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MESSAGE FROM THE PRESIDENT

hat a year! Who could have predicted where we would be today when this fiscal year began on July 1, 2019? We were very busy moving our initiatives forward before the pandemic struck, and managed to stay very busy even after the COVID-19 induced global lockdowns.

A workshop on sport-fishing in Cuba — an opportunity for preemptive conservation strategies to be developed.



The launch of a partnership with Grupo
Puntacana Foundation, Grogenics, AlgeaNova,
and Roig Agro-Cacao on nuisance sargassum
collection and re-use in the Dominican Republic.

PHOTO © MATYAS REHAK/SHUTTERSTOCK



Being selected by the Ocean Panel for a Sustainable Ocean Economy as co-lead on a Tourism Action Coalition, setting its vision and goals and recruiting and engaging members.



Attending the "Our Ocean" Conference 2019 (Oslo, Norway) to report on our formal Commitments on addressing ocean acidification.

PHOTO © MICHAEL ANKES ON UNSPLASH





Assisting Hawaii with its ocean acidification action plan.

PHOTO © BRADEN JARVIS ON LINSOIL ASH



Co-hosting a Senate Forum in Mexico on ocean, seas and opportunities for Sustainable Development.

Providing National Ocean Policy recommendations to the Mexican Senate.

PHOTO © CARLOS RANDA ON UNSPLASH





Presenting at a Western Indian Ocean, workshop on ocean acidification policy (Zanzibar).

PHOTO © CHEMA PHOTO ON UNSPLASH





Attending a White House Summit on Partnerships in Ocean Science and Technology.



Launching a partnership with Conservation X Labs for a "Microfiber Innovation Challenge".



Release of the Ocean Acidification Policy Guidebook.



With Rockefeller Capital Management, successfully proposing to Credit Suisse Impact Advisory Group to partner in the creation of a Credit Suisse Rockefeller Ocean Engagement Strategy to drive companies to improve their relationship with the ocean.





Travel to Seoul for the International Bar Association's annual meeting, hosting a panel on plastic ocean pollution.

PHOTO © YEO KHEE ON UNSPLASH



3

Giving the blue economy keynote for Oceans of Knowledge at the Royal Institution, London.

PHOTO © MARCIN NOWAK ON UNSPLASH



Launching a "Blue Shift" social media communications campaign that is a call to action focusing on how society can restore economies, post COVID-19, in a way that focuses on ocean health and sustainability.



Beginning a baseline and feasibility study for UNEP focused on restoration and the blue economy in the Wider Caribbean Region.



Speaking on the marine protected areas panel for the 2020 Capitol Hill Oceans Week.

Work with NOAA and UNESCO-IOC to organize meetings of philanthropists in New York, California and Copenhagen regarding the UN Decade of Ocean Science for Sustainable Development.



Hosting the 2nd Annual Ocean Acidification Day of Action event at the Embassy of New Zealand.

PHOTO © ROD LONG ON UNSPLASH

Cosponsoring and signing onto the Confluence Philanthropy's 2020 Belonging Pledge — A Commitment to Advance Racial Equity (in investing), which has attracted 97 signers representing \$1.78 trillion.



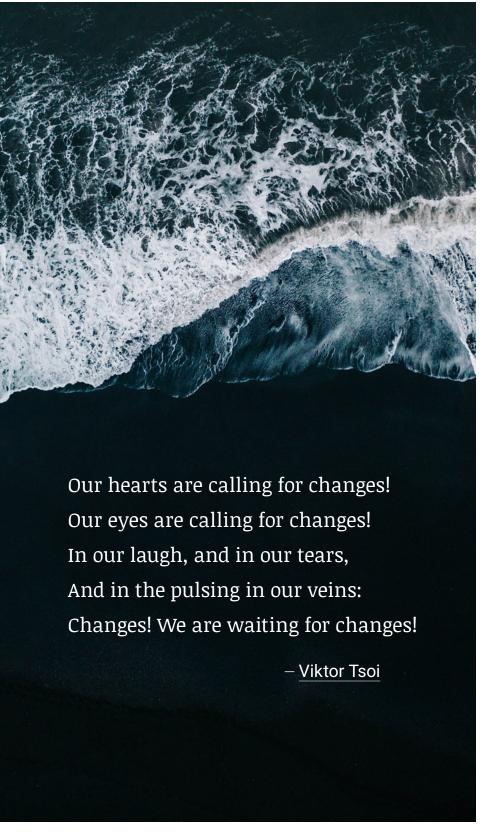


In the FY20 report you will read about our expanding Diversity, Equity, Inclusion and Justice Initiative as we strive to help the whole ocean conservation sector move forward even as we deepen our work to improve our internal equity lens. You will also read about our COVID-19 response; our work with the Climate Strong Islands Network; our new Initiative on Redesigning Plastics; as well as the continued success of our Blue Resilience and our International Ocean Acidification Initiatives. What you won't necessarily read about is how well our team has worked from home, and continued to represent us in international and domestic fora, for which I am truly grateful. Nor will we bore you with how different it was NOT to eat airline meals and conference buffets, change time zones, sleep in unfamiliar beds, and sit in windowless conference rooms — even if we miss the magic of new cultures, chance meetings and spontaneous hallway conversations. If we have learned anything, it's that our pre-COVID-19 policy of careful evaluation of all travel for its benefits versus costs was insufficient. We can do more than we thought without getting on an airplane. We hope all future conferences offer virtual attendance — even if they also take place in person.

Philosophically, we are calling for a <u>Blue Shift</u>. Because if we do the right thing for the environment and our world ocean, we also do the right thing for the economy. Just as using an equity and justice lens for investments helps all communities, the blue lens can refine it further. We can build back bluer. We can begin by shifting our focus to the subset within the ocean economy that is sustainable. For a decade we have advised the Rockefeller Ocean Strategy (an unprecedented ocean-centric investment fund), which this year we have evolved into the Rockefeller Climate Solutions Fund. Every company in the portfolio has a product or service that is actively good for the ocean. This year, TOF in partnership with Rockefeller Capital Management won an international bidding process to start a second ocean-focused investment fund. This one will be about engaging companies who can be convinced by our team to change their bad-for-the-ocean behavior. As investors engaging on ocean health, we will look for opportunities to restore abundance for future generations because a healthy and abundant ocean is critical to everyone's survival. As a parallel goal, such opportunities shall sustainably use oceanic and coastal resources to create jobs and sustained economic growth over time.

TOF also continues to build a legacy of helping others gain agency over their futures and environmental solutions rather than just going in, doing a project, and leaving. We strive to build science and policy capacity in Africa, the Pacific Islands, the Wider Caribbean Region and around the world. Our model enables us to increase the capacity of conservation organizations, academics, and policy makers alike, and support knowledge sharing so that it's durable. It also includes the transfer of technology such as our donations of field and lab kits for measuring and monitoring ocean chemistry change by local scientists in their home waters.

We also work hard to be internationalist in our approach because solutions have to be as global as our shared ocean. Our team is well along on looking to the United Nations' Sustainable Development Goals as a prevailing effectiveness measurement and reporting system to establish benchmarks and measures for coastal and ocean conservation effectiveness, but also for the tracking for our investment portfolios. I am an advisor to the **Ocean Panel**, made up heads-of-state pursuing policy change and



improved sovereign investment in innovation (Mazzucato) for a "Sustainable Ocean Economy." And, the TOF team is helping to guide the UN Decade of Ocean Science for Sustainable Development, an effort to invest and synthesize ocean science on behalf of our ocean and our global economy. As a member of the Ocean Studies Board, I feel a particular responsibility because the Board is the U.S. National Committee to advise the Decade.

All of this is culminating in the application of our strengths in two proximate geographies with strong connections to our organization. We have set up TOF-Mexico (Fundación Mexicana para el Océano A.C.) and launched a Caribbean Marine Research and Conservation Initiative. Building on years of work with local communities in Mexico, Cuba, Dominican Republic, Jamaica, Grenada, St. Kitts, Haiti, Dominica, and Aruba we are embarking on more efficiently leveraging our work in Mexico and the Wider Caribbean Region especially where it relates to ocean acidification, blue resilience, or to science and policy capacity building.

As I write this, we are still in the middle of pandemic and an economic stagger of unimaginable scale, which is balanced by a multi-national inflection point calling for addressing systemic racism, addressing climate change, and capturing the best of human collaboration, community-building, and investment in our future.

Many of us in the ocean conservation community have said the ocean is rising and so are we.

I wish you all well, and I wish for the best outcome for the health of the ocean upon which we all depend.

For the ocean,

Mark J. Spalding

President, The Ocean Foundation

PUSHING THE NEEDLE FORWARD TO ADDRESS DIVERSITY, EQUITY, INCLUSION AND JUSTICE AT ALL LEVELS



has proven to be one for the history books as several events have taken the globe by storm. Unlikely natural disasters and COVID-19 alone have stopped us in our tracks, resulted in the loss of many loved ones, and shifted our mindsets regarding how we operate and function daily. While the above-mentioned events have changed the world, it is not the only fight for change which we here in America endured and continue to pursue. In June of 2020, the unjust murders of African American men and women created a global movement seeking justice and reform of the unfair treatment they have faced in America.

While it may be difficult for many organizations, stakeholders, or ocean conservation champions in our sector to grasp, this issue must be addressed by all regardless of their societal purpose. The Ocean Foundation asks that as you're reading this, you take a step back and remove your political affiliations, assumptions, and biases from this conversation and work to openly understand the plight faced by marginalized communities and the role we all play. It is well established that people of color are and historically have been disproportionately affected by many things such as:

COVID-19

- Natural disasters
- Brutality

- Climate change
- Inadequate health care
- Systemic oppression

It is critical that marginalized voices who do not have a seat at the table are included in all discussions that impact both their communities and livelihood. The current systems and conservationists in place frankly do not provide them with the opportunities to become involved, obtain positions to drive change or access to the resources required to implement change.

In the marine sector, it is painfully obvious that the demographic makeup of conservation staff, leadership and board members are not representative of the communities we serve. A majority of the solutions created to address the issues we face are developed without involving those communities, or without the intention of setting community leaders up for success. Marine conservation efforts cannot be effective if the solutions are designed without engaging all those who share in our collective responsibility to be good stewards of the coasts and ocean. The only way to collectively move forward is by proactively and deliberately engaging members of traditionally marginalized groups in decision-making, and practicing equity in funding distribution and conservation approaches.

On July 1, 2016, The Ocean Foundation established its Diversity, Equity, Inclusion, and Justice committee and cross-cutting values to:

- 1. Transform our organization to embody and embrace the above-mentioned values;
- 2. Steer the coastal and ocean conservation community towards a more progressive and inclusive movement:
- 3. Address and raise awareness of challenges faced in philanthropy, conservation, and society as a whole; and
- 4. Identify the communities being hit hardest and engage in dialogue and partnership to promote and provide a platform in which their voices can be heard.

PREVIOUS PAGE © CLAY BANKS ON UNSPLASH





To achieve this, TOF recognizes our unique opportunity to serve as a convener for all marine conservation organizations across the globe by hosting valuable and transparent conversations discussing inequities, lack of diversity and justice by inviting and including all groups and people on our journey to improve our sector. TOF has elected to undertake the following activities to drive change and push the conversations forward:

CONDUCT BI-MONTHLY ROUNDTABLES. An opportunity for TOF to directly engage marginalized communities, and amplify the voices of individuals or groups seeking or implementing change to address D.E.I.J. challenges facing our broader community. Topics of discussion include gender and racial inequities across all sectors, climate refuges, unconscious biases in the workplace, and more.

