

Redesigning Plastics Initiative: What We Have Done So Far

The Ocean Foundation has supported the cleanup of marine debris for years—even before the official launch of its Redesigning Plastics Initiative—and is a member of the Global Partnership on Marine Litter, Plastic Pollution Coalition, Break Free from Plastic Coalition, and Plastic Funders Network. TOF staff regularly updates its [plastics resources webpage](#) with the latest findings and research related to plastic pollution covering fields of policy, health, biodiversity, and more. As we look forward to the achievements to come as we tackle the plastic pollution issue, here's a look back on what we have accomplished so far.

2011 MAR **Awarded 32 grants in support of marine debris cleanup in partnership with Alaskan Brewing Company**

Through Coastal CODE, the Alaskan Brewing Company's Committee Advised Fund, hosted by The Ocean Foundation, TOF awarded 32 grants totaling \$81,810 to organizations in support of marine debris cleanup between March 2011 and October 2014. The following West Coast organizations received grants:

- 5 Gyres Institute
- Alaska Marine Conservation Council
- Alaska Marine Stewardship Foundation
- Alaska SeaLife Center
- All One Ocean
- Cape Decision Lighthouse Society
- Center for Alaskan Coastal Studies
- Citizens for a Healthy Bay
- Coastal Footprint
- Heal the Bay Santa Monica Pier Aquarium
- I Love A Clean San Diego
- Juneau Watershed Partnership
- Kake Tribal Heritage Foundation
- Los Angeles Waterkeeper
- Northwest Straits Foundation
- Orange County Coastkeeper
- Puget Soundkeeper Alliance
- Save the Waves Coalition
- SOLVE
- Southeast Alaska Guidance Association (SAGA)
- Taiya Inlet Watershed Council
- Takshanuk Watershed Council
- Wishtoyo Foundation

2016 AUG **Launched "Suck the Straws Out" campaign**

The Ocean Foundation's fiscally sponsored project, Inland Ocean Coalition, is part of a collaborative movement called "Suck the Straws Out." The movement encourages towns, cities, and states to eliminate single-use plastic straws by encouraging restaurants to only provide straws upon request, and when requested, provide paper or reusable alternatives. The campaign which started in Boulder, Colorado, has grown to other cities in Colorado, Connecticut, and Utah. The Coalition is also a member of the Break Free From Plastic Coalition.

DEC **Blog post: "[Plastics are Defining our Future Ocean](#)"**

TOF President, Mark J. Spalding, explains the ever-growing problem of marine plastic pollution. "Big chunks and tiny pieces, even microbeads and microplastics, have formed a kind of global miasma that interferes with ocean life the way static interferes with communication. Only worse. Microfibers are in the flesh of our fish. Plastic in our oysters. Plastics interfere with foraging, nurseries, and growth."

2017 DEC

Awarded four grants in support of marine debris cleanup in partnership with 11th Hour Racing

Between December 2017 and February 2019, The Ocean Foundation awarded four \$10,000 grants (\$40,000 total) in support of marine debris cleanup to organizations local to stopover sites along the Volvo Ocean Race and the Transat Jacques Vabre. The grantees were:

- [Take 3](#)
- [Healthy Seas](#)
- [Ocean Crusaders](#)
- [Clean Up Australia](#)

2018 JAN

Won grant to remove lost fishing gear in Puerto Rico

TOF's fiscally sponsored project, Conservación ConCiencia, was awarded a \$108,000 grant from the National Fish and Wildlife Foundation to locate and remove lost and abandoned fishing gear ("ghost gear") from the waters surrounding Puerto Rico following Hurricane Maria. In addition to hundreds of fishing traps, Conservación ConCiencia recovered a 350-meter-long gill net.

Blog post: "[A Plastic Ocean](#)"

TOF Board members Joshua Ginsberg, Angel Braestrup, and President Mark J. Spalding participated in a Salisbury Forum event focused on plastic waste in the ocean. The event began with the 2016 film "A Plastic Ocean," for which TOF is listed as a supporter. In his subsequent blog, Mr. Spalding describes the "beautifully filmed, emotionally devastating overview of the ubiquitous distribution of plastic waste throughout our global ocean and the harm it is causing to ocean life and to human communities as well."

