 2018](#), the Ocean Protection Council approved funding to support a California track of Fish 2.0 to enhance sustainability of fisheries and fishing communities through innovation. The California track of Fish 2.0 is now launched and the California workshop is set for November 28-29 in San Francisco. Any California seafood businesses involved in any aspect of seafood supply chains, climate resilience technologies or seafood production, harvesting and trade, are eligible to

apply to participate in this free, two-day workshop. Participation is free at both the workshop and reception, but anyone who wants to attend must [apply online by October 28](#). The online competition of the California track of Fish 2.0 will open on November 28, together with the start of the workshop. Additional details are available on the [Fish 2.0 California Track homepage](#), the [workshop flyer](#), as well as OPC's Fish 2.0 California track [project page](#). Read the [press release](#) for more details regarding the announcement of the California track.

Marine Protected Areas (MPAs):

MPA Monitoring Action Plan:

The MPA Monitoring Action Plan (Action Plan) is being presented today for consideration for adoption, [Item 4b](#). The Action Plan identifies priority metrics, habitats, sites, and species for long-term monitoring to aid in the evaluation of the MPA Network's progress towards meeting the goals of the [Marine Life Protection Act](#). The Action Plan is a living document and will guide data collection and analysis in preparation for the 2022 Ten-Year MPA Network Management Review. The Action Plan went through a scientific peer review process as well as review by California Tribes and Tribal Governments, and the general public. The Action Plan was adopted by the Fish and Game Commission on October 17, 2018. Pending Council approval of the Action Plan, OPC will release a competitive grant process, administered by California Sea Grant, to support monitoring projects consistent with the priorities identified in the Action Plan; this competitive process was approved by the Council at its July 25, 2018 OPC meeting.

MPA Statewide Leadership Team Work Plan:

The MPA Statewide Leadership Team (Leadership Team) Work Plan is being presented today for consideration for adoption, [Item 4a](#). The Work Plan defines priority actions in the MPA Management Program in the four focal areas of: outreach and education; research and monitoring; Item 4a 2 enforcement and compliance; and policy and permitting. The Work Plan outlines shared strategic priorities among the members of the Leadership Team and identifies key actions and outcomes related to the management of California's statewide network of MPAs. The resolution for consideration recognizes the "MPA Statewide Leadership Team Work Plan FY 18/19 – 20/21" as being a foundational document that will guide the work and priorities of the Leadership Team on tasks related to MPA network management over the next three years. The inaugural Work Plan covered the period FY 15/16 and 17/18 and catalyzed significant progress towards achieving the goals of the Marine Life Protection Act. Key accomplishments to date include, but are not limited to:

- [Outreach and Education](#): Installation of 356 regulatory and interpretive signs; establishment of a small grants program for the MPA Collaborative Network¹ focused on locally produced outreach products; and a comprehensive gap analysis to guide future work.
- [Enforcement and Compliance](#): Use of MPA Watch human use data to help inform enforcement assets allocation; progress towards deployment of an electronic records management system; and piloting of new technologies to

¹ <http://www.mpacollaborative.org/>

- improve efficiency and effectiveness.
- **Research and Monitoring:** Completion of Phase 1 baseline monitoring to establish conditions of the MPAs at the time of implementation; regional public meetings to share results including open web access² to all data and reports; and the launch of Phase 2 long-term monitoring to track performance of the MPAs.
 - **Policy and Permitting:** Launch of a quantitative cumulative impact assessment tool to inform decision making about scientific collecting permits; multiple successful engagements working across regulatory jurisdictions to eliminate or significantly reduce impacts to MPAs; and ongoing discussion of policy needs regarding other uses of MPAs not related to consumptive take (e.g. habitat modifications within an MPA).

Once-Through Cooling Interim Mitigation Program:

The Once-Through Cooling (OTC) Interim Mitigation Program Award Guidelines are being presented today for consideration for adoption, Item 4c. The Award Guidelines were made public for a 30-day public comment period from August 13 – September 14, 2018. The Award Guidelines establish the high-level process and criteria that OPC will use to solicit competitive applications, evaluate and select proposals, and distribute awards using OTC interim mitigation funds. The Award Guidelines were thoughtfully designed based on the best science available to ensure that funds are allocated to projects that are consistent with the State Water Resources Control Board's policy's intention to increase marine life associated with marine protected areas. The OPC Science Advisory Team's report, "[Ocean Restoration Methods: Scientific Guidance for Once-Through Cooling Mitigation Policy](#)", played a critical role in the creation of the Award Guidelines. The report provided scientific guidance on the types of restoration methods that can help offset the harmful effects of OTC and interpreted key terms in the policy.