PROVIDE CONTINUOUS INTERNAL D.E.I.J. TRAININGS. It is critical that we provide trainings that allows for staff to grow both professionally and personally as not only employees or contractors with TOF, but as members of civil society. Trainings cover a variety of topics from harassment, identifying and addressing microaggressions, cultural competence and more.

HOST AN ANNUAL MARINE PATHWAYS INTERNSHIP. Building a pipeline of diverse marine conservation champions is key. The marine conservation sector is considered a field in which people of color aren't interested. This common misconception leads to the lack of opportunities, internships, and fellowships for those groups as they are not targeted. TOF's paid Marine Pathways Internship provides an opportunity for people of color, women, people with disabilities, veterans, LGBTQ+, and individuals with diverse backgrounds to gain experience working with a non-profit in the conservation sector.

CONDUCTING AN ANNUAL D.E.I.J. AUDIT. TOF will conduct an annual audit to identify D.E.I.J. gaps across the organization. The audit will consist of an anonymous survey taken by staff, fiscally sponsored projects, and board members, and serve as a tool to identify how inclusive and equitable the organization is.

FORM EXTERNAL PARTNERSHIPS TO FOSTER LEADERSHIP THAT PROMOTES D.E.I.J. TOF will continue to push for others to address D.E.I.J. issues through our partnerships, fellowships, networks and memberships to drive change. It is just as critical that we do our part to raise awareness and encourage others through our affiliations and advocate for a just society.

COMMIT TO PROVIDING RESOURCES TO ADDRESS D.E.I.J. TOF commits to funding activities, providing the appropriate amount of oversight to implement those activities, and designate staff to fundraise to support additional activities.

As TOF continues to grow and identify areas for improvement, we strive to ensure that all cross-cutting values are instilled at every level to drive change as a convener in this space. We commit to instilling D.E.I.J. values in what I call the 6Ps: 1) Policies, 2) Practices, 3) Programs, 4) Processes, 5) Planning, and 6) People. And to call for the rest of our community to do the same. Additionally, we encourage and challenge the conservation community to understand that addressing D.E.I.J. issues and implementing activities is not a competition but a responsibility. In our sector, we are often too concerned with being the first to implement an activity or solution for external recognition. This should never be the case in regards to this topic. Sharing our experiences, stories, and challenges are critical for success and can be a powerful tool for potential collaboration.

Although we have committed to breaking down barriers and strive to make our communities more equitable, more diverse, and inclusive at every level, there is always more that we can do. TOF commits to being fully transparent about our current and future actions, and will continue to hold ourselves accountable to our commitment. Our ultimate goal is to create a just and equitable culture and society for all. We openly stand with those who are actively addressing D.E.I.J., and challenge those who are to join this movement. A movement that harnesses the power, ingenuity, and resources of all of us that care about the wellbeing of our world ocean.

To end, we challenge all to think about D.E.I.J. beyond the Black Lives Matter movement. Releasing statements or proposed plans is not enough. The disparities we face across the sector are often recurring and require continuous change. This means that we must all wholeheartedly invest in institutionalizing change for as long as we exist. Do more, and say less.

Sincerely,

Eddie Love

Eddie Love

Program Manager and D.E.I.J. Committee Chair

OUR IMPACT ON THE OCEAN

Where Your Money Goes

Fiscal Year Ended June 30, 2020

\$2,901,101

TOWARDS CONSERVING MARINE HABITATS AND SPECIAL PLACES

Conserving the places and habitats that are special to the people of the world who rely on them most is important to us and our community.

\$1,909,060

TOWARDS PROTECTING SPECIES OF CONCERN

Protecting species of concern is of utmost importance to us. We strive to protect those species and their habitats for future generations.

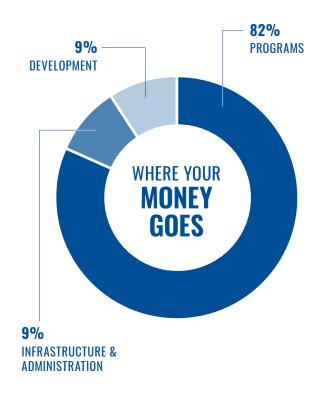
\$1,219,186

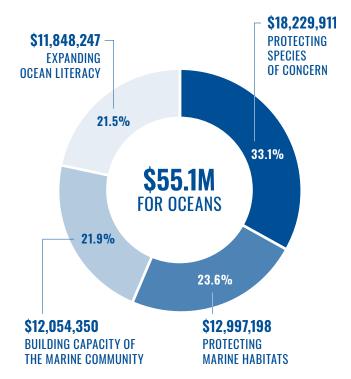
TOWARDS EXPANDING OCEAN LITERACY

Educating future ocean leaders, expanding ocean knowledge, and increasing public awareness are sometimes the first steps towards preserving a healthy ocean.

\$1,130,717 TOWARDS BUILDING CAPACITY OF THE MARINE COMMUNITY

Empowering implementors allows for marine conservation to thrive well into the future.











































MESSAGE TO OUR COMMUNITY

It has been painful to read the news and watch the devastating global spread of COVID-19. During this difficult time, we hope that you and yours are healthy and taking care of yourselves and each other.

Here at The Ocean Foundation, we are doing everything we can to support the community we have all built together. We know this crisis is disruptive to the work of all of our partners — and the world at large — but together we are resilient. We recognize that we need to be flexible in these unprecedented and rapidly changing circumstances, and we want you to know we will continue to uplift people, partners, and projects around the world to the best extent that we can.

We often remark on the global reach of The Ocean Foundation community and our gratitude for your dedication to the health of the ocean and the betterment of our individual communities. Thank you for being a crucial member of The Ocean Foundation and please know we are thinking of you.

World Central Kitchen



The Ocean Foundation is working with World Central Kitchen (WCK) to cooperate on coastal and ocean related food security, sustainability and resilience against future disasters, including education, capacity building and public outreach efforts.

In response to the pandemic, WCK is working across America to safely distribute individually packaged, fresh meals in communities that need support, for children and families to pick up and take home, as well as delivery to seniors who cannot venture outside. WCK is now active in dozens of cities providing nearly 100,000 fresh meals every day. Traditional safety nets like school feeding programs, city

services, and food banks are struggling to meet basic needs. Seniors, who are isolated for their safety, are unable to access meal services. Meanwhile, the country's hospital workers are more stretched than ever before

In an innovative approach to work around the challenges of food distribution with COVID-19 restrictions and the national scale of this disaster, WCK began partnering with local restaurants to

As of July 15, 122 days into their response, WCK had provided a total of 20 million meals to over 2,000 unique locations around the world. Their incredible efforts to feed millions and connect workers with employment continues today.

provide jobs for their staff and meals for those in need. WCK's #ChefsForAmerica initiative is making a key connection between people who need meals and restaurant workers and drivers who need to earn a living. To date, this effort alone has provided more than 5.2 million meals from nearly 2,500 restaurants around the country.

Keep Loreto Magical



© RICHARD JACKSON



Loreto is a special town in a special place on an amazing body of water, the Gulf of California. There is a future to be built here that depends on reverence for all that is magical here. Ten years ago, the Loreto Bay National Marine Park was named a UNESCO World Heritage Site. The Park is home to an array of fish and marine mammals, and is part of the migratory pathway of blue whales, fin whales, humpbacks, killer whales, pilot whales, sperm whales and more.

As the COVID-19 pandemic spread throughout the world, it inevitably found its way to this magical place. Fortunately, Keep Loreto Magical (KLM), in cooperation with the local government, helped build a hospital in the area about a decade ago, and equipped it with three ventilators on site to treat respiratory conditions. While this foresight was incredibly valuable in the community's response this year, this global pandemic posed additional challenges, so KLM sprang into action.

First, KLM focused on ensuring that Loretanos and the community living in Nopoló all had the current information about the rapidly spreading pandemic, using social media to great effect in both English and in Spanish. Next, the Community Supported Agriculture and Community Supported Fishery

programs switched to safer home delivery to avoid gatherings. In March, KLM took over 25 orders to benefit seven ranchers and their families. Local KLM partners then launched a Facebook group with over 15,000 members of all locallyowned businesses in Loreto who had the ability to take orders and deliver food to local residents, as well as other products and services. KLM volunteers worked with the hospital to make sure it had the supplies needed and provided support to the paramedics, airport and bus personnel, as well as at military checkpoints, to help facilitate delivery of supplies when they were shipped in. In April, 60 face shields were assembled and readied for the hospital. As a creative solution to the local constraints posed by the pandemic, local volunteers pioneered a 3D printer to produce an additional 30 face shields for health worker's protection. Volunteers distributed these supplies to the hospital, along with cleaning and wearing instructions.



BeeSure



BeeSure has been a long standing partner of TOF, offsetting portions of their carbon emissions with

TOF's SeaGrass Grow program. As their company designs products such as gloves, face masks, and disposable plastics, they have committed to conserving resources and maximizing the number of recycled materials used in production. As the pandemic spread across the country, BeeSure recognized healthcare workers as the heroes risking their lives daily in efforts to help others, so they produced and donated over 50,000 pairs of gloves to healthcare facilities in the San Francisco Bay area.



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TOF SIGNS ONTO THE CLIMATE STRONG ISLANDS DECLARATION



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To F is proud to stand with island communities on their path toward self-determination, climate resilience, and local solutions. The climate crisis is already devastating island communities across the United States and around the world. Extreme weather events, rising seas, economic disruptions, and health threats created or exacerbated by human-driven climate change are disproportionately affecting these communities, and current policies and programs are not designed to meet local needs. That's why we are proud to be a signatory on the Climate Strong Islands Declaration with our partners from island communities in the Caribbean, the North Atlantic, and the Pacific.



On February 26th, 2020, in conjunction with the second Climate Strong Islands Dialogue held in San Juan, Puerto Rico, TOF stood with island partners for the release of the <u>Climate Strong Islands Declaration</u>. TOF was honored to

participate in the drafting, coordinating and public release of the declaration.

SOCIAL EQUITY

Climate change is an issue of social justice. Island communities are disproportionately affected by the effects of climate change and the risks of damage from storms. Equitable climate change adaptation plans need to take vulnerable populations into account.

COASTAL RESILIENCE

Blue carbon nature-based solutions support community resilience through coastal resilience. Investment in the conservation and restoration of seagrass and mangroves helps communities adapt to sea level rise, erosion, and flooding from storm surges, provides habitats for seafood, and supports ecotourism.

PUBLIC HEALTH

We have to prepare health services for increased severity and frequency of vector-borne and infectious diseases as well as emergency responses from extreme weather, all due to a warming climate.



BUILT INFRASTRUCTURE

Vulnerabilities to roads, bridges, and power networks need to be addressed now. Waiting until climate change becomes more aggressive will be more costly in terms of spending, human lives, and to our economy.

FOOD SECURITY

Investing in our local biodiversity and keeping our water and soil clean will be paramount to sustain our local food sources and related jobs.

POPULATION MIGRATION

Large-scale human migration is increasing due to resource scarcity and the frequency of extreme weather events that cause the original homes of climate refugees to become uninhabitable. The International Panel for Climate Change predicts 200 million people will be displaced by 2050 due to the effects of climate change.

The climate crisis is already devastating island communities across the United States and around the world. The extreme weather events, rising seas, economic disruptions, and health threats created or exacerbated by human-driven climate change are disproportionately affecting these communities, even as policies and programs that are not designed for islands routinely fail to meet their needs. With the ecological, social, and economic systems upon which island populations depend under increasing stress, prevailing attitudes and approaches that disadvantage islands must change. We demand action at the local, state, national, and international levels to help island communities respond effectively to the climate emergency facing our civilization.