APR

Partnered with National Caucus of Environmental Legislators

The Ocean Foundation joined NCEL to create a community of state-level legislative champions to address plastic waste at the state level. These partners are currently working directly with representatives of six states. Partially a result of this partnership, over 180 state bills addressing plastic have been introduced throughout the country to date.

Delivered keynote at the Embassy of Finland during the Dialogue on Ending Plastic Pollution: Opportunities for the Public and Private Sectors

Transcript: "[Don't Let the Plastic Get into the Ocean](#)"

TOF President, Mark J. Spalding, provided an overview of marine plastics pollution—covering where it comes from, what plastic does in the ocean, the problem with single-use plastics, trends, and how we can end plastic pollution.

Advised Earth Day Network's "End Plastic Pollution" campaign

TOF President, Mark J. Spalding, helped Earth Day Network staff to design and launch a plastic communications campaign designed to dramatically increase global public awareness about the health, environmental, and other risks associated with plastics and influence changes in attitudes and behaviors. Through this campaign, the level of attention paid to plastic pollution skyrocketed. The campaign engaged governments in pursuing a legal instrument on plastic pollution, developed a K-12 Climate Education Week toolkit, partnered with artists to reach new audiences through visual media, and more.

JUN **Awarded \$700 grant to support congressional briefing, “The Ocean Plastic Pollution Problem: Solvable with Science, Innovation, and Education”**

The Consortium for Ocean Leadership hosted a congressional briefing on June 12 which communicated the problem of plastic pollution in the ocean along with the science and solutions from academia, industry, and aquaria working to solve the issue. Approximately 130 individuals attended the briefing, including staffers from 52 unique House offices and 12 unique Senate offices.

JUL **Attended The Klosters Forum**

Blog post: “[Our Ocean and the Future of Plastic](#)”

TOF President, Mark J. Spalding, shares his experience attending this event which “fosters more innovative collaborations by bringing together disruptive and inspirational minds to tackle some of the world’s most pressing environmental challenges. ...This year, seventy of us gathered to talk about the future of plastic in our world, especially as to how we can reduce the harm from plastic pollution to the ocean. ...How do we deal with a problem that is both contributed to by most of humanity, and potentially harmful to all of humanity?”

DEC **Developed concept of The Ocean Foundation’s Redesigning Plastics Initiative**

After his attendance at The Klosters Forum, TOF President, Mark J. Spalding, took on a six-month review of the variety of current efforts to tackle marine plastic pollution and identified a novel approach that utilizes the expertise of The Ocean Foundation. This strategy has been shared with NGO leaders and Foundation representatives for feedback. The plan was called audacious, and recognized as a way to open an entirely new conversation about plastic pollution.

2019 **JAN** **Interviewed for Global Cause article, “[How to stop plastics polluting our ocean](#)”**

TOF President, Mark J. Spalding, was interviewed for the “Future of Plastics” campaign which launched as an insert in every copy of the New Scientist on June 8th for World Oceans Day and spanned six months. His interview focused on small, everyday lifestyle changes we can all take to make a big difference.

MAY **Launched the [Redesigning Plastics Initiative](#)**

Attended Chemical Sciences Roundtable on Plastics

TOF President, Mark J. Spalding, attended this roundtable on plastics which concluded with the joint understanding of the need for simplification and standardization of plastic for separability and recyclability.

Talk on plastics at National Convention of Industrialists in Mexico

TOF President, Mark J. Spalding, converted TOF’s concept of its Redesigning Plastics Initiative into a public-facing presentation for this Convention. It was incredibly well received by the Mexican recycling industry—leading to and TOF signing an MOU with CANACINTRA to do more on plastic, an agreement to formally advise Mexico’s Senate Commission on the Environment on how to address plastic pollution, and the launch of a project to author a book chapter on plastic pollution in Mexico’s aquatic environment.