International Union for Conservation of Nature Green List:

California's MPA Network has been accepted as a candidate for the International Union for Conservation of Nature (IUCN) Green List. The [IUCN Green List program](#) is a recent initiative that aims to promote effective, equitable, and successful protected areas worldwide. Green List [criteria](#) benchmark good governance, sound design and planning, effective management, and successful conservation outcomes. These criteria have strong alignment with the goals specified in the MPA network's founding legislation, the Marine Life Protection Act. The Green List process represents a unique opportunity to bring together a diversity of stakeholders in the evaluation of California's MPA network against Green List criteria. Joining the Green List will provide formal global recognition of California's leadership in ocean management and help to ensure the durability and success into the future. This process also represents an opportunity for California to work with global innovators in marine science, management, and conservation to share lessons from California's success and ensure our adaptive management is informed by the best science available. The Expert Assessment Group for the Green List (EAGL), comprised 17 individuals with a

² <https://data.cnra.ca.gov/>

variety of backgrounds in the MPA sector, met twice in Sacramento to begin the evaluation process led by IUCN and a neutral third-party evaluator. Details about the evaluation process can be found [here](#) and the process is on track to be completed in 2019.

Strategic Plan Issue Area 4: Coastal and Ocean Impacts from Land-Based Sources

Marine Pollution Program:

Updating Monitoring Recommendations for Emerging Contaminants in Coastal Waters

In July 2018, OPC approved funding for a convene and facilitate an expert panel to update monitoring recommendations for emerging contaminants in coastal waters. As mentioned at the July meeting, OPC staff has hosted an interagency meeting to further shape the management questions the expert panel will address, and will continue to work with stakeholders and the grantee to refine the questions that direct the panel's activities.

Item 8 on the October 25, 2018 OPC meeting agenda includes consideration to disburse funds for projects that will advance our knowledge of nutrient pollution, harmful algal blooms, and microplastics and pathogens. These projects work towards building out the marine pollution program to cover a wider range of pollution issues than plastics. Item 8 also includes consideration to disburse funds for the Newport Water Wheel project, which will reduce trash pollution in Upper Newport Bay, and will provide opportunities for community education and trash pollution characterization.

Strategic Plan Issue Area 5: Existing and Emerging Ocean Uses

Marine Renewable Energy

At the request of Governor Brown in May 2016, the Director of the federal Bureau Ocean Energy Management (BOEM) established a BOEM California Task Force to facilitate education, coordination and consultation on leasing and permitting for, as well as the monitoring and evaluation of, renewable energy projects located on the California outer continental shelf. OPC staff assisted the Governor's office and BOEM staff in organizing the kick-off meeting for the Task Force, which was held in Sacramento in October 2016.

During 2017, OPC staff assisted BOEM and the California Energy Commission (CEC) with outreach efforts on the Central Coast. Currently, outreach efforts are focused on the North Coast. This change in focus reflects the Redwood Coast Energy Authority's announcement that it had assembled a consortium for the purposes of developing a small-scale wind farm off the Humboldt County coast. OPC staff has assisted the CEC in locating relevant data sets for the offshore wind planning process that is being conducted at the request of the Task Force. A second Task Force meeting was held last month by BOEM and the state. The major outcome of this meeting was BOEM's announcement of draft "Call Areas" for offshore wind leasing on the Central and North Coasts. Basically, "Call Areas" are a preliminary identification of suitable areas for offshore wind development and do not incorporate formal environmental review. On October 19th, BOEM published in the federal register a formal "[Call for Information and Nominations](#)" which includes three "Call Areas" on the California Outer Continental Shelf. The state and other stakeholders will

have until January 28, 2019 to submit their comments to the federal docket. The OPC-led state-federal Marine Renewable Energy Work Group will be meeting in November to discuss the Call for Information and opportunities for collaborating on a response and regulatory issues.

Outer Continental Shelf Oil and Gas Development

OPC staff are awaiting the release in early 2019 of the Bureau of Ocean Energy Management's next iteration of its Proposed Five-Year Outer Continental Shelf Oil and Gas Leasing Program. The draft proposed program included renewed leasing for the California Outer Continental Shelf. On behalf of the Governor's office, in March of this year, the OPC coordinated and submitted to the federal register [a state of California response](#) to the draft program.

APPENDIX 1: Global Climate Action Summit

More information on the ocean sessions and outcomes at the Summit can be accessed at this website (www.oceanclimateaction.org) which incorporates ocean-climate commitments, videos from the press conference and two ocean-climate sessions, and other related news.

These commitments will also be made available on the GCAS website at this link:
<https://www.globalclimateactionsummit.org/all-announcements>

The videos of the press conference and two GCAS ocean-climate sessions can be accessed below:

Press conference: [Facebook Live via Packard Foundation](#)



**New Ocean-Climate Agenda
To Be Unveiled at Global
Climate Action Summit**

World-renowned climate and ocean experts will address
the Ocean's role in combating climate change

Friday, September 14th | 7:30 – 8:00am (PST)

 Watch live here: facebook.com/PackardFoundation


**GLOBAL
CLIMATE
ACTION SUMMIT**

#OceanClimateAction
#GCAS2018
oceanclimateaction.org

Morning session: [GCAS YouTube](#)

The Ocean-Climate Challenge: High Thematic Dialogue

Friday, September 14th | 9:00am – 10:30am (PST) | Yerba Buena Center for the Arts Theater