Island communities in the United States and around the world are literally on the front lines of the climate crisis, and are already coping with:

- extreme weather events and rising seas that are compromising or destroying critical infrastructure, including electrical grids, water systems, telecommunications facilities, roads and bridges, and port facilities;
- → often overburdened and under-resourced health care, food, education, and housing systems;
- 7 changes in the marine environment that are devastating fisheries, and degrading the ecosystems upon which many island livelihoods depend; and,
- challenges associated with their physical isolation and, in most cases, a relative lack of political power.

Regulations and policies designed to serve mainland communities often do not serve islands well, including:

- 7 federal and state disaster preparedness, relief, and recovery programs and rules that do not adequately respond to the circumstances faced by island communities;
- energy policies and investments that increase dependence on the mainland in costly and risky ways;
- conventional approaches to drinking water and wastewater systems that disadvantage islands;
- → housing standards, building codes, and land use regulations that increase the vulnerability
 of island communities; and,
- → perpetuation of systems and policies that increase food insecurity.



The most vulnerable island communities in the United States are being routinely overlooked, neglected, or marginalized. Examples include:

- ▶ post-disaster recovery assistance for Puerto Rico and the U.S. Virgin Islands has been impeded by politics, institutional foot-dragging, and ideological posturing;
- ¬ small or isolated island communities often have very few health care providers and services, and those that exist are chronically underfunded; and,
- ▶ loss of housing and/or livelihoods contributes to high per capita rates of homelessness and forced relocation as illustrated by the aftermath of Hurricanes Katrina, Maria, and Harvey.

With adequate resources, island communities are well-positioned to:

- ▶ leverage investments in energy, telecommunications, transportation, and other technologies to participate more effectively in regional and global economies;
- ⋾ share promising local practices focused on sustainability and resilience;
- 7 pilot innovative solutions to sustainability and climate mitigation and adaptation;
- ▶ pioneer nature-based solutions that enhance coastal resilience and prevent coastal erosion in the face of sea level rise and intensifying storms and natural disasters;
- 7 model effective local implementation of the United Nations Sustainable Development Goals.

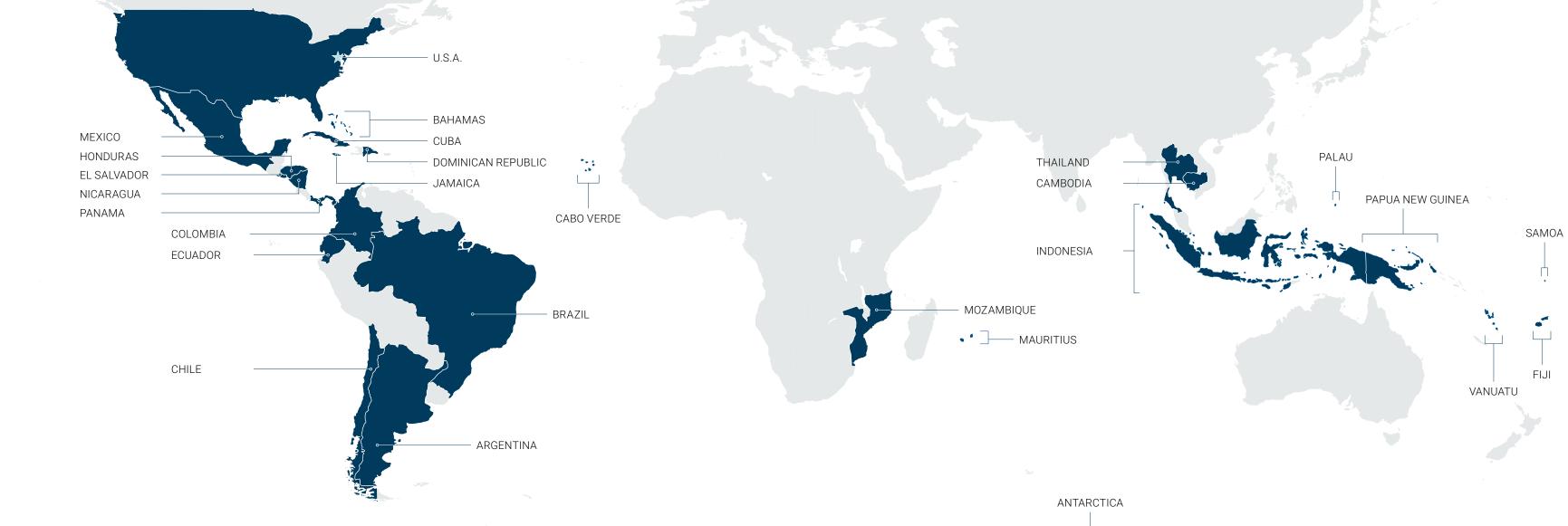
We, the signatories, call on government agencies, foundations, corporations, environmental groups, and other organizations to:

- recognize the potential of islands to develop and perfect transformative approaches to energy, transportation, solid waste, agriculture, ocean, and coastal management;
- 7 review existing policies, practices, and priorities to determine if they disadvantage or marginalize island communities;
- collaborate in a respectful and participatory way with island communities to develop new initiatives, programs, and projects that help them respond effectively to the growing climate crisis and other environmental challenges;
- increase the level of funding and technical support available to island communities as they working to transform the critical systems on which they depend; and
- nersure that island communities are able to more meaningfully participate in funding and policy-making activities that affect their future.





THE OCEAN FOUNDATION'S PROJECTS AROUND THE WORLD





Eight million metric tons. That's how much plastic we dump into the ocean each year. That's about 17.6 billion pounds every single year. At this pace, by 2050, ocean plastic will outweigh all of the fish in the ocean. Plastic can be found in thousands of products because plastics solve some basic engineering and technical challenges for users. Plastics underpin convenience in a mobile society. In some instances, plastic can have valuable uses and applications including as lighter components in vehicles, planes, and vessels to reduce energy use and thus, carbon emissions. Likewise, as lighter weight packaging and containers, plastics can reduce energy used for transport. Plastics are also useful for medical protection and sanitation in pandemics, following natural disasters, and in remote conflict zones. Specially designed plastics reduce food waste by increasing the shelf life of certain perishable goods, and reducing breakage of containers of liquids.

The very properties that have made plastic ubiquitous have left the world with an equally ubiquitous waste problem — long lasting, light weight, and cheap. The burden of plastic's down sides is generally not borne by the producer.

Unfortunately, despite ever increasing evidence of the harm to all life from the dark side of plastics, investment in plastic production capacity is increasing. New applications are being developed, and applications and uses of plastic are becoming increasingly more complex. And the problem of plastic waste is growing too. In fact, less than 10% of waste plastic is recycled. Thus, municipal solid waste management facilities send most plastic to landfills. A small percentage is incinerated, and only some of that to create energy. Most of the time "recycling" has meant exporting plastic waste from Europe and North America to China or to a few other nations for final sorting and disposal there.

Beginning with China in January 2018, most receiving nations have reacted by banning plastic waste imports, in part because of their own waste management needs and in part because it was not economical to sort the recyclable from the non-recyclable, or to dispose of the latter properly. The public harm outweighed any positive benefit. And as of January 2021, an amendment to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal makes it a right of nations to refuse the shipments, as well as a requirement for exporting nations to track plastic waste exports. Thus, the dark side of plastic has quite literally been brought home to the consuming communities who lack the facilities to recycle the many different specific polymers and mixed materials that are in use.

TOF's Approach to Redesigning Plastic

We propose to pursue science-informed national legislation in plastic-producing countries to require reengineering of the chemistry of plastic itself, redesign of plastic products, and to limit what is made from plastic. A primary goal is to ensure that plastic is used only in products and applications that provide a benefit to society. In addition, those beneficial plastics are to be made from simplified

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polymers and ingredient mixtures, as well as standardized formulations so that the products will better lend themselves to integration of plastic into the circular economy — which is to say that the harm from production, use, and disposal will be minimized or eliminated and any plastics produced will not enter the waste stream and will be fully converted to usable resources. The legislation to require the reengineering of the chemistry of plastic itself will also call for the application of green chemistry concepts to eliminate concerns about toxicity of plastic products.

- A Re-engineer the chemistry (reduce complexity and reduce toxicity, thus making plastic simpler and safer).
- Re-design the products (reduce customization, thus making plastic more standardized and simpler).
- 7 Re-think what we make from plastic (a hierarchy of plastic, thus choosing to limit plastic production only to its highest and best uses with maximum closed-loop reuse the same raw materials at the end of use).

Thus, by shifting the conversation to how plastics are made and what we make from plastic and how they will be re-inserted into a circular economy, we can guide manufacturers toward a production-based solution to this global problem.

To share TOF's history of work on the plastic debris issue, here is a summary of our achievements to date, which was published on our website in March 2020.



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March

Awarded 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.

Grantees:

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





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August

Launched the "Suck the Straws Out" Campaign

TOF'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

December

Authored 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."

December

Awarded Four Grants in Support of Marine Debris Cleanup in Partnership with 11th Hour Racing Between December 2017 and February 2019, TOF 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.

Grantees:

Take 3
Ocean Crusaders
Healthy Seas
Clean Up Australia



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January

TOF Awarded 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.



Conservación ConCiencia and the DNER work together to remove derelict fishing gear.

Authored 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 helped to support. 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.

April

Partnered with National Caucus of Environmental Legislators

TOF 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, <u>Don't Let Plastic</u> 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.



TOF President, Mark J. Spalding, speaking at the Earth Day Network's 2020 event.

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.

June

Awarded 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 in June 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.

July

Attended the First Klosters Forum and Authored 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, 70 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?"

January

Interview with Global Cause, 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 Plastic 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.



TOF President, Mark J. Spalding and Alexandra Cousteau on a panel at the National Convention of Industrialists in Mexico.

Advising the Mexican Senate on Plastics Legislation

TOF 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 onto New Plastic Economy's Letter Against Oxo-Degradable Plastic Packaging

TOF 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.



June

Fostered the Creation of the Plastic Pollution Work Group

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 Work Group and serves as Chair of the Committee.

Attended the Second Klosters Forum Focused on Plastic Pollution in the Ocean

July

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 U.S. National Academies of Science, Engineering, and Medicine explored establishing a roundtable or cross-academies formal study on ocean plastics. This lead to the "Rethinking Plastics Scoping Discussion" with National Academies of Science, Engineering, and Medicine, and a call 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.

August

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.

September

International Bar Association Annual Conference panel in Seoul, Korea

TOF 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.

January

TOF Calls on the USA's National Academies of Science, Engineering, and Medicine (NASEM) to Hold the "Emerging Technologies to Advance Research and Decisions on the Environmental Health Effects of Microplastics" Meeting

TOF 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.

February

TOF is Featured in Coverage on the Break Free From Plastic Pollution Act

Draft U.S. 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.



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TOF Authors 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 Courtnie 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."

March

TOF Participates on Panel to Tackle Plastic Pollution

On March 5th, TOF's Jason Donofrio participated on a panel focused on addressing plastic pollution in the United States and globally. The local store, Follain, hosted and the community organization, Bethesda Green, organized the educational event, which discussed the environmental problems with —

and solutions to — plastic pollution. Ten percent of product sales from the evening were donated to Bethesda Green to support their work increasing sustainable practices in the community.

