Dear Mr. President and Members of Congress:

As scientists, we write to you, united in our concern over the proposed expansion of offshore oil and gas drilling in U.S. waters. Offshore drilling represents a significant threat to marine life and coastal economies that rely on a vibrant ocean. Because our health and planet depend on a rapid transition to clean, renewable energy, we should not be investing in new fossil fuel extraction. On World Oceans Day, we call on you to protect our coasts and halt these efforts to expand offshore drilling.

Offshore drilling fuels climate change, which threatens our health and livelihoods.

Among the greatest threats to our oceans are rising temperatures and acidity, caused largely by emissions from burning fossil fuels.¹ If we continue on our current path, the expected increases in temperature, increases in extreme weather, and rising sea levels will wreak havoc on coastal communities. These catastrophic impacts will displace people and create geopolitical instability.^{2,3}

All coasts should be protected from another BP Deepwater Horizon catastrophe.

In 2010, the BP *Deepwater Horizon* exploded, spewing over 200 million gallons of oil into the Gulf of Mexico.⁴ Fisheries closed and demand for Gulf seafood plummeted.⁵ The loss to the seafood industry is estimated at nearly \$1 billion.⁵ After the BP disaster, boating, fishing and beach visits dropped across the region, and the recreation industry lost more than \$500 million in revenue.^{6,7} Toxic oil ruined wetlands and killed marine wildlife including commercially valuable fish. Lasting impacts from the spill continue to this day. According to the National Oceanic and Atmospheric Administration (NOAA):⁸

- At least 1,300 miles of Gulf shoreline were oiled, including wetlands which protect coastlines during storms and serve as nurseries for many fish and shellfish.
- Hundreds of fish species were exposed to oil. Red snapper, bluefin tuna and spotted seatrout are among those known to be impacted. Trillions of larval fish and invertebrates were killed.
- Bottlenose dolphins in Barataria Bay were decimated. Following the spill, deaths rose by 35% and incidence of failed pregnancies by 46% compared with a healthy population.
- Oil exposure resulted in up to a 7% decline in the population of endangered sperm whales in the Gulf of Mexico.
- Nearly half the critically endangered Gulf of Mexico Bryde's whales were impacted by oil, and the population dropped by 22%.
- The spill killed up to 170,000 sea turtles in the northern Gulf of Mexico, home to five endangered or threatened sea turtle species.

Offshore oil drilling generates chronic pollution in the ocean and on land.

Where offshore drilling exists today, the associated coastal industrialization and pollution threaten local communities. In addition to the hundreds of accidental spills each year, standard operating procedures for oil and gas extraction generate waste, including radioactive materials, polluted water, sludge and sediments. More than 18 billion barrels of waste fluids from oil and gas production are produced annually in the United States. Moreover, communities of color are often disproportionately impacted by environmental pollution, with African Americans exposed to 38% more polluted air than Caucasian Americans and 75% more likely to live in communities neighboring industrial sites. 12

The Gulf of Mexico already contains enough pipeline to encircle the Earth – over 26,000 miles – and with each new piece of oil infrastructure our communities and environment face additional threats. ¹³ Further opening federal waters to offshore drilling poses an unacceptable risk of serious harm to marine life and coastal communities.

Respectfully, Mr. President, we urge you to protect our coasts from expanded offshore drilling in the next National Outer Continental Shelf Oil and Gas Leasing Program. We call on Congress to protect our coasts by passing legislation to immediately freeze the footprint of offshore drilling and to prevent further expansion of this dangerous industry.

Sincerely,

Donald F. Boesch, Ph.D.
President Emeritus
University of Maryland Center for Environmental Science

Andrew A. Rosenberg, Ph.D.
Director, Center for Science and Democracy
Union of Concerned Scientists

Claire Paris, Ph.D.
Professor, Department of Ocean Sciences
Rosenstiel School of Marine and Atmospheric Sciences

Ayana Elizabeth Johnson, Ph.D. Founder and CEO Ocean Collectiv

Richard Wildermann Chief (retired), Environmental Division Minerals Management Service

Samantha Joye, Ph.D. Regents' Professor University of Georgia Peter Corkeron, Ph.D. Senior Scientist and Chair Kraus Marine Mammal Conservation Program Anderson Cabot Center for Ocean Life New England Aquarium