DANCE FROM THE ISLANDS FIJIAN DRUMMERS Rako Pasefika A WELCOME FROM THE WEST COAST JULIE PACKARD Executive Director, Monterey Bay Aquarium WASHINGTON STATE AND THE OCEANS GOVERNOR JAY INSLEE Washington OUR OCEAN PLANET LEHUA KAMALU Captain, Polynesian Voyaging Society NAINOA THOMPSON President, Polynesian Voyaging Society	CLIMATE IS AN OCEAN ISSUE: THE OCEAN-CLIMATE ACTION AGENDA JOHN KERRY Former U.S. Secretary of State ISLAND NATIONS AND THE OCEAN-CLIMATE ACTION AGENDA FRANK BAINIMARAMA Prime Minister of Fiji COMMITMENTS FOR THE COASTS AND OCEANS SECRETARY JOHN LAIRD California Natural Resources Agency SENATOR BRIAN SCHATZ Hawaii	IMPLEMENTING THE OCEAN-CLIMATE ACTION AGENDA MODERATOR: CRISTINA MITTERMEIER Photographer, National Geographic PANELISTS: DR. M. SANJAYAN CEO Conservation International DR. JANE LUBCHENCO Professor, Department of Integrative Biology, Oregon State University AMBASSADOR MACHARIA KAMAU Principal Secretary, Ministry of Foreign Affairs, Kenya SHEILA WATT-CLOUTIER Environmental, Cultural and Human Rights Advocate	 GLOBAL CLIMATE ACTION SUMMIT  globalclimateactions summit.org/live #OceanClimateAction #GCAS2018 #StepUp2018 oceanclimateaction.org
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Afternoon session: [Facebook Live via Packard Foundation](#)

The Ocean-Climate Challenge: New Approaches, Partnerships, and Opportunities

Friday, September 14th | 2:30pm – 4:00pm (PST)
Moscone South (747 Howard Street, San Francisco)

 **Facebook Live:**
facebook.com/PackardFoundation

#OceanClimateAction
#GCAS2018
#StepUp2018
oceanclimateaction.org

SUBNATIONAL AND BUSINESS LEADERSHIP FOR THE OCEANS MODERATOR: KEN ALEX Director, Governor's Office of Planning and Research, California PANELISTS: NINA JENSEN CEO, REV Ocean THE HONORABLE DAVID SPEIRS Minister for Environment and Water, South Australia MAYOR KIRK CALDWELL Honolulu	ARMCHAIR DISCUSSION: INTEGRATING OCEANS INTO THE CLIMATE DIALOGUE MODERATOR: JOHN PODESTA Founder and Director, Center for American Progress PANELISTS: MINISTER INIA SERUIRATU Minister for Agriculture, Rural & Maritime Development, & National Disaster Management, Fiji JULIO CORDANO Head of the Department of Climate Change, Ministry of Foreign Affairs, Chile EVA SVEDLING State Secretary to the Minister for International Development Cooperation and Climate, Sweden	VALUE OF PARTNERSHIPS IN CLIMATE-SMART OCEAN GOVERNANCE MODERATOR: JANIS JONES CEO, Ocean Conservancy PANELISTS: DANIELA V. FERNANDEZ Founder & CEO, Sustainable Ocean Alliance KOSI LATU Director-General, Secretariat of the Pacific Regional Environment Programme REP. KRISTIN JACOBS Florida House of Representatives	SUPPORTING THRIVING CULTURES UNDER CHANGE: THE GULLAH/GEECHEE SEA ISLAND COALITION QUEEN QUET MARQUETTA L. GOODWINE Chiefess of the Gullah/Geechee Nation COMMITMENTS SUPPORTING THE OCEAN-CLIMATE ACTION AGENDA ASSEMBLYMEMBER MARK STONE 29th California Assembly District SAM TEICHER Founder and Chief Reef Officer, Coral Vita	CLOSING: IMPLEMENTATION AND INSPIRATION CARRYING TO COP24 PETER THOMSON UN Secretary General's Special Envoy for the Ocean VLADIMIR RYABININ Executive Secretary of the Intergovernmental Oceanographic Commission and Assistant Director General of UNESCO
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GLOBAL CLIMATE ACTION SUMMIT

Media highlights related to oceans at the Summit can be found below:

- San Francisco Chronicle: **Look to the ocean for climate resiliency** | Deborah Halberstadt (opinion), 09.27.18