Panelists:

- Jason Donofrio of The Ocean Foundation discussed global plastic pollution issues and investments in reducing plastic waste worldwide.
- 7 Tiffany Bassford, Follain Bethesda Director, discussed plastics in the beauty world and Follain's interests in sustainability.



Jason Donofrio presents TOF's approach to redesigning plastics to a crowd at Follain in Bethesda, Maryland.

- 7 Kim Goddu, **Bethesda Green** Director of Be Green Living, discussed Bethesda Green's initiatives to promote local solutions to plastics waste and how local residents can get involved in solving this problem locally.
- ✓ Carey Thompson and Tom Mills of Elysian Holdings presented their business case for how to replace plastics in the waste stream through innovative technology that will create new packaging from 100% compostable industrial hemp.
- Alan Pultyniewicz, Recycling Coordinator of the **Montgomery County Department of Environmental Protection**, spoke about the local government commitment and actions to deal with waste reduction and recycling.

Enters Partnership with Conservation X Labs

TOF 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."



TOF Expands Conservation Work Throughout Latin America and the Caribbean



TOF's Caribbean Marine Research and Conservation Initiative will allow the organization to execute an application of our programmatic work in a place-based manner. The goal of this initiative is to create a climate resilient, sustainable blue economy in the Latin America and Caribbean Region. TOF has a unique ability to encourage coordination and collaboration among smaller organizations currently operating in the region. TOF will work to bring people

together to share information about the type of work being done, as well as potential co-financing efforts, so that organizations can avoid redundancy and leverage funding opportunities at a regional scale. To do this, TOF will focus on advising governments and regional bodies and by equipping stakeholders with tools and strategies to address persistent environmental threats, such as ocean acidification and climate change, and by improving Marine Protected Area (MPA) management and marine migratory species conservation.

With a focus on policy implementation, we are helping the region to explore how it is going to persist and prosper in the face of declining tourism revenues related to COVID-19, eutrophication, sea level rise, and other threats, by providing on-the-ground implementation in the areas of:

- 1. Caribbean blue economy, particularly related to the post COVID-19 recovery
- conservation finance.
- nature-based solutions
- 4. ocean acidification
- 5. regional governance

Sportfishing in Cuba: A Sustainable, Conservation-Based, Economic Opportunity

TOF, in collaboration with the Harte Research Institute for Gulf of Mexico Studies, carried out a groundbreaking workshop entitled: *Sportfishing in Cuba: A Sustainable, Conservation-Based, Economic Opportunity.* Taking place in July in



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Havana, the workshop was designed to explore the implementation of conservation-based sportfishing models with Cuban officials and interested parties such as fishers, industry members, and researchers. As a direct result of this workshop, participants formed the first-ever Cuban National Sportfishing Working Group, which will advise all sportfishing initiatives in the country in a way that ensures a sound and sustainable recreational fishing policy. These activities are part of the Advancing Recreational Fisheries Policy and Management in an Evolving Cuba project, funded by the Harte Charitable Foundation. The project solicited input from recreational fishery models throughout the Caribbean such as the Bahamas and in turn is serving as a model for the implementation of sustainable recreational fishery industries in small, isolated communities throughout the Caribbean.

CIM.UH Club CIP

Carimar Harte The Ocean Foundation

Expedition Witnesses and Assesses Elkhorn Coral Spawning for the First Time in the Garden of the Queen, Cuba

In August 2019, an expedition to Jardines de la Reina National Park (JRNP), or *Gardens of the Queen*, documented the rare spawning of elkhorn coral (*Acropora palmata*). Together, TOF, the Center for Marine Research of the University of Havana, and the Center for Coastal Ecosystems Research were able to scientifically assess this spawning occurrence. The expedition team consisted of 11 scientists. This research is now yielding new insights in the local health of the vital coral reef ecosystem in Cuba and is informing efforts to restore elkhorn coral



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throughout the Jardines de la Reina archipelago. In May 2020, TOF submitted a major proposal to the Caribbean Biodiversity Fund to upscale coral restoration in Cuba and the Dominican Republic with a particular focus on the elkhorn coral of Jardines de la Reina.



TOF Participates in Cuba/ Seychelles Learning Exchange

In September, TOF led a delegation made up of TOF Representatives, Fernando Bretos and Katie Thompson, and three Cuban delegates; Carlos Diaz and Juliett Gonzalez of the Cuba's National Center of Protected Areas and Abel Gonzalez of the National Center for Fisheries Inspections.
After the thirty-hour journey to Mahé, Seychelles, the group briefly took in the breathtaking views before conducting a five-day long workshop exchange, which featured meetings with the Seychelles Ministry of Energy, Environment and Climate Change and the Seychelles Fisheries Authority. TOF met with the Seychelles Conservation and Climate Adaptation Trust, the Blue Economy Department, and The Nature Conservancy to learn about Seychelles' debt-fornature swap and the marine spatial planning and



At the offices of the Seychelles Conservation and Climate Adaptation Trust to discuss the debt-for-nature swap.

fisheries development activities that have come out of it. Finally, TOF was able to learn from the Ministry of Tourism about how it is controlling coastal tourism development in the Seychelles.

Cuba and Seychelles, separated by 9,000 miles, both have economies that rely heavily on tourism and marine resources. Cuba receives more than four million annual visitors and has protected more than 20% of the country's area. Seychelles, an island nation of 90,000, receives three times its population in foreign tourists, and is one of the first island states to officially incorporate blue economy planning in many of its policies. These parallels, along with the strong ongoing bilateral relationships between Cuba and Seychelles, led to the idea of an exchange between the two countries to share knowledge surrounding marine and natural resource management, particularly related to fisheries and protected areas. The exchange was funded by the Harte Charitable Foundation through our project, Advancing Recreational Fisheries Policy and Management in Cuba.

Key Workshop Themes: Sportfishing, Protected Areas, and Science Diplomacy





LEFT The Cuban delegation after a site visit and snorkel to Saint Anne Marine National Park with protected area staff.

Through TOF's meetings with the Seychelles Fisheries Authority, we learned that sportfishing is a booming yet relatively new activity in the Seychelles and that management of the industry could be improved. Many Cuban leaders have also expressed a need for strengthened management of sport-fishing in their region. Recently, both Cuba and the Seychelles have passed new fisheries legislation, making this an opportune time for the countries to exchange ideas about their laws' implementation.

In addition to sportfishing, protected area management emerged as an important topic for both countries. TOF spent time with representatives from the Seychelles National Protected Areas (SNPA), and a meeting with the Cuban Ambassador to Seychelles, Juán Humberto Macías Pino. The visit culminated with a meeting with the Ministry of Foreign Affairs that resulted in the drafting of the first ever agreement related to environmental conservation between these two island nations. TOF is extremely grateful to the incredibly generous Seychellois hospitality and to the Seychelles Ministry of Energy, Environment and Climate Change for the time and effort that went into planning this successful exchange.

Initiative to Save Caribbean Sawfish Hosts Workshop in Havana, Cuba

In December, representatives from the Initiative to Save Caribbean Sawfish and the Center for Marine Research (CIM) of the University of Havana convened a two-day workshop to create a community of Cuban research and policy professionals dedicated to the study and protection of this unique species. Specifically, the workshop focused on highlighting the conservation status of this species in Florida, the Bahamas and Cuba, training the Cuban scientists in how to conduct field research on sawfish, approaches to strengthening legal protections for the species in Cuba, and planning meetings on expeditions to gather further field research. Attending the workshop were representatives from the CIM, Center for Fisheries Research (CIP), National Cuban Aquarium, Center for



Coastal Ecosystems Research (CIEC), Avalon Fishing Centers, National Center for Protected Areas (CNAP) and the Center for Environmental Control (CICA). TOF's CariMar Initiative is partnering with two TOF FSFs on this project, Shark Advocates International and Havenworth Coastal Conservation. It is being funded by Shark Conservation Fund.

In June 2020, TOF and its Cuban and U.S. partners finalized a manuscript entitled *Strengthening Marine Species Protections in Cuba: A Case Study on the Critically Endangered Smalltooth Sawfish.* It has been submitted to the prestigious journal Marine Policy, for publication.

The University of Havana's Marine Research Center (CIM) Celebrates its 50th Anniversary

This year the University of Havana's Centro de Investigaciones Marinas (Marine Research Center, CIM) celebrated 50 years of operation. TOF attended in support and was recognized for its 21 years of collaboration with the Marine Research Center on marine science in Cuba. TOF's work with the CIM began in 1999 when TOF's Fernando Bretos collaborated with the CIM's Director at the time. Dr. Maria Elena Ibarra. Dr. Ibarra's passion for marine conservation and her ability to collaborate with other international groups was the driving force behind TOF's first partnership with the CIM. Now, over 20 years later, TOF is proud to share the University of Havana's deep commitment to ocean conservation and biodiversity.

TOF's Alejandra Navarrete and Katie Thompson attended this year's celebration. Mrs. Navarrete received an award in recognition of TOF's decades of collaboration with and support of the CIM. Ms. Thompson gave the presentation "The Ocean Foundation and CIM: 21 years of science, discovery, and friendship" on the panel "International Scientific Relations and Capacity Building" moderated by the CIM Director, Patricia González. TOF is excited to continue collaborating with the University of Havana for many more years on marine science and conservation in Cuba and the Wider Caribbean Region.



Katie Thompson (left) and CIM Director, Patricia González.



INTERNATIONAL OCEAN ACIDIFICATION INITIATIVE



The ocean is the world's largest carbon sink, which is a natural part of the global carbon cycle. However, this process quickly falls out of balance when human activities add significant amounts of carbon dioxide to the atmosphere. The end result is an increasingly acidic global ocean.

Today, the ocean is 30% more acidic than it was just 200 years ago. To make matters worse, it is also acidifying faster right now than at any recorded moment in human history. When carbon dioxide (CO_2) is absorbed by seawater, chemical reactions occur that reduce seawater pH, carbonate ion concentration, and saturation states of biologically important calcium carbonate minerals. These chemical reactions are termed "ocean acidification (OA)."

Ocean acidification poses challenges to plants and animals that are essential to marine ecosystems and human society as well as the global food supply chain.

To Combat the Devastating Effects of Ocean Acidification Around the World We Must First Address the Inequity Within Scientific Research by Expanding Capacity in Under Resourced Regions





TOF Announces Voluntary Commitment at 2019 Our Ocean Conference

In October 2019, at the Our Ocean Conference held in Norway, TOF committed US\$1.5 million towards implementing national, sub-national and regional ocean acidification monitoring, adaptation, and mitigation strategies to help nations fulfill commitments in support of United Nations Sustainable Development Goal (SDG) 14.3.



TOF President, Mark J. Spalding making commitment at 2019 Our Ocean Conference.

TOF Partners with The United Nations Environment Programme (UNEP) and the Caribbean Environment Programme (CEP) to ensure the Wider Caribbean Region can monitor, understand and address ocean acidification in their waters.







In November 2019, TOF finalized a partnership with UNEP and CEP in an effort to address ocean acidification as well as to provide expertise on the restoration of seagrasses, mangroves and salt marshes throughout the Caribbean. This partnership specifically supports the recommendations made at The Eighth Meeting of the Scientific and Technical Advisory Committee (STAC) to the Protocol Concerning Specially Protected Areas and Wildlife (SPAW) in the Wider Caribbean Region. This will allow TOF to expand our work on ocean acidification monitoring as well as our expertise on policy and legislation to some of the most vulnerable communities facing this global crisis.