John Bruno, Ph.D. Professor, UNC Chapel Hill

Ian MacDonald, Ph.D.
Professor, Florida State University

Emily Klein, Ph. D. Boston University

Patrick Christie, Ph.D. Professor University of Washington

Carol Pride, Ph.D. Professor

Savannah State University

Nigella Hillgarth, Ph.D. Ocean Collectiv

Diva Amon, Ph.D. Natural History Museum, London

Steve Gilbert Ecologist, Special Project Manager South Carolina Wildlife Federation

Zachary Long, Ph.D. Associate Professor University of North Carolina Wilmington

Daniel Pauly, Ph.D.
Principal Investigator
The Sea Around Us
Institute for the Oceans and Fisheries
University of British Columbia

Laura Koehn, Ph.D. University of Washington

Margaret Siple, Ph.D.
Postdoctoral Research Associate
University of California, Santa Barbara

Tracey Sutton, Ph.D.
Professor, Department of Marine and
Environmental Sciences
Nova Southeastern University

Bruce Coull, Ph.D.
Distinguished Professor and Dean Emeritus
School of the Environment
University of South Carolina

Merry Camhi, Ph.D. Director, New York Seascape New York Aquarium/Wildlife Conservation Society

Katherine Pease, Ph.D. Director of Science & Policy Heal the Bay

Erin Pulster, Ph.D. Scientific Researcher University of South Florida

Sarah Hameed, Ph.D. Senior Scientist Marine Conservation Institute

Marvourneen Dolor, Ph.D. Founding Member Ocean Collectiv

Clay Montague, Ph.D. Associate Professor Emeritus University of Florida

Anthony Snider, Ph.D. Environmental Sciences University of North Carolina Wilmington

Matthew King, Ph.D. President and Chairman COMMON Foundation

Mark Southerland, Ph.D. Senior Ecologist Tetra Tech

Lucy Sonnenberg, Ph.D. Director/Research Professor Jacksonville University Andrew Carter, Ph.D.

Senior Conservation Policy Analyst

Defenders of Wildlife

Quinton White, Ph.D.

Executive Director, JU MSRI

Jacksonville University

Jennifer Miller, Ph.D.

Senior Scientist

Defenders of Wildlife

Elizabeth Hogan

Consultant for Science and Policy

Aquarium Conservation Partnership

Ned Tillman

CEO, Sustainable Growth

Albert Holm, Ph.D.

Retired

Christopher Malinowski, Ph.D.

Postdoctoral Research Associate

Purdue University

Patrick Ryan, Ph.D.

Colorado School of Mines and the Metropolitan

State University of Denver

Linda Silversmith, Ph.D.

Biochemist & Science writer

Jacob Kravetz

Chemistry PhD Candidate

Johns Hopkins University

Grace Young, Ph.D.

Pisces VI

Anni Djurhuus, Ph.D.

University of South Florida

Alina Szmant, Ph.D.

Adjunct Professor of Marine Science

Center for Marine Science

University of North Carolina Wilmington

DJ Schubert

Wildlife Biologist

Animal Welfare Institute

David Shiffman, Ph.D. Postdoctoral researcher

Arizona State University

Sarah Giltz, Ph.D.

Marine Scientist

Oceana

Lea Shanley, Ph.D.

Senior Fellow

University of Wisconsin-Madison

Judith Bakker, Ph.D.

Florida International University

Apryl Boyle

Marine Researcher

El Porto Shark

Kathleen Treseder, Ph.D.

Professor of Biology

University of California Irvine

Scott Eustis

Community Science Director

HealthyGulf

Swarna Muthukrishnan, Ph.D.

Staff Scientist

Clean Ocean Action

Devon Francke

Marine Biologist

Marine Exploration Center

Kristin Carden, Ph.D.

Oceans Program Scientist

Center for Biological Diversity

Matthew Davis

Legislative Director

League of Conservation Voters

Francine Kershaw, Ph.D.

Staff Scientist

Natural Resources Defense Council

John Dean, Ph.D.

Distinguished Professor Emeritus

Marine Science Program

University of South Carolina

Anthony Ouellette, Ph.D.