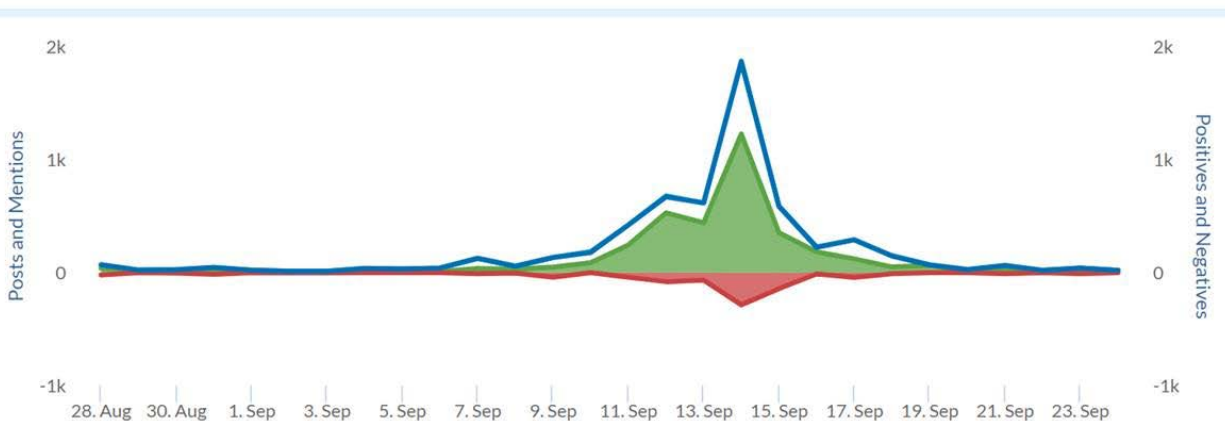
- <https://www.sfchronicle.com/opinion/article/Look-to-the-ocean-for-climate-resiliency-13264626.php>
- Forbes: **Can Businesses Participate In (And Profit From) Ocean Conservation?** | Priya Shukla, 09.2.18
<https://www.forbes.com/sites/priyashukla/2018/09/21/ocean-conservation-is-an-opportunity-for-businesses/#5268ed575f02>
 - Devex: **Ocean Advocates Find New Ways to Link Their Cause with Climate Change** | Catherine Cheney, 09.17.18
<https://www.devex.com/news/ocean-advocates-find-new-ways-to-link-their-cause-with-climate-change-93410>
 - Fiji Sun Online: PM: **The Ocean Is Our Everything** | Maika Bolatiki, 09.15.18
<https://fijisun.com.fj/2018/09/15/pm-the-ocean-is-our-everything/>
 - Fiji Broadcasting Corporation: **Pacific Islands Driven to Fight for Their Homes: PM** | Kelly Vacala, 09.15.18
<http://www.fbc.com.fj/fiji/68575/pacific-islands-driven-to-fight-for-their-homes-pm>
 - Forbes: **Ocean Issues Are At The Forefront Of the Global Climate Action Summit** | Priya Shukla, 09.14.18
<https://www.forbes.com/sites/priyashukla/2018/09/14/ocean-issues-are-at-the-forefront-of-the-global-climate-action-summit>
 - Washington Post: **The Oceans are in Danger. We Need to do More than Ban Plastic Straws** | John Podesta, CAP (opinion), 09.14.18
<https://www.washingtonpost.com/opinions/the-oceans-are-in-danger-we-need-to-do-more-than-ban-plastic-straws>
 - San Francisco Chronicle: **Young inspired to save oceans at Sustainable Oceans Alliance gala** | Leah Garchik, 09.13.18
<https://www.sfchronicle.com/entertainment/garchik/article/Young-inspired-to-save-oceans-at-Sustainable-13225273.php>
 - Forbes: **Landmark Commitments will be Made at the Global Climate Action Summit** | Priya Shukla, 09.12.18
<https://www.forbes.com/sites/priyashukla/2018/09/12/landmark-commitments-will-be-made-at-the-global-climate-action-summit/#331c21d72ae8>
 - KSBW: **Julie Packard of the Monterey Bay Aquarium talks about future of oceans** | (Video interview), 08.12.18
<https://www.ksbw.com/article/julie-packard-of-the-monterey-bay-aquarium-talks-about-future-of-oceans/23109711>
 - Jean-Michel Cousteau's Ocean futures Society: **Global Climate Action Summit 2018** | Jean-Michel Cousteau (blog), 09.12.18
<http://www.oceanfutures.org/news/blog/global-climate-action-summit-2018>
 - La Opinión: **El Océano es Nuestra Mejor Solución Para el Clima** | Meg Caldwell, Packard Foundation (opinion), 09.12.18
<https://laopinion.com/2018/09/12/el-oceano-es-nuestra-mejor-solucion-para-el-clima/>
 - San Jose Mercury News: **Protect Our Oceans, The Heart of Earth's Climate Cycle** | Julie Packard, Monterey Bay Aquarium (opinion), 09.11.18
<https://www.mercurynews.com/2018/09/11/opinion-protect-our-oceans-the-heart-of-earths-climate-system/>
 - Sacramento Bee: **Want to Combat Climate Change? Take Care of Our Oceans** | Meg Caldwell (opinion), 09.10.18
<https://www.sacbee.com/opinion/op-ed/soapbox/article218021975.html>

Video highlights related to oceans at the Summit can be found below:

- [Our Ocean Planet](#), **NRDC**: This preview of Our Ocean Planet, a short film narrated by Sigourney Weaver, makes the case that we need to help the ocean heal so that it can help us adapt to the mounting pressures of climate change. The ocean absorbs one-quarter of the carbon dioxide we produce by burning fossil fuels and stores 90 percent of the heat on our warming planet. But overfishing and pollution have brought the ocean to the breaking point. Its systems are starting to fail.
- [Protecting the Ocean, the Heart of Earth's Climate System | A Message From Julie Packard](#), **Monterey Bay Aquarium**: The week of September 10, people from around the world are gathering in San Francisco for the Global Climate Action Summit. Convened by the State of California, the Summit brings together leaders—representing nations, states, cities, companies, investors and citizens—to celebrate climate action, and step up their ambitions to meet the targets set by the Paris Agreement.
- [Climate solutions exist on land AND in the ocean, a message from the Packard Foundation](#): Learn how sequoia and mangrove forests are helping us go #FurtherFaster. #GCAS2018 #StepUp2018

Social media highlights related to oceans at the Summit can be found below:

- Total use of the #OceanClimateAction hashtag: **2,741 posts** (8/28-9/24)
- Total ocean-climate related posts: **3,152 posts** during the conference (9/12-9/14)



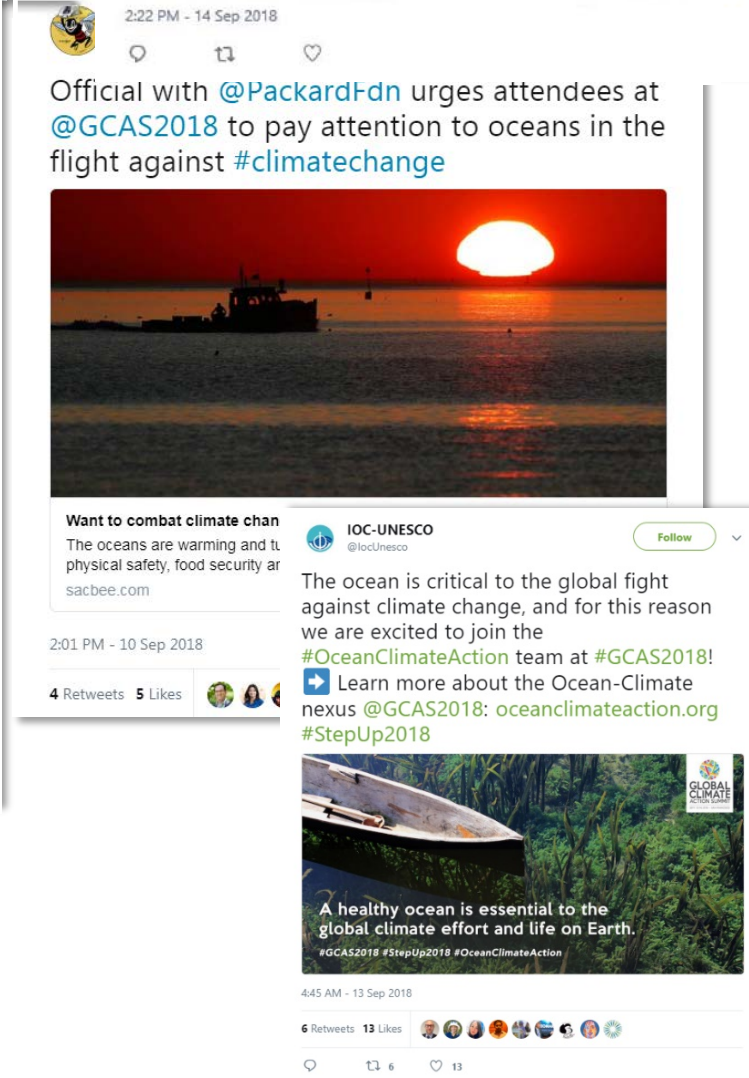
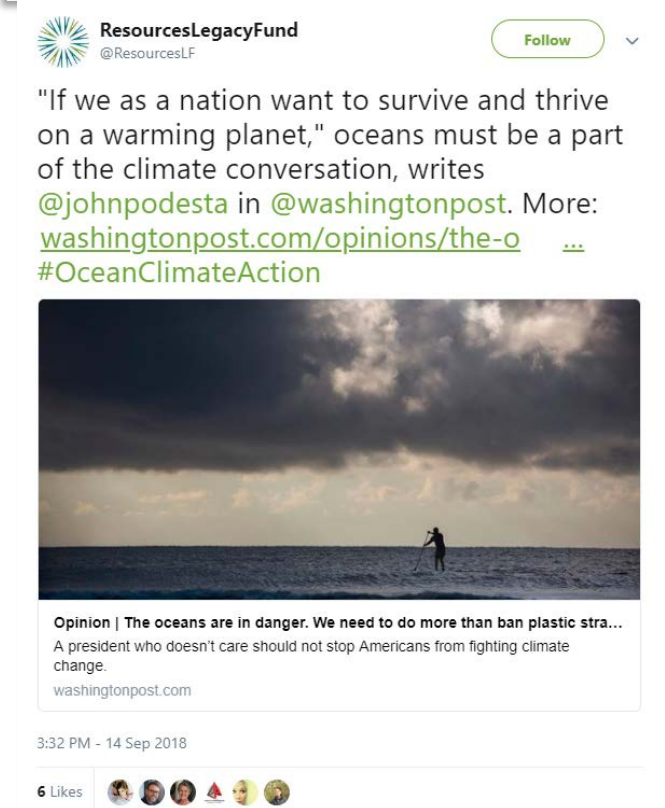
Key: Green = positive sentiment, Red = neutral sentiment, Blue = number of posts

This graph presents the ocean-climate conversation that took place from 8/28 – 9/24 and shows how ocean-conversation flowed before, during and after the Summit. As you can see, ocean-climate conversation began to heighten leading up to the Summit, with an obvious spike of ocean-climate conversation taking place during the Summit itself.