Ocean Acidification Capacity Building in Latin America and the Caribbean

The Global Ocean Acidification Observing Network, or *GOA-ON*, is an essential collaborative international network created to detect and understand the drivers of ocean acidification in estuarine-coastal-open ocean environments, the resulting impacts on marine ecosystems, and to make the information available to optimize modeling studies. GOA-ON in a Box is a low-cost kit used for collecting weather-quality ocean acidification measurements. This year, in an effort to expand scientific capacity in Latin America and throughout the Caribbean, TOF procured and prepared six *GOA-ON in a Box* monitoring kits for delivery. These monitoring kits have now been delivered safely to communities in Ecuador, Jamaica,

Colombia and Panama and are in the process of being delivered to Argentina, and Mexico. As an added layer of due diligence, TOF visited Logenix International, our shipping agent, to conduct a walk through and audit of all of the shipments to clear them prior to delivery. Logenix has been an invaluable partner in assisting with preparation of formal documents for customs and donation purposes.

In the past five years, TOF has deployed a total of 17 monitoring kits to 16 countries, establishing OA monitoring where it didn't exist before, filling critical scientific knowledge gaps.

Strengthening National OA Strategies in Latin America

This year TOF continued its work to strengthen Mexico's response to ocean acidification at the executive, legislative, and scientific level. TOF began a partnership with the High Level Panel for a Sustainable Ocean Economy and The National Institute of Statistics and Geography (INEGI) to initiate a new nation-wide ocean monitoring plan. Through this partnership, TOF will help expand the number of ocean acidification monitoring sites throughout Mexico by training INEGI's staff, and will help Mexico streamline how it delivers and shares data to global networks.

TOF is working to develop a Latin America Caribbean Initiative that includes ocean acidification to prioritize sites for blue carbon restoration to support the blue economy.

For nearly 21 years, TOF has worked with local partners in Mexico to protect the ocean and the critical biodiversity throughout the region.

TOF Provides Training on OA Legislation for the Senate of the Republic of Mexico

In March 2019, TOF conducted a training workshop for the elected leaders of the Mexican Senate's Commission on the Environment, Natural Resources, and Climate Change to help policymakers understand the devastating effects ocean acidification is creating, and the action steps they can take to address them. The local scientific expert was Dr. Jose Martín Hernandez



Ayon, a partner and colleague of TOF. The long-term goal is to help the Government of Mexico draft and pass national legislation to address OA in 2020. As a next step, in October 2019, TOF was invited back to the Commission to participate as an organizer and participant in the Senate Forum,

"The Oceans and Seas of Mexico: Challenges and Opportunities for Sustainable Development." At this two-day long forum, which was attended by over 300 people, including Senators, government officials, researchers, NGOs and students, TOF led a panel on our OA strategy in Mexico, and a bill was proposed to address the issue, which TOF President Mark J. Spalding and TOF's Government and Multinationals Liaison Officer, Alejandra Navarrete, are helping to draft. In addition, TOF met with the National Institute of Ecology and Climate Change to help outline a National Program on OA for Mexico.

TOF Participates in GOA-ON North American Hub Meeting in Huatulco, Mexico

The GOA-ON North American Ocean Acidification Hub, which has been established to serve the countries of Mexico, Canada, and the United States, and is part of the Global Ocean Acidification Observing Network (GOA-ON), has encouraged grass-roots formation of regional hubs to foster communities of practice for the efficient collection of comparable and geographically distributed data to assess ocean acidification and its effects, and to support adaptation tools such as model forecasts.

TOF Collaborates in OA Policy Meeting in Zanzibar and Release of the Report: "Towards a Western Indian Ocean Regional Ocean Acidification Action Plan"



In October 2019, TOF President Mark J. Spalding presented, "Instigating OA as a Policy Priority in the Indian Ocean Region," sharing insight on legislative approaches and governance strategies at the Western Indian Ocean Regional Ocean Acidification workshop held in Zanzibar, Tanzania. The workshop was organized by the Nairobi Convention, in collaboration with the IUCN-chaired Ocean Acidification international Reference User Group (OAiRUG), and the Western Indian Ocean

Marine Science Association (WIOMSA). Across the two day period, TOF collaborated with workshop participants and Nairobi Convention partners to address OA as a regional topic of common concern, similar to the model of work TOF has done with the Cartagena Convention. To frame and provide overall context to assist the OA international Reference User Group's (OAiRUG) efforts in the Indian Ocean region, TOF shared a background report on OA, which was drafted by TOF and recently published by the Commonwealth Secretariat.

The main objectives of the workshop were to take stock of current regional knowledge and actions on OA, and to identify priorities to be included in a draft regional action plan for consideration by the parties

to the Nairobi Convention for the Western Indian Ocean (WIO) region that will provide guidance on how to respond to this challenge. The workshop was attended by over 40 regional invitees, comprising government representatives, end users, and resource managers, and was informed by a small number of key ocean acidification scientists who could provide an overview of current global scientific knowledge on ocean acidification, and also comment on current and planned activities in the region. The main output from the event was a series of priority actions to be included in a draft Action Plan for the region for consideration by the Nairobi Convention



Photos by TOF President, Mark J. Spalding, at top is Oslo, Norway, and bottom photos are of Zanzibar, Tanzania.

As follow up priorities in the action plan, TOF offered to:

- A Establish and strengthen monitoring capacity through the provision of technical training and monitoring equipment through the establishment of regional training hubs with regular workshops, assist nations and regions with monitoring plans, and facilitate the customization and delivery of low-cost equipment.
- 7 Provide legal drafting expertise for international, regional, national, and sub-national policies to address ocean acidification, with consideration to needs, contexts, and governance structures.
- **7** Establish a global partnership to test adaptation and mitigation strategies. Many of the most promising tools for adapting and mitigation OA remain largely untested or too expensive to implement at scale.

Throughout 2020 and beyond, TOF plans to continue engagement with policymakers throughout the Indian Ocean region and Western Africa to address OA as a threat to food security, tourism, natural storm resilience.

About OA-Africa

Ocean Acidification Africa (OA-Africa) is a network established to coordinate and promote ocean acidification awareness and research in Africa. This network is a regional hub of the GOA-ON and is composed of more than 100 members including scientists, graduate students, technicians, and managers working or interested in ocean acidification observations across the African continent. The goal of the network is to ensure Africa is resilient and knowledgeable of potential threats and mitigation/adaptation strategies available to combat ocean acidification.

The network aims to bring scientists together to:

- 1. provide information to stakeholders and policymakers
- 2. provide guidance and direction
- 3. coordinate activities related to ocean acidification research and monitoring
- 4. identify broad support for increased ocean acidification research and monitoring
- 5. promote the advancement of science.

For more information you can visit <u>www.oa-africa.net/</u> or contact The Ocean Foundation's Alexandra Refosco at <u>arefosco@oceanfdn.org</u>.

Second Annual Ocean Acidification Day of Action

On the 8th of January, TOF hosted the second annual Ocean Acidification Day of Action at the Embassy of New Zealand in Washington, D.C. This second iteration of the event created new partnerships and opportunities for TOF to strengthen the ability of countries to monitor, understand, and respond to ocean acidification. Formal remarks were provided by New Zealand's Ambassador to the United States, Ambassador Rosemary Banks, Chief of Staff of the Committee on the Environment, Natural Resources, and Climate Change in the Mexican Senate, Ms. Jatziri Pando, and TOF Program Officer leading the initiative on OA, Alexis Valauri-Orton.

In 2017, TOF created the first version of a guidebook for policymakers on existing legislation to address ocean acidification. This was distributed to participants at policy trainings held for Fiji and Colombia and to a close network of partners for their feedback. The guidebook was then formally launched at the OA Day of Action, with policy template legislation that could be adopted by national and sub national governments. For more information or to receive the Guidebook please visit www.oceanfdn.org/oa-guidebook/.







LEFT TOF Program Officer, Alexis Valauri-Orton. **MIDDLE** TOF President, Mark J. Spalding speaks with New Zealand's Ambassador to the United States, Ambassador Rosemary Banks and Mr. Cephas Kayo, Charge d' Affairs for the Embassy of Papua New Guinea. **RIGHT** TOF staff, Jason Donofrio and Kate Killerlain Morrison speaking with New Zealand's Ambassador to the United States, Ambassador Rosemary Banks.





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Since 2008, TOF has been involved in coastal restoration projects around the world and has widely promoted the concept of Blue Carbon; the capacity of natural ecosystems of seagrasses, mangroves, and salt marshes to take up and sequester large quantities of carbon in both the plants themselves and the sediment below. Recognizing that this concept could help address climate change while promoting ocean health, TOF focuses on protecting and restoring these coastal ecosystems, while investing in the science and viability of blue carbon and nature-based solutions.

Unlocking the Power of Seagrasses, Mangroves and Tidal Marshes

Seagrasses are flowering plants that grow in shallow waters along coasts, lagoons, and estuaries. Seagrass meadows can be found along the coasts of every continent except for Antarctica and over one billion people live within 30 miles of a meadow. A mangrove is a small tree or shrub that lives in the coastal intertidal zone. Salt marshes are found along coasts and estuaries and floods and drain through tidal movement.

Seagrass beds, mangrove forests, and salt marshes are recognized globally as some of the most productive and diverse coastal marine habitat communities in the world. Widely distributed seagrass beds, mangrove forests, and salt marshes deliver many important and valuable ecosystem services. These services include functions such as nurseries, shelter and food for juvenile fish, birds, invertebrates, and herbivores. Seagrasses, mangroves, and salt marshes also stabilize sediments and attenuate wave energy; protecting shorelines from erosion and maintaining water clarity.

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Benefits of Blue Carbon Solutions: Seagrasses, Mangroves, and Salt Marshes

COASTAL PROTECTION. Seagrass meadows, mangrove forests, and salt marshes are often the first line of defense for coastal communities. They protect against storm surges and hurricanes by dissipating wave energy and can help reduce flooding and harm to coastal infrastructure.



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CARBON SEQUESTRATION. By capturing carbon dioxide and storing it in their biomass, seagrass, salt marsh and mangrove species are able to reduce the amount of excess carbon in the air, thereby lessening the greenhouse gas' contribution to climate change.

Seagrasses occupy 0.1% of the seafloor, yet are responsible for 11% of the organic carbon buried in the ocean, and help mitigate the effects of ocean acidification. (Smithsonian Institution — under "Blue Carbon" by Pamela L. Reynolds, reviewed by Emmett Duffy and Nancy Knowlton, Smithsonian NMNH)

On average, salt marshes sequester five times more carbon at rates an order of magnitude higher than land ecosystems. (IUCN)

Mangroves sequester at least 10 times as much carbon as terrestrial forests, having the highest carbon net productivity among all ecosystems. (IUCN)

- INCREASED BIODIVERSITY. A single acre of seagrass may support as many as 40,000 fish, and 50 million small invertebrates like crabs, oysters, and mussels. (Smithsonian Institution under "Creation of Living Habitat" by Pamela L Reynolds, reviewed by Emmett Duffy and Nancy Knowlton, Smithsonian NMNH)
- **FOOD SECURITY.** Seagrass meadows supply 50% of the world's fisheries by providing habitats, especially for juveniles. Through this habitat protection, seagrass meadows are part of crucial ecosystems that provide vital nutrition for close to 3 billion people. (IUCN)

Salt marsh plants are salt tolerant and adapted to water levels that fluctuate with the tide. Tides carry in nutrients that stimulate plant growth in the marsh and carry out organic material that feeds fish and other coastal organisms, which is vital for food security for many coastal communities. (New Hampshire Department of Environmental Resources)

As one of the most productive and diverse ecosystems in the world, mangrove forests contribute to climate resilience, food security and biodiversity in near shore and inland environments by serving as fish nurseries and habitats for other aquatic plants and animals. (IUCN)

LOCAL EMPLOYMENT AND ECONOMIC BENEFIT. For every \$1 invested in coastal restoration projects and restoration jobs, \$15 in net economic benefit is created from reviving, expanding or increasing the health of seagrass meadows, mangrove forests, and salt marshes. (Center for American Progress and Oxfam Report, 2014)

Jobos Bay Long-Term Monitoring Workshop









In 2018, in response to Hurricanes Irma and Maria, TOF began working with the Jobos Bay National Estuarine Research Reserve (JBNERR) in an attempt to rebuild the island's natural infrastructure, improve resilience to the growing effects of climate change, sequester carbon, and help to buffer against future storms.