Professor of Biology and Chemistry

Jacksonville University

Gerry Pinto, Ph.D.

Associate Research Scientist Jacksonville University MSRI

Rosalind Rolland, Ph.D.

Senior Scientist

Anderson Cabot Center for Ocean Life

New England Aquarium

Joseph Pfaller, Ph.D. Research Director Caretta Research Project

Kathryn Matthews, Ph.D.

Chief Scientist

Oceana

Eleonore Rimbault

Ph.D. candidate, Anthropology

University of Chicago

Damon Mullis Executive Director Ogeechee Riverkeeper

Paulette Hammond

Maryland Conservation Council

Paul Sandifer, Ph.D. Researcher, Retired

Craig O'Connell, Ph.D. Executive Director

O'Seas Conservation Foundation, Inc.

Emil Petruncio, Ph.D. Adjunct Faculty

Anne Arundel Community College

Shanae Allen

Research Scientist, FL FWC

Sean Beckwith

University of South Florida

William Webster, Ph.D.

Retired from NASA, Goddard Space Flight Center, Unitarian Universalist Legislative

Ministry of Maryland

Marissa Swain Associate

Renewable Energy Buyers Alliance

Alexandra Puritz

Exploration Education Program Manager National Marine Sanctuary Foundation

Morgan Raven, Ph.D. Assistant Professor

University of California, Santa Barbara

Timothy Donaghy, Ph.D. Senior Research Specialist

Greenpeace USA

Alejandra Enriquez Marine Biologist College of Charleston

James Bishop, Ph.D.

Retired, formerly the Kuwait Institute for

Scientific Research

Kristina Carroll

Executive Director-Caretta Research Project

Savannah Science Museum, Inc.

ChelseyBryson Marine Scientist University of Hawaii

Katie Day Staff Scientist

Surfrider Foundation

Donald M. Goldberg Executive Director

Climate Law & Policy Project

Jeremy Stalker, Ph.D.

Associate Professor of Marine Geology

Jacksonville University

Michelle Guitard

University of South Florida

David Hollander, Ph.D.

Professor, College of Marine Science

University of South Florida

Luke LeMond

Chief Professional Geologist

Southwest FL Water Management District

Makenzie Kerr

Lab Manager & Outreach Coordinator

USF

Claire Onak

Lake Superior State University

Tara Cox, Ph.D.

Professor, Marine Sciences Savannah State University

Lindsay Dubbs, Ph.D.

Research Associate Professor

UNC Chapel Hill and Coastal Studies Institute

Julie Vecchio, Ph.D.

Postdoc, University of South Florida

Randy Russell

Electronics Engineer

University of South Florida College of Marine Science

Chris Knight

Fisheries Specialist, UCSD/SIO

Hannah Hamontree

Chemist, University of South Florida

Annelisa Moe

Water Quality Scientist

Heal the Bay

Shannon Roback, Ph.D.

Professor/ Water UCI Center Director

California State University Dominguez Hills/UC Irvine

Larry Cahoon, Ph.D.

Professor, UNC Wilmington

Stephen Skrabal, Ph.D.

Professor

University of North Carolina Wilmington

Patrick Drupp, Ph.D.

Associate Director for Legislative Advocacy

Sierra Club

Lauren Horton, MD

Internal Medicine Physician

Sarah Howard

SUNY College of Environmental Science and

Forestry

Luke Ginger

Water Quality Scientist

Heal the Bay

John Calambokidis

Research Biologist

Cascadia Research

Nancy Caruso

Executive Director and Marine Biologist

Tom Kutcher

Wetland Scientist

Rhode Island Natural History Survey

Niki Beach, Ph.D.

Environmental Scientist

Lisa Rodrigues, Ph.D.

Associate Professor

Villanova University

Katherine Graham

Assistant Scientist

New England Aquarium

Michael Schram

PhD Student, Biological Oceanographer

Univ. of S. Florida, College of Marine Science

Rashid Sumaila, Ph.D.

Professor and Director

Fisheries Economics Research Unit

Institute for the Oceans and Fisheries

University of British Columbia

Karina Brocco French PhD Student

University of California, Irvine

Brianna Michaud

PhD Student, University of South Florida

Richard Groover, Ph.D.