Began advising Mexican Senate on plastics legislation

The Ocean Foundation continues to advise the Mexican Senate's Commission on the Environment on how to address plastic pollution through bans on single-use products, increase in recycling requirements, and examination of biodegradable plastic, among other controls.

Signed New Plastic Economy's [letter against oxo-degradable plastic packaging](#)

The Ocean Foundation joined over 70 other companies, associations, and NGOs in signing onto a letter explaining why oxo-degradable plastic packaging does not have a place in the circular economy and should be banned from the market.

JUN Fostered the creation of the Plastic Pollution Committee

In Mark J. Spalding's role as a member of the Ocean Studies Board of the U.S. National Academies of Science, Engineering, and Medicine, he fostered the creation of the Plastic Pollution Committee and serves as Chair of the Committee.

JUL Attended the second Klosters Forum focused on plastic pollution in the ocean

As a result of attending the Forum, TOF President, Mark J. Spalding, introduced the Ho Family Foundation to both Klosters and the Plastics Solution Fund. In early 2020, TOF began giving feedback to Pew Charitable Trusts as it continues to develop its plastic campaign.

Dialogue of Ocean, Chemical Sciences, & Technology and Environmental Studies & Toxicology Boards

Attended by TOF President and Ocean Studies Board member, Mark J. Spalding, this meeting of these three Boards of the US National Academies of Science, Engineering, and Medicine explored establishing a roundtable or cross-academies formal study on ocean plastics.

"Rethinking Plastics Scoping Discussion" with National Academies of Science, Engineering, and Medicine

Blog Post: ["TOF calls for National Academies to Explore Redesigning Plastics"](#)

The Ocean Foundation called for a scoping meeting with the National Academies of Science to raise the question of how the Academies could advise on the science of redesigning plastics and the potential for a production-based approach to address the shared global plastic pollution challenge.

AUG Launched Colorado microplastics study

TOF's fiscally sponsored project, Inland Ocean Coalition, partnered with researchers from University of Colorado Boulder to study microplastics in Colorado's waterways. The team will define a robust sampling and characterization methodology then collect and analyze water samples from throughout Colorado to understand the extent, types, and sources of present microplastics.

SEP International Bar Association Annual Conference panel in Seoul, Korea

The Ocean Foundation organized a panel and recruited speakers to address the topic, "Ocean pollution focusing on plastic-impacts and solutions." President, Mark J.

Spalding, worked with the Environment, Health, and Safety Law Committee's Chair to make this panel a success, challenging attending lawyers to think differently about plastic. Speakers addressed why plastic pollution is a problem, the challenges for developing nations receiving waste for "recycling," engineering and design solutions, and suggestions for actions the attendees could take to address the problem with government and corporate clients.

2020 JAN

Called on the USA's National Academies of Science, Engineering, and Medicine to hold the "Emerging Technologies to Advance Research and Decisions on the Environmental Health Effects of Microplastics" meeting

The Ocean Foundation called for NASEM to raise the question of how the Academies could advise on the science of ecotoxicity of plastic and on redesigning plastic chemistry to address the shared global plastic pollution challenge. Despite the widespread nature of microplastics, little is known about how they affect living things. This meeting brought together leading scientists to summarize the current known and unknowns of microplastic pollution and how to leverage this information for policy and public health questions.

FEB

Started an overview of ocean plastic pollution funding

The Ocean Foundation is in the early stages of conducting a thorough review of the current funding mechanisms in place to support the fight against marine plastic pollution. The end product will be a summary report which identifies these mechanisms, their funding strategies, supporters, and funders.

Featured in article by AFP about the Break Free From Plastic Pollution Act

["Draft US law to make plastic industry responsible for recycling"](#)

TOF President, Mark J. Spalding, was interviewed by Agence France-Presse (AFP) about the Redesigning Plastics Initiative and the Break Free From Plastic Pollution Act.