- The Global Climate Action Summit – [tweet](#), [tweet](#), [tweet](#)
- Natural Resources Defense Council – [Facebook post](#)
- Cristina Mittermeier, Photographer and Founder of Sea Legacy – [tweet](#)
- CAP Action – [tweet](#)
- Monterey Bay Aquarium YouTube Channel – [video](#)
- Scripps Institution of Oceanography, University of California San Diego – [tweet](#)

- Dr. Joel B. Carboni, Founder of Green Project Management – [tweet](#)
- CA Waterkeepers– [tweet](#)
- Miriam Goldstein, Dir. of Ocean Policy at @amprog – [tweet](#), [tweet](#), [tweet](#)
- Meg Caldwell, Dir. of Oceans at @packardfdn [tweet](#), [tweet](#)
- Packard Foundation – [tweet](#), [tweet](#), [tweet](#), [tweet](#)
- UN Development Programme in the Maldives – [tweet](#)
- The Intergovernmental Oceanographic Commission of UNESCO – [tweet](#)
- South Australia's Department for Environment and Water – [tweet](#) (VIDEO)
- Julie Packard, Executive Director of the Monterey Bay Aquarium – [tweet](#) (VIDEO), [tweet](#), [tweet](#)
- Joe Arvai, Director at University of Michigan School for Environment and Sustainability – [tweet](#)
- George H. Leonard, Chief Scientist at Ocean Conservancy – [tweet](#), [tweet](#)
- GreenLatinos – [tweet](#)
- UCSB Benioff Ocean Initiative – [tweet](#), [tweet](#), [tweet](#)
- California Ocean Protection Council – [tweet](#)
- Sacramento Bee – [tweet](#)
- Resources Legacy Fund – [tweet](#)
- Climate Advisers – [tweet](#)







Global Climate Action Summit @GCAS2018 · Sep 14

The "Ocean-Climate Challenge" session will be LIVE today at 9:00 a.m. PT—Check out the morning program & don't forget to tune in. >> globalclimateactionsummit.org/live #GCAS2018 #StepUp2018

The Ocean-Climate Challenge: High Thematic Dialogue

Friday, September 14th | 9:00am – 10:30am (PST) | Yerba Buena Center for the Arts Theater

SAVING FROM THE ISLANDS

FLIAN DRUMMERS

Raúl Puente

WELCOME FROM THE WEST COAST

JULIE PACKARD

Executive Director, Monterey Bay Aquarium

WASHINGTON STATE AND THE OCEANS

GOVERNOR JAY INSLEE

Washington

OUR OCEAN PLANET

LESLIA KAMALI

Captain, Palmyra Island, Palmyra Island

NANCY THOMPSON

President, Palmyra Island, Palmyra Island

CLIMATE IS AN OCEAN ISSUE: THE OCEAN-CLIMATE ACTION AGENDA

JOHN KERRY

Former U.S. Secretary of State

ISLAND NATIONS AND THE OCEAN-CLIMATE ACTION AGENDA

PRINCE EMBODIMENT

Prime Minister of Fiji

COMMITMENTS FOR THE OCEANS AND OCEANS

SECRETARY JOHN LAIRD

California Natural Resources Agency

SENATOR BRIAN SCHATZ

Utah

IMPLEMENTING THE OCEAN-CLIMATE ACTION AGENDA

CRISTINA WITTEMEIER

President, National Geographic

MODERATOR

DR. JANE LUSCHENCO

Professor, Oregon State University

AMBAZADOR

MACAULUS KAMAU

Principal Secretary, Ministry of Foreign Affairs, Kenya

SHEILA WATKINS

Environmental, Cultural and Human Rights Advocate



globalclimateactionsummit.org/live

#OceanClimateAction
#GCAS2018 #StepUp2018
oceanclimateaction.org

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Global Climate Action Summit @GCAS2018 · Sep 14

The "Ocean-Climate Challenge" afternoon session is LIVE today—Check out the program & don't forget to tune in. >> #GCAS2018 #StepUp2018

The Ocean-Climate Challenge: New Approaches, Partnerships, and Opportunities

Friday, September 14th | 2:30pm – 4:00pm (PST)
Moscone South (747 Howard Street, San Francisco)

Facebook Live: facebook.com/PackardFoundation

INTERNATIONAL AND DOMESTIC LEADERSHIP FOR THE OCEANS

KEN ALEX

Director, Governor's Office of Planning and Research, California

MODERATOR

MINISTER EVA SORUBATU

Minister for Agriculture, Rural & Maritime Development, & National Disaster Management, Fiji