In March 2019, TOF conducted a four-day training workshop on seagrass and mangrove long-term monitoring for over 40 participants in March 2020 at the Jobos Bay National Estuarine Research Reserve. Two days were lecture-based and two days were field-based at our established seagrass and mangrove restoration sites. Peak Design and the workshop's primary funder, the Commission on Environmental Cooperation (CEC), also donated their time and resources to document the training and interview our partners and staff. The workshop was funded through the North American Partnership for Environmental Community Action (NAPECA) grant program, which is administered by the CEC.

Participants learned sophisticated long-term monitoring techniques and how to use advanced monitoring equipment to help measure the effectiveness of restoration efforts. Participants also initiated planting at our pilot mangrove restoration sites.

Sargassum Insetting in the Dominican Republic

In 2011 Caribbean countries began receiving massive quantities of the floating algae, known as sargassum, affecting the ecological health of the coastal zone and flooding the beaches with tons of algae. While large natural rafts of sargassum form an important ecosystem in the open ocean and are beneficial to coastal vegetation when washed ashore in small quantities, the recent inundation of sargassum in the Caribbean is severely disrupting coastal tourism, the fishing industry, and endangering critical ecosystems. Coral reefs and seagrass beds are being smothered by massive mats that also deplete oxygen levels in the surrounding water column leading to significant die-offs.



Punta Cana, Dominican Republic. © S. Borisov/Shutterstock

Furthermore, as *sargassum* decays, it releases hydrogen sulfide, which poses a health risk to humans and wildlife. As large-scale *sargassum* strandings become a recurring stressor, coastal areas are being put under increasing pressure with severe consequences for shoreline stability and other ecosystem services, including carbon sequestration and storage.

Recognizing the growing threat *sargassum* poses to coastal communities throughout Latin America and the Wider Caribbean Region, TOF is partnering with Fundación Tropicalia, Grogenics and AlgeaNova on new techniques and processes to deal with this issue. The partnership focuses on a pilot project in the community of Miches, Dominican Republic, to pioneer the use of *sargassum*-based compost for small-scale local organic agriculture while also sequestering and storing carbon through regenerative

soil-building practices. The concept, referred to as "carbon insetting," consists of reducing and offsetting your carbon footprint within your own value chain. In this case, the *sargassum* is used as compost in organic agriculture, thereby increasing yields, lowering costs, and reducing nutrient runoff.

The concept is designed both to remove nuisance *sargassum* before inundating beaches, and to sequester and store carbon through soil building using seaweed-derived agricultural inputs. Sequestering carbon from the atmosphere and supporting local food systems are interconnected, and part of a larger suite of tools we have to combat the devastating effects climate change is having on these communities. TOF is also working with Grupo Puntacana Fundación to help connect with the local community.

Thanks to the support of Marriott International and private donors this project was officially launched in the fall of 2019.





LEFT Amaury bean farm untreated with compost before planting. **RIGHT** This image shows the section of an Amaury bean farm where *sargassum*-based compost was applied.

About Miches, Dominican Republic



Miches is a town located in El Seibo province in the northeast coast of the Dominican Republic. The community sits between the northern slopes of the Cordillera Oriental and the southern shore of the Samaná Bay.

With a population of approximately 21,000, the municipality of Miches has historically been an isolated community located in one of the least resourced regions of the Dominican Republic. Roughly 55% of the population is classified by international standards as living in poverty and 9.4% in extreme poverty. The main economic activities in Miches are agriculture, cattle-

raising, artisanal fishing, micro-business services and artisanal crafts. Its population faces the socioeconomic challenges of emerging rural communities, such as unemployment, lack of educational

resources, and underdevelopment. The growing effects of climate change, such as stronger hurricane events, have put additional stress on farmers due to loss of yields and incomes.

We know poverty has a direct impact on people's health. In rural areas, even if people have access to crops, the variety is usually limited, with restricted economic possibilities. By increasing the diversity, quantity, and quality of the produce available in their own gardens, the goal is for the community of Miches to be able to increase crop yields, improve nutrition, and ultimately generate higher incomes, resulting in greater long-term stability.

Looking ahead, we aim to scale up our *sargassum*-insetting efforts throughout the Wider Caribbean Region by:

- Partnering with tourist resorts and coastal communities to unlock the potential of sargassumbased agricultural products to mitigate climate change while fostering sustainable economic development and local food production.
- Supporting scientific and industrial research on the environmental, economic, and social benefits of utilizing nuisance *sargassum* as agriculture-enhancing products.
- Pioneering new business models for market-based and philanthropic financing of sargassum-based carbon insetting through soil building and regeneration.
- Coordinating training workshops and other learning activities related to the responsible harvest and transformation of sargassum into compost, mulch, and other environmentally-friendly products for use in organic agriculture.
- Exploring generating certified carbon credits using *sargassum*-based products through the application of Verified Carbon Standard's emerging methodology related to the adoption of sustainable agricultural land management.

Harmful Algal Blooms: Developing a Cooperative Strategy 1st Workshop

Freshwater resources in Florida are abundant yet vulnerable. A rapidly growing population and 100 million visitors a year put an enormous amount of pressure on a resilient but weakening system. Although the Everglades' water problems dominate the discussion from Lake Okeechobee south, there are other parallel and complementary water issues in the region that must be addressed. The glaring headlines of 2018's red tide, blue-green toxic algae, and other signs of dirty water threw a long-time problem into the national spotlight. A lack of enforcement and an abundance of pollutants are not new threats to Florida's water quality. Agriculture, development, and disruption of natural water flows all contribute to the length, severity, and long-term effects of toxic algal blooms and other symptoms of poor water quality. The causes are generally well known and the solutions are often pretty clear. The question is how to get from a known solution to an implemented solution.

One obstacle is the lack of defined collaborative projects. Another is a shortage of funder collaboratives. In response to this issue, TOF hosted two regional meetings designed to bring NGOs and funders together to develop cooperative strategies to fight Florida's harmful algal bloom crisis, including red tide and blue-green algae.

The first convening was held in Ft. Myers, Florida in October and focused on gathering the key NGOs working on harmful algal blooms in Florida and the wider Gulf of Mexico region. The problem-solving roundtable included discussions



TOF President, Mark J. Spalding, Program Officer, Ben Scheelk, and TOF Program Associate, Courtnie Park, facilitated the two-day event, leading the workshop trainings and presentations.

about existing activities, how they complement each other and can be made more effective together, and developing new collaborative projects to present to a group of funders in follow up meetings. TOF Program Officer, Ben Scheelk, and Program Associate, Courtnie Park, organized the meeting along with partners from Healthy Gulf. TOF served as the facilitator for the 25 NGO participants and the meeting culminated with the creation of three key action tracts, including legislative, regulatory, and citizen-science related projects.

This workshop was supported by The Ocean Foundation, Healthy Gulf, and The Curtis & Edith Munson Foundation.

Harmful Algal Blooms: Developing a Cooperative Strategy 2nd Workshop

As follow up, TOF convened the second strategy session in Jupiter, Florida in December, with the primary goal to build on the ideas generated and decide on four to six projects that would enable NGO partners to move forward together on solutions to Florida's nutrient and pollutant overload in waterways and nearshore coastal waters. The process was intended to identify cooperative and collaborative project possibilities, with the idea that the former is relatively straightforward and the latter may need a more specific definition and investment of resources.

The NGO attendees included scientists and activists with expertise in the area that are interested in deepening and broadening their collaboration to leverage their collective strength in support of specific projects. The funder attendees included long-time Florida funders and relative newcomers and those who are interested in supporting collaborative projects to move the ball forward on these well-known issues.

Following the December meeting, all 16 NGO participants received small unrestricted grants to recognize their time and contributions to the discussion. A portion of funding from these grants is intended to support travel costs and logistical expenses associated with a "legislator education day" being organized in Tallahassee, Florida in 2020.

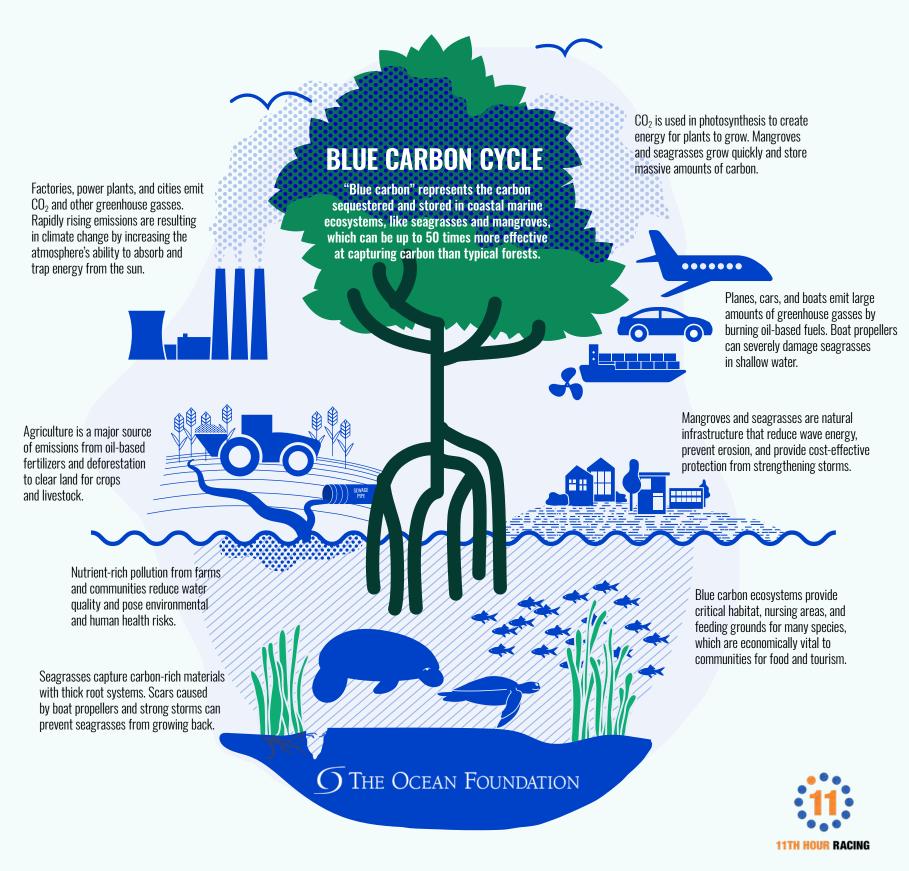
The second workshop was supported by The Ocean Foundation, Rachel's Network, The Martha G. Moore Foundation, The Henry Foundation, and The Curtis & Edith Munson Foundation.