Authored chapter for Springer Publishing Company's *Plastics in the Aquatic Environment*

The final draft was submitted of a chapter titled "The current state of law on plastic pollution in Mexico and a view towards the future," written by Mark J. Spalding, Alejandra Navarrete, and Courtne Park of The Ocean Foundation; Angel Braestrup, TOF Board Member; and Octavio H. Lara of CANACINTRA. The chapter explores Mexico's current legal framework and regulatory mechanisms around single-use plastics and proposes a national-level framework for addressing plastic pollution in the country's waterways. The chapter states, "To better protect Mexico's waterways and aquatic life, the legal mechanisms must ensure that the federal legal framework for pollution meets constitutional requirements and considers the entire life cycle of plastics from production to the end of its life."

MAR

Entered into an MOU with Conservation X Labs

The Ocean Foundation is collaborating with Conservation X Labs on the design, dissemination, evaluation, partnership development, and fundraising for the Microplastics Grand Challenge.

Ocean Studies Board Committee meeting

TOF President and member of the Ocean Studies Board, Mark J. Spalding, attended this meeting which focused on scoping a round table or formal study on the path to a plastic-free ocean.

Roger Revelle Commemorative Lecture - "Ocean Plastic: A Scientist's Tale"

This year's lecture, arranged by the Ocean Studies Board, featured Dr. Chelsea Rochman. Dr. Rochman has been researching ocean plastic for over a decade and delivered "The Story of Plastic Pollution from the Distant Ocean Gyres to the Global Policy Stage."

JUL TOF President interviewed for Closer Magazine article, "[How the Pandemic has Created an Eco Crisis](#)"

Mark J. Spalding discussed the effects of COVID-19 on plastic pollution.

AUG Released an infographic for the Redesigning Plastics Initiative (RPI)

Now found on TOF's RPI webpage (<https://oceanfdn.org/rpi>), this infographic summarizes the goals of the Initiative in a visual, straightforward way.

SEP Became a member of the United Nations Environment Programme's Global Partnership on Marine Litter

This partnership's mission is to "protect the global marine environment, human well-being, and animal welfare by addressing the global problem of marine litter" by providing a platform for knowledge sharing among all actors involved in the prevention of marine litter and microplastics.

Invited to join the Institute of Marine Engineering, Science, and Technology's (IMarEST) Ocean Plastics and Marine Litter Special Interest Group (SIG)

The main focus of this SIG is ocean-based sources of marine debris from the maritime, fishery, and aquaculture industries. It was established to identify the right questions and how to address them, develop tools to share knowledge with industry and policy leaders, and support widespread change. The SIG expressed an interest in following up with TOF on policy.

OCT Hosted the virtual panel discussion, "Plastic Pollution: Exploring Opportunities for Strengthening International Governance"

In partnership with five Nordic Embassies to the United States—Norway, Denmark, Finland, Iceland, and Sweden—this event highlighted a panel of U.S. and Nordic legislative representatives and Nordic companies which have made great strides in reducing plastic footprints.

Delivered draft plastics legislation to WWF

TOF and contracted legislative drafters conducted in-depth research to find the best examples of introduced policies around the world at both the national and sub-national levels then drafted a legislative proposal focusing on plastic and materials production, recycling, reuse, and disposal. This language includes ten primary areas where congressional action can significantly decrease pollution while providing economic and environmental recovery and resiliency.

NOV **Drafted New York Break Free From Plastic Act**
TOF drafted and delivered legislation to the National Caucus of Environmental Legislators to serve as a state-level Break Free From Plastic Act specifically for the State of New York.

DEC **Signed [open letter](#) calling for non-food plastics sachets to be phased out**
This letter calls for legislative frameworks which are phasing out unnecessary single-use plastics to include non-food plastics sachets. Signed by corporate, political, and academic supporters, this call has received cross-party political support from UK politicians and members of the European Parliament.

2021 JAN **Entered into an MOU with the National Renewable Energy Laboratory (NREL)**
The Ocean Foundation is partnering with the BOTTLE Consortium (Bio-Optimized Technologies to keep Thermoplastics out of Landfills and the Environment) to coordinate on their mutual objectives to advance the science and engineering of polymers to make them recyclable by design and thus reduce plastic pollution. TOF will provide a nonprofit perspective as BOTTLE develops original applied science on polymer design to improve recyclability and make plastics Safer, Simpler, and more Standardized.