THE HONORABLE DAVID SPIES

Minister for Environment and Water, South Australia

MAJOR KIRK CALDWELL

Honolulu

ARMCHAIR DISCUSSION: INTEGRATING OCEANS INTO THE CLIMATE DIALOGUE

JOHN PROSSER

Founder and Director, Center for American Progress

MODERATOR

MINISTER EVA SORUBATU

Minister for Agriculture, Rural & Maritime Development, & National Disaster Management, Fiji

THE HONORABLE DAVID SPIES

Minister for Environment and Water, South Australia

MAJOR KIRK CALDWELL

Honolulu

VALUE OF PARTNERSHIPS IN CLIMATE ADAPTATION

JAMES JONES

CEO, Ocean Conservancy

MODERATOR

DANIELA V. FERNANDEZ

Founder & CEO, Sustainable Ocean Alliance

KOSI LATU

Director General, Secretariat of the Pacific Regional Environment Programme

BER KRISTIN JACOB

Public Involvement Representative

SUPPORTING THRIVING CULTURES UNDER CHANGE: THE GULANDECHES SEA ISLAND CO-OPERATION

QUEEN QUEEN MARGUETA L. GODOVINE

Chairman of the Board, Gulandech Sea Island Co-Operation

COMMITMENTS SUPPORTING THE OCEAN-CLIMATE ACTION AGENDA

ASSEMBLY MEMBER MARK STONE

29th California Assembly District

SAM TEICHER

Founder and Chief Real Estate Officer, Coral Vita

CLOSING IMPLEMENTATION AND INSPIRATION CARRYING TO COP24

PETER THOMSON

On Secretary General, Special Envoy to the Ocean

VACANCY EVANS

Executive Secretary of the International Convention on the Great Lakes and the St. Lawrence River

GLOBAL CLIMATE ACTION SUMMIT

5 15



NRDC September 14 at 9:01 AM

Our Ocean Planet is a short film about the interplay of climate change and the ocean. The ocean absorbs one-quarter of the carbon dioxide we produce by burning fossil fuels and stores 90 percent of the heat on our warming planet. But overfishing and pollution have brought the ocean to the breaking point. Its systems are starting to fail. Our Ocean Planet makes the case that we need to help the ocean heal so that the ocean can help us adapt to the mounting pressures of climate change. Learn more: <https://on.nrdc.org/2QuML9S>

Our Ocean Planet was produced by the Natural Resources Defense Council (NRDC), Bloomfish Pictures and Rock, Paper, Scissors. It premiered at the Global Climate Action Summit in San Francisco on September 14, 2018.

#GCAS2018 #OceanClimateAction



9.8K Views

137 Likes 126 Shares



Resources Legacy Fund

September 4 at 3:15 PM ·

Important new website on ocean issues in preparation for #GCAS2018: <https://www.oceanclimateaction.org/> #OceanClimateAction #StepUp2018



OCEANCLIMATEACTION.ORG

Ocean Climate Action - Ocean Climate Action

Healthy and resilient ocean and coastal ecosystems underpin the world'...

Like

Comment

Share



Julie Packard

@juliepackard

Follow

California is really stepping up its climate leadership--setting an example for the world: mbayaq.co/2x4ANv0 @MontereyAq @CaliforniaEPA @Cal_OPR #GCAS2018 #OceanClimateAction



11:55 AM · 11 Sep 2018

30 Retweets 107 Likes



Statements in support of ocean-climate action at the Summit:

“Ocean Conservancy applauds Governor Jerry Brown, the state of California, and the international leaders gathered in San Francisco for this watershed moment,” said [Janis Searles Jones](#), **CEO of Ocean Conservancy**. “We know we need to move more quickly to address climate change, and it is heartening to see these commitments being made, in the absence of federal leadership in the US on this issue. We simply cannot solve the climate crisis without taking into consideration what is big, blue and hiding in plain sight – our ocean. For the first time at a major climate conference, the ocean will be featured prominently. This gives me hope for the future.”

“A thriving, resilient ocean holds the potential to mitigate some of the worst consequences of climate change,” said [Meg Caldwell](#), **Deputy Director for Oceans at the Packard Foundation**. “While the problems facing our ocean are complex – and the approaches we take to address these threats may differ from place to place – the basic path to creating a better future for our ocean and our climate is clear: Stop the activities that do the most harm and create incentives for the solutions that do the most good for the ocean and people.”

“The ocean is the heart of Earth’s climate system; it plays a central role in regulating our climate and absorbing human-caused greenhouse gas emissions,” said [Julie Packard](#), **Executive Director Monterey Bay Aquarium**. “Yet for too long it’s been overlooked. Now, for the first time, it’s part of the global climate conversation. Ocean leaders, including the team at Monterey Bay Aquarium, have issued a call to governments, industry and the world’s citizens, outlining what it will take to protect our living ocean. Now is the time to act. The lives of seven and a half billion people depend on it.”