Offset with Seagrass Grow

With almost every aspect of your daily life, you force more and more carbon dioxide and other greenhouse gases into our atmosphere. It's just a fact of modern life. There are many things you can do to reduce your footprint, but that's not always enough. By offsetting your carbon footprint with SeaGrass Grow, you help to defend against climate change AND restore critical marine habitats.

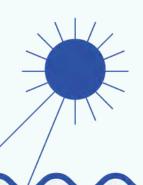
The Ocean Foundation released the first-ever Carbon Offset Calculator in 2012 as part of its SeaGrass Grow program. Individuals, businesses, nonprofit organizations, and event organizers use the calculator to offset their carbon footprint through a charitable contribution applied to a blue carbon restoration or conservation project. The calculator provides an easy-to-use way for donors to make their tax-deductible donation "tangible" by associating it with a specific amount of blue carbon resources that need to be restored or protected to offset their respective carbon footprint.

Confluence
Jackson Hole Wild
Diversified Communications
11th Hour Racing
Bee Sure



BLUE CARBON SEQUESTRATION

Seagrasses are flowering plants that exist on the coasts of every continent except Antarctica.
Seagrasses occupy 0.1% of the seafloor, but store 11% of the organic carbon buried in the ocean.
Nearly 2% of coverage is lost annually.



**

Suspended and dissolved materials from animals, plants, and land-based sediments in the water are captured by blue carbon ecosystems.

When light is blocked, such as during a harmful algal bloom, seagrasses produce less oxygen through photosynthesis, which is needed by the roots to use nutrients found in the sediment and seawater.



Seagrass meadows buffer against ocean acidification and create better conditions for shell-forming organisms to survive.

The nH of seawater is

The pH of seawater is typically higher inside a seagrass meadow versus outside of it.

■ Day
■ Night

— Inside
— Outside
— Day

Day
■ Second overages

In addition to producing seeds, seagrasses have horizontal root structures called rhizomes that allow them to quickly spread to new areas. These roots play an important role in capturing and storing carbon-rich materials.

Chloroplasts in the cells of seagrass tissues use the sun's energy to convert CO_2 and water into sugars and oxygen through photosynthesis. The process of respiration releases CO_2 when

sugars and oxygen are consumed. The net amount of CO_2 that is captured is usually high, but poor environmental conditions can throw off the balance.

Seagrasses serve as nurseries and feeding grounds for many species, including fish, crabs, sea turtles, and manatees. Carbon rich materials from animals and vegetation can be buried underneath seagrass roots and stored for millennia.

THE OCEAN FOUNDATION





iscal sponsorship refers to the practice of nonprofit institutions offering their legal and tax-exempt status, together with all applicable administrative services, to individuals or groups engaged in research, projects, and activities relating to and furthering the mission of the sponsoring nonprofit organization. As a registered 501(c)(3) entity, TOF offers appropriate legal incorporation, IRS exemption and charitable registration, in addition to financial oversight, business administration, human resources, grant management, capacity building, legal compliance and risk management. TOF provides two types of fiscal sponsorship; comprehensive sponsorship and pre-approved grant relationships.

As a fiscal sponsor, TOF helps reduce the complexity of operating a successful project or organization by providing the critical infrastructure, proficiency, and expertise of a large NGO so that projects can focus on program development, fundraising, and outreach. Through its fiscal sponsorship program, TOF creates space for innovation and unique approaches to marine conservation where people with big ideas – social entrepreneurs, grassroots advocates, and cutting-edge researchers — can take risks, experiment with new methods, and think outside the box.



© ETHAN DANIELS/SHUTTERSTOCK







In FY20, The Ocean Foundation sponsored a total of 46 projects around the world.

Fiscally Sponsored Funds

- Anchor Coalition
- Big Ocean
- Blue Climate Solutions
- Coastal Coordination
- CariMar
- Deep Sea Mining Campaign
- earthDECKS.org Ocean Network
- Eastern Pacific Hawksbill Initiative
- Friends of Sustainable Travel International
- Friends of the Delta
- International Fisheries Conservation Program
- High Seas Alliance
- Inland Ocean Coalition
- Laguna San Ignacio Ecosystem Science Program
- Ocean Connectors
- Ocean Conservation Research
- **Friends of Funds**
- Conservacíon ConCiencia
- Darwin200
- Deep Green Wilderness
- Fundacion Tropicalia
- Future Ocean Alliance
- Georgia Strait Alliance
- Grupo Tortuguero

- Ocean Revolution
- Ocean State of Mind
- Proyecto Caguama
- Redfish Rocks Community Team
- Saving Ocean Wildlife
- St. Croix Leatherback Project
- SEVENSEAS Media
- Shark Advocates International
- Smartfish International
- Superfish Tracking Research Partnership
- SURMAR-ASIMAR
- Tag-A-Giant
- The Ocean Project
- The Science Exchange
- The Wise Laboratory Field Research Program
- The Last Ocean Project
- Uncharted Blue
- Havenworth Coastal Conservation
- Island Reach
- La Tortuga Viva
- Pro Esteros
- SongSaa
- Trezco Systems

INLAND OCEAN COALITION

Our Story: You Don't Have to See the Ocean to Protect It

The Inland Ocean Coalition began as the Colorado Ocean Coalition (COCO) in 2011. Founded by Vicki Nichols Goldstein after a family move to landlocked Boulder, CO, in 2009, the Coalition's aim was to inspire and empower Colorado citizens to promote the health of our ocean through education and community involvement.

Having spent most of her life working to protect our ocean, Vicki started looking for organizations in Colorado that had an inland ocean focus. To her surprise, there were none. She consulted with colleagues and found inspiration in their support for a new initiative, an Inland Ocean Movement. In 2011, the Colorado Ocean Coalition became a project under the fiscal sponsorship of The Ocean Foundation



On June 9, 2018, the Colorado chapter of the Inland Ocean Coalition marched through downtown Boulder, Colorado, along with simultaneous marches, flotillas, and water celebrations across the country and around the world. Together, March for the Ocean events contributed to building a next blue wave of resistance while celebrating all that our waters — salty, brackish and fresh — provide us.

Starting in 2015, other inland communities began forming inland ocean chapters, including Utah, Great Lakes in Michigan, and a Sonoran Desert chapter in Arizona. In 2016, the Colorado Ocean Coalition became the National Oceanic and Atmospheric Administration's (NOAA's) first official inland ocean partner. The Memorandum of Agreement was signed by the U.S. Department of Commerce and NOAA and established "a broad framework for joint participation" with the goal of engaging inland communities on the importance of ocean conservation and enhancing the quality of life for the American people.

The movement has garnered support and recognition from luminaries in the ocean conservation movement — people like Dr. Sylvia Earle, Marine Researcher In-Residence at the National Geographic Society and Jean-Michel Cousteau, Founder of the Ocean Futures Society.

Our Work: Building Land-to-Sea Stewardship

In early 2017, the Colorado Ocean Coalition transitioned to the Inland Ocean Coalition (IOC). In their fourth year as a national organization, IOC stills work with individuals, communities, legislative leaders, and a wide range of partners on key ocean protection, watershed health, and plastic pollution issues, while strengthening their chapters and working collaboratively to grow the inland ocean movement.

Last year proved to be a year of tremendous growth for the inland ocean movement. Six new chapters were added to their ranks for a total of 16 inland ocean chapters currently: Wyoming, Montana, Alaska, Central and Northern Texas, and the University of Michigan joined Arizona, Buffalo, NY, Colorado, Colorado State University, Great Lakes, Michigan, Illinois, Prairie, Manitoba, Utah, and University of Colorado as part of the inland ocean movement (our Washington, D.C., chapter joined in early 2020).

IOC chapters are helping to grow the inland ocean movement from coast to coast. In 2019.



In early 2019, the Inland Ocean Coalition's Colorado chapter teamed up with other Colorado organizations — including Environment Colorado, CoPIRG, Colorado Sierra Club, and Eco-Cycle — to urge Colorado lawmakers to take action to combat plastic pollution in the state.

chapters focused on issues like local plastic bag bans, community outreach and education, creek and beach cleanups, and supporting national ocean policy issues like safeguarding protections for national marine sanctuaries, healthy fisheries legislation, protecting our coasts from offshore oil development, and implementing the United Nations' sustainable development goals.

As IOC chapters continue to grow, so does their outreach and legislative work. Last year IOC hosted or attended 116 community events across the country and fought for over 50 policies, bills, and resolutions to support ocean and watershed health. We also participated in 50 meetings with members of Congress from 10 states.

Why Inland Communities?

Those who live among mountains, rivers, and inland cities have a direct impact on the cycles of life in the ocean — think about what we eat, the energy we use, and how we take care of our streams and creeks, which all lead downstream to the sea

There is enormous untapped potential for getting people inland involved in ocean protection and for holding our legislative leaders accountable for their votes. Ocean issues need to be addressed on many levels — coastal and inland, as well as at the grassroots and federally. There are many



IOC Founder & Executive Director Vicki Nichols Goldstein (center) and Buffalo, NY, chapter lead Stephanie Krueger (left) at the 2018 March for the Ocean in Washington, D.C.

national ocean conservation organizations addressing important ocean issues, but none with an inland ocean focus. IOC is unique in that they have boots on the ground in key districts, and as

constituents, these supporters have direct access to legislative decision makers. Their unique niche allows them to work with chapters and supporters to convey to our Congressional leaders that all of us have a stake in ocean protection.

In light of recent events in the United States, we have come to recognize the importance of focusing on diversity, equity, and inclusion (DEI). Now more than ever, we recognize that increasing DEI will not only bring strong partners to the organization and enhance our mission, it will also increase our understanding of how ocean degradation, watershed health, plastic pollution, and climate change disproportionately impact marginalized populations. IOC strives to increase DEI in all areas of their work, and moving forward will focus on the critical need to incorporate DEI development into all aspects of our Inland Ocean Coalition.

IOC's long-term goals are to have a chapter in every state and to have strong ocean protection policies that are maintained and embraced by the nation. IOC aims to make ocean protection not simply a coastal cause but an issue of national importance that preserves marine biodiversity and healthy ecosystems. Together, we are working to build ocean conservation constituencies throughout the country by empowering individuals to be leaders in their communities and to become protectors of our ocean and waterways, no matter where they live.



© INLAND OCEAN COALITION

SHARK ADVOCATES INTERNATIONAL

Celebrating 10 Years of Safeguarding Sharks

A year dominated by a global pandemic also happened to mark a milestone for a project of The Ocean Foundation (TOF) dedicated to safeguarding some of the ocean's most vulnerable and valuable animals. In May, Shark Advocates International (SAI) rather quietly celebrated its tenth year of promoting sound conservation policy for sharks and closely related rays.

In May of 2010, Sonja Fordham founded SAI based on her two decades of expertise as a leader in the shark conservation field. Her career has focused on publicizing the plight of sharks and advocating science-based remedies before fishery management and wildlife conservation bodies.

"From the beginning, SAI has been all about participation, partnerships, and perseverance. We've aimed to brave even the toughest policy arenas to secure the most meaningful measures, priding ourselves on showing up and speaking up for the sharks."

Despite their fierce image, sharks are among the most vulnerable of the ocean's animals. Over hundreds of millions of years, most of the roughly 400 species have evolved to serve as important predators and are not equipped to withstand heavy predation themselves. Most sharks and rays are in fact exceptionally susceptible to overfishing because they grow slowly, mature late, and produce relatively small numbers of young.