Entered into an MOU with ClientEarth

ClientEarth is an environmental nonprofit “using the law to protect life on earth.” With this new partnership, TOF and ClientEarth will explore the relationship of ocean plastic pollution with human health.

Drafted model bill for Extended Producer Responsibility (EPR) for packaging

This model state-level adaptation of the Break Free From Plastic Act, drafted for and delivered to the National Caucus of Environmental Legislators, can be modified for introduction in any state within the U.S.

TOF partner, Conservation X Labs, launched the [Microfiber Innovation Challenge](#)

On January 27, 2021, Conservation X Labs held a virtual launch event to make its Challenge public and start accepting applications for “transformative innovations addressing plastic microfiber pollution.”

APR **Awarded a \$20,000 grant to 5 Gyres**

5 Gyres will conduct two studies to understand the timeline of complete PHA biodegradation in different environments and in different product shapes and sizes.

Awarded a \$22,500 grant to Peak Plastic Foundation

Peak Plastic Foundation will develop policy, films, and web-based content to reveal the human costs of plastic production and create the social and political will to seek environmental justice in the United States. Specifically, The Ocean Foundation’s grant will support the production of three-minute films featuring Persons of Color leaders to make the connection between race and plastic production (people living next to petrochemical facilities that have been traditionally under-resourced).”

MAY **Signed an [open letter](#) urging the U.K. Government to put a global plastics treaty on the G7 Summit agenda**

The Ocean Foundation signed on to an open letter written by A Plastic Planet and addressed to the government of the United Kingdom, calling for the discussion of a global plastics treaty to be added to the then-upcoming G7 Summit.

Kicked off the process to stand up the [Marine Debris Foundation](#)

The Ocean Foundation is working with the National Oceanic and Atmospheric Administration's (NOAA) Marine Debris Program to stand up the Marine Debris Foundation as authorized by the Save Our Seas Act 2.0. "The purposes of the Marine Debris Foundation include encouraging, accepting, and administering private gifts of property for the benefit of, or in connection with, efforts to address marine debris and to perform other functions related to marine debris."

JUN **Received a \$25,000 grant from the Agua Fund**

These funds will be used to support our participation with The National Academies of Sciences, Engineering, and Medicine (NASEM) and the National Renewable Energy Laboratory (NREL), groups who build the science and research necessary for legislators and plastic manufacturers to redesign how plastic is made. This information will then be made free and available online, as this data is critical for shifting the burden of plastic pollution from consumers to producers.

JUL **Awarded a \$35,000 grant to Helix Science LLC**

Helix Science LLC will determine the toxicity of the waters near the XPress Pearl cargo ship accident off the coast of Sri Lanka which released chemicals and two containers full of plastic pellets into the ocean in June of 2021.

AUG **Hired Erica Nuñez as The Ocean Foundation's Program Officer for Plastics**

Erica Nuñez serves as technical program lead of The Ocean Foundation's scientific and policy activities related to combating the global challenge of coastal and ocean plastic pollution. Erica has over 16 years of experience working to protect our ocean. Thirteen of those years were spent working for the federal government at the National Oceanic and Atmospheric Administration (NOAA), where she served as the lead on international marine debris issues, UNEP, in addition to being the U.S. Focal Point for the SPAW Protocol of the Cartagena Convention and a U.S. delegation member to the UNEA Ad Hoc Open-Ended Expert Group on marine litter and microplastics. In 2019, Erica left federal work to focus her career on ending plastic pollution and joined Ocean Conservancy as part of their Trash Free Seas Program. There she focused on domestic and international plastics policy matters related to reducing and preventing plastic marine debris from entering the ocean, and was a core team member that developed the Plastic's Policy Playbook: Strategies for a Plastic-Free Ocean, a guidebook for policy makers and relevant stakeholders on plastic policy solutions.