Coordinator, The Virginia Roundtable of

Environmental Science Professors

Philip Hamilton Research Scientist New England Aquarium

Madison Swayne, Ph.D. Assistant Professor San Diego State University

Mark Swingle

Chief of Research & Conservation

Virginia Aquarium & Marine Science Center

Benjamin Kay

Professor of Life and Environmental Sciences

Santa Monica College

Karyna Rosario, Ph.D. Research Scientist

University of South Florida

Madison Schwaab

University of South Florida

David Naar, Ph.D.

Professor, University of South Florida

Zack Jud, Ph.D.

Director of Education

Florida Oceanographic Society

Alex Brylske. Ph.D.

Professor of Marine Science & Technology

College of the Florida Keys (retired)

Affiliations of signatories are provided for purposes of identification only; signatories sign as individuals, not as representatives of their institutions.

Sources:

- IPCC (2019) Summary for Policymakers. In: IPCC Special Report on the Ocean and Cryosphere in a Changing Climate
 [H.-O. Pörtner, D.C. Roberts, V. Masson- Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, M. Nicolai, A.
 Okem, J. Petzold, B. Rama, N. Weyer (eds.)]. Available:
 https://report.ipcc.ch/srocc/pdf/SROCC FinalDraft FullReport.pdf.
- 2. United States and Army War College (2019) Implications of Climate Change for the U.S. Army: 52.
- 3. USGCRP (2016) The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment. U.S. Global Change Research Program, Washington, DC. 1–312p.
- 4. National Commission on the BP Deepwater Horizon and Oil Spill and Offshore Drilling (2011) Deep Water: The Gulf oil disaster and the future of offshore drilling. Report to the President. Washington, D.C.
- BOEM (2016) Carroll, Michael; Gentner, Brad; Larkin, Sherry; Quigley, Kate; Perlot, Nicole, et al. An Analysis of the Impacts of the Deepwater Horizon Oil Spill on the Gulf of Mexico Seafood Industry. U.S. Dept. of the Interior, Bureau of Ocean Energy Management, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study BOEM 2016-020.
- NOAA Assessing the Impacts from Deepwater Horizon. National Oceanic and Atmospheric Administration | US
 Department of Commerce. Available: https://response.restoration.noaa.gov/about/media/assessing-impacts-deepwater-horizon.html.
- 7. NOAA (2016) Deepwater Horizon Oil Spill: Final Programmatic Damage Assessment and Restoration Plan and Final Programmatic Environmental Impact Statement.
- 8. NOAA Affected Gulf Resources | NOAA Gulf Spill Restoration. Available: https://www.gulfspillrestoration.noaa.gov/affected-gulf-resources.
- 9. US EPA (2018) Radioactive Waste Material from Oil and Gas Drilling. In: *US EPA*. Available: https://www.epa.gov/radtown/radioactive-waste-material-oil-and-gas-drilling. Accessed Jan 24, 2020.

- 10. BSEE (2019) Aggregated Data of OCS Oil and Gas Industry Activities (e.g. production and drilling levels), Work Hours, Incidents and Compliance: 2008-2018. Available: https://www.bsee.gov/sites/bsee.gov/files/summary-tables-2018-updated-8-16-2019.pdf. Accessed Mar 4, 2020.
- 11. US EPA (2015) TENORM: Oil and Gas Production Wastes. In: *US EPA*. Available: https://www.epa.gov/radiation/tenorm-oil-and-gas-production-wastes. Accessed Jan 23, 2020.
- 12. Fleishman L and Franklin M (2017) Fumes Across the Fence-Line: The Health Impacts of Air Pollution from Oil & Gas Facilities on African American Communities. NAACP and Clean Air Task Force. Available: https://www.naacp.org/wp-content/uploads/2017/11/Fumes-Across-the-Fence-Line NAACP-and-CATF-Study.pdf. Accessed Jan 29, 2020.
- 13. BSEE (2016) Bureau of Safety and Environmental Enforcement Annual Report 2016. Available: https://www.bsee.gov/sites/bsee.gov/files/bsee_2016_annual_report_v6b.pdf. Accessed Nov 4, 2019.