“The Ocean is our most effective buffer against climate change. It gives us half the oxygen we breathe, absorbs most of the heat we generate and captures over a quarter of the carbon dioxide released into the atmosphere every year. But we’re causing widespread harm to this vital lifeline,” said [Kristian Teleki](#), **Director of the Friends of Ocean, an initiative jointly run by the World Economic Forum and World Resources Institute**. “Everyone needs a healthy Ocean, no matter where they live, so we must change our ways. The good news is that we have the knowledge, power and technology to do this. We just need to act much quicker, work together and be smarter in our approach.”

“While the oceans make up 70 percent of the globe and are facing some of the planet’s most extreme climate impacts, they are often overlooked in the climate change discussion. But the oceans also hold many solutions,” said [Miriam Goldstein](#), **Director of Ocean Policy at Center of American Progress**. “This week, at the Global Climate Action Summit, we have the opportunity to explore these solutions. From the creation of marine protected areas, to the restoration of “blue carbon” ecosystems such as mangroves and seagrass beds, to improvements to coastal infrastructure and shipping, the oceans can and should be the basis of a new, blue, low-carbon economy in which we all prosper.”

“Ocean and climate issues are inextricably linked, yet international climate forums have often overlooked the ocean-climate relationship,” said [Gwynne Taraska](#), **Senior Fellow at Climate Advisers**. “By recognizing the promise of ocean-based climate action, the Global Climate Action Summit is helping to set a precedent for the global climate effort.”

"The ocean is the origin and engine of all life on this planet. Yet as far as humans are concerned, climate change threatens to turn our oceans from ally to foe," said [Dr. M. Sanjayan](#), **CEO of Conservation International**. "We must take advantage of this renewed global interest in oceans and political will in some countries, especially island nations, to massively accelerate protection and effective management of our oceans. This includes integrating the ocean into a sustainable blue economy and harnessing the power of marine ecosystems to help us mitigate and adapt to climate impacts."

"Ocean science can help us to address impacts from climate change, marine pollution, ocean acidification, the loss of marine species and degradation of marine and coastal environments," said [Vladimir Ryabinin](#), **Executive Secretary of the Intergovernmental Oceanographic Commission and Assistant Director General of UNESCO**. "To curb climate change and achieve sustainable development, good science is needed to inform policies and raise the knowledge bar of all stakeholders."

"California is taking action to protect our invaluable marine ecosystem and the coastal and frontline communities that will bear the brunt of the climate impacts. We are working hand in hand with some of the best scientists in the world to develop solutions that limit the impacts of climate change on the ocean and the communities that depend on it," said [Deborah Halberstadt](#), **Executive Director of Ocean Protection Council, Deputy Secretary for Ocean and Coastal Matters, California Natural Resources Agency**. "As a demonstration of the State's commitment, this week's Global Climate Action Summit will culminate in two high level sessions that focus specifically on the ocean-climate nexus and will challenge all delegates to commit to global action on ocean-related climate measures."

"Our coasts and ocean are at the center of climate change. Seas are rising, the ocean is acidifying and storms are increasing. With climate change already knocking at the door, it's time for immediate action," said [Stefanie Sekich-Quinn](#), **Coastal Preservation Manager of the Surfrider Foundation**. "Gone are the days of complacency and inaction. The Global Climate Action Summit offers an incredible opportunity to join global forces and drive collective solutions that protect our ocean and coasts from climate change."

"The ocean is the great engine that regulates our climate and sustains life on earth. For the first time ever, global leaders from all sectors of society have recognized that oceans can and must be part of the solution to combating climate change," said [Lisa Suatoni](#), **Senior Scientist, NRDC**. "By integrating ocean actions into climate policy we protect our communities and future generations."

"We need our oceans," said [Liz Havstad](#), **executive director of Hip Hop Caucus**. "Coastal and island communities, are the stakeholders, the experts, the leaders, and the stewards who we must heed when it comes to ocean strategies of climate resiliency and adaptation."

"We need a safe ocean for economic reasons, cultural reasons, and for our children to have a place to grow up in and thrive in," said [Mark Magaña](#), **founding president and CEO of GreenLatinos**.

"Ambitious actions on climate change have to go with ambitious actions on the ocean," said [Taholo Kami](#), **Special Representative for the Ocean Pathway for the COP23 Presidency Secretariat**.

"We are all in the same canoe - climate change affects all of us," [said](#) **Inia Seruiratu, the Fijian Minister for Agriculture, Rural & Maritime Development, and National Disaster Management.** "It is time that we bring everybody in through these partnerships."

"We've done our job on raising awareness of the problems," [said](#) **Peter Thomson, United Nations special envoy for the ocean.** "What we have to move on to now is solutions to the problems we've identified and strategies for implementing those solutions."

"We used to kind of thank our lucky stars that the ocean absorbed all this carbon so that we didn't grow our concentrations of carbon in the atmosphere as quickly," [said](#) **Michael Northrop, program director for sustainable development at the Rockefeller Brothers Fund.** "It's really only in the last 10 years that we've started to say, 'no this is a problem.' Having concentrations of carbon in the ocean is horrible. It's cataclysmic. It's going to be a complete disaster for all of us."