Sharks are sought for their meat, fins, hides, teeth, and livers, and are taken incidentally in fisheries targeting other species. Lack of limits on fishing has resulted in serious population declines around the world. The International Union for Conservation of Nature (IUCN) estimates that roughly a quarter of the world's shark and ray species are threatened with extinction.



Shortfin mako shark (Isurus oxyrinchus). © Greg Skomal

When shark and ray populations are allowed to recover, they can support healthy marine ecosystems, sustainable fisheries, and ecotourism opportunities. Central to such recovery are fishing limits based on scientific advice and the precautionary approach — something that the vast majority of countries still lack, despite myriad commitments.

SAI works — from the Atlantic state level to globally — to secure those fishing limits, as well

as full protection for particularly vulnerable species and enforceable bans on shark "finning" (slicing off a shark's fins and discarding the body at sea).

Partnerships and coalitions are integral to SAI's work. Sonja benefits from a long history of working closely with the world's leading shark scientists through her roles as Deputy Chair of the IUCN Shark Specialist Group (SSG) and Conservation Committee Chair for the American



SAI President, Sonja Fordham at the 2017 ICCAT meeting with shark conservation partners: Shannon Arnold, Ali Hood, Sandrine Polti, Ania Budziak, and Alejandra Goyenechea.

Elasmobranch Society. Over the years, SAI has joined forces with representatives from a range of conservation groups, as well as aquariums, dive clubs, fishing associations, and governments.

Through the IUCN SSG, Sonja has helped publicize Red List assessment results for threatened species and develop global conservation strategies for some of the world's most threatened rays, including sawfishes, mantas, and rhino rays.

SAI has a particular interest in protecting sawfishes — through implementation of a U.S. Recovery Plan under the Endangered Species Act to listings under various international wildlife treaties. In recent years, SAI has partnered with Havenworth Coastal Conservation (another TOF project) and SeaLife Law to focus on protecting two Critically Endangered sawfish species in the wider Caribbean region. Last year, the coalition won important sawfish protection commitments under the Cartagena Convention (Specially Protected Areas and Wildlife Protocol) and the Western Central Atlantic Fishery Commission.

SAI has also long been engaged in efforts to strengthen finning bans. Working with colleagues in the Shark Alliance, SAI played a key role in bringing the European Union (EU) — a major shark fishing power — from lagging to leading in terms of finning ban enforcement standards. That pivotal change led to global partnerships with groups like Defenders of Wildlife and the Humane Society International to help the EU and the United States promote best practice around the world and improve regional bans in the North Atlantic and Mediterranean Sea.

Over the last 10 years, sharks and rays have received significantly greater attention under global wildlife treaties. SAI has worked with the World Wildlife Fund, Wildlife Conservation Society, the Pew Charitable Trusts, the International Fund for Animal Welfare, and others to list qualifying sharks and rays under the Convention on International Trade in Endangered Species (CITES) and the Convention on Migratory Species (CMS). With scores of species listed since 2010, the focus is increasingly turning to improved implementation of associated obligations.

Because fishing is the main threat to sharks and rays, countries' commitments under CITES, CMS, etc., cannot be properly implemented without securing catch limits. Indeed, fishery management is

warranted for all sharks and rays taken in fisheries, whether or not they're listed under wildlife treaties. SAI and its partners have seen international progress (along with plenty of disappointment) over the last decade through Regional Fishery Management Organizations (RFMOs). Advances include safeguards for overfished silky sharks, exceptionally vulnerable mobulid rays (mantas and devil rays), and whale sharks. Within the last 10 years, all the world's tuna RFMOs have prohibited retention of Critically Endangered oceanic whitetip sharks, amounting to a global fishing ban.

SAI has spent the most time on RFMOs for the Atlantic and Mediterranean, working in recent years as part of the Shark League. The coalition has welcomed an agreement by the Northwest Atlantic Fisheries Organization (NAFO) to study and protect the ridiculously long-lived Greenland shark, as well as the world's first international blue shark quota and unprecedented shortfin make restrictions by the International Commission for Conservation of Atlantic Tunas (ICCAT). With our Shark League partners (Shark Trust, Project AWARE, and Ecology Action Centre), we've celebrated emerging shark conservation leadership from Canada while navigating a U.S. government shift away from science and shark-related consequences from the United Kingdom leaving the EU.

To all of these international arenas, SAI brings critical expertise from active participation in fisheries management processes in the United States (still a leader in effective shark conservation). Sonja is an appointed member of just about every management advisory panel relevant to Atlantic sharks and rays. Since 2010, she's been at the forefront of securing greater protection for hammerhead and dusky sharks, new quotas for smoothhounds, a ban on cownose ray killing contests, positive indicators for smalltooth sawfish rebuilding, recovery of several skate species, and long-term sustainability of spiny dogfish fisheries.

Naturally, there's still much work to be done. Most important, government commitments must be followed by concrete, enforceable restrictions on fishing. Such action is exceedingly urgent for Caribbean sawfishes, which still lack sufficient protection in remaining range countries like the Bahamas and Cuba, and for dangerously declining North Atlantic shortfin make sharks, as the United States and EU stand in the way of retention ban advised by scientists since 2017.

"I'm so very proud to have been a part of great progress for shark conservation over the last decade, and mindful that The Ocean Foundation made it possible. Reflecting on this anniversary, I'm full of gratitude for all who have supported SAI over this time, and looking forward to celebrating the milestone with many of them as soon as it is safe to do so. Until then, our work to protect the world's valuable, vulnerable sharks continues with renewed inspiration."

Thanks to support from the TOF family, as well as many generous funders, volunteers, interns, and fellows, SAI is looking forward to continuing this work for at least another decade.

OUR FINANCIAL STATEMENTS

Financial Position & Cost Allocations

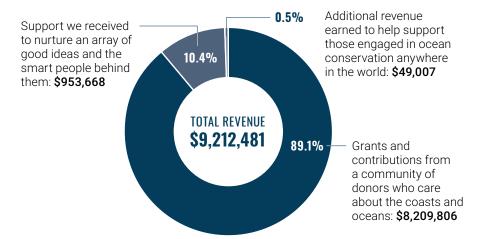
Fiscal Year Ended June 30, 2020

STATEMENT OF FINANCIAL POSITION

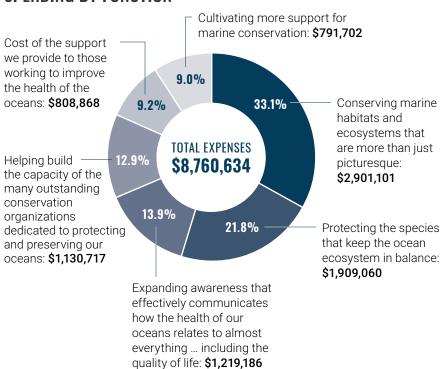
ASSETS		
CURRENT ASSETS		
Cash & cash equivalents	\$	1,746,930
Investments		244,372
Receivables		3,168,007
Prepaid expenses		33,643
The second second	\$	5,192,952
PROPERTY & EQUIPMENT		
Equipment & software	\$	113,284
Furniture & fixtures		2,041
Vehicles		17,895
	\$	133,220
Less: accumulated depreciation	\$	(133,220)
OTHER ASSETS		
Investment (interest in undeveloped land)	\$	9,300,000
Receivables, net of current		794,202
Intangible assets, net		52,193
Security deposits		12,042
,	Ś	10,158,437
	\$15,351,389	
TOTAL ASSETS	\$	15,351,389
	\$	15,351,389
LIABILITIES & NET ASSETS	\$	15,351,389
LIABILITIES & NET ASSETS CURRENT LIABILITIES		
LIABILITIES & NET ASSETS CURRENT LIABILITIES Accounts payable & accrued expenses	\$	374,716
LIABILITIES & NET ASSETS CURRENT LIABILITIES Accounts payable & accrued expenses Tenant security deposit		374,716 3,100
LIABILITIES & NET ASSETS CURRENT LIABILITIES Accounts payable & accrued expenses Tenant security deposit Deferred rent liability (current portion)		374,716 3,100 14,916
LIABILITIES & NET ASSETS CURRENT LIABILITIES Accounts payable & accrued expenses Tenant security deposit	\$	374,716 3,100 14,916 620
CURRENT LIABILITIES Accounts payable & accrued expenses Tenant security deposit Deferred rent liability (current portion) Charitable gift annuity (current portion)		374,716 3,100 14,916
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LIABILITIES & NET ASSETS CURRENT LIABILITIES Accounts payable & accrued expenses Tenant security deposit Deferred rent liability (current portion) Charitable gift annuity (current portion) OTHER LIABILITIES Deferred rent liability (net of current) Charitable gift annuity (net of current)	\$ \$ \$	374,716 3,100 14,916 620 393,352 95,752 3,155 98,907
LIABILITIES & NET ASSETS CURRENT LIABILITIES Accounts payable & accrued expenses Tenant security deposit Deferred rent liability (current portion) Charitable gift annuity (current portion) OTHER LIABILITIES Deferred rent liability (net of current) Charitable gift annuity (net of current)	\$ \$	374,716 3,100 14,916 620 393,352 95,752 3,155
LIABILITIES & NET ASSETS CURRENT LIABILITIES Accounts payable & accrued expenses Tenant security deposit Deferred rent liability (current portion) Charitable gift annuity (current portion) OTHER LIABILITIES Deferred rent liability (net of current) Charitable gift annuity (net of current) TOTAL LIABILITIES NET ASSETS	\$ \$ \$	374,716 3,100 14,916 620 393,352 95,752 3,155 98,907
LIABILITIES & NET ASSETS CURRENT LIABILITIES Accounts payable & accrued expenses Tenant security deposit Deferred rent liability (current portion) Charitable gift annuity (current portion) OTHER LIABILITIES Deferred rent liability (net of current) Charitable gift annuity (net of current) TOTAL LIABILITIES NET ASSETS Without donor restriction	\$ \$ \$ \$	374,716 3,100 14,916 620 393,352 95,752 3,155 98,907 492,259
LIABILITIES & NET ASSETS CURRENT LIABILITIES Accounts payable & accrued expenses Tenant security deposit Deferred rent liability (current portion) Charitable gift annuity (current portion) OTHER LIABILITIES Deferred rent liability (net of current) Charitable gift annuity (net of current) TOTAL LIABILITIES NET ASSETS Without donor restriction Undesignated	\$ \$ \$	374,716 3,100 14,916 620 393,352 95,752 3,155 98,907 492,259
LIABILITIES & NET ASSETS CURRENT LIABILITIES Accounts payable & accrued expenses Tenant security deposit Deferred rent liability (current portion) Charitable gift annuity (current portion) OTHER LIABILITIES Deferred rent liability (net of current) Charitable gift annuity (net of current) TOTAL LIABILITIES NET ASSETS Without donor restriction Undesignated Designated by Board	\$ \$ \$ \$	374,716 3,100 14,916 620 393,352 95,752 3,155 98,907 492,259 (603,687) 12,785,050
LIABILITIES & NET ASSETS CURRENT LIABILITIES Accounts payable & accrued expenses Tenant security deposit Deferred rent liability (current portion) Charitable gift annuity (current portion) OTHER LIABILITIES Deferred rent liability (net of current) Charitable gift annuity (net of current) TOTAL LIABILITIES NET ASSETS Without donor restriction Undesignated	\$ \$ \$ \$	374,716 3,100 14,916 620 393,352 95,752 3,155 98,907 492,259

\$ 15,351,389

REVENUE TO SUPPORT MARINE CONSERVATION



SPENDING BY FUNCTION



TOTAL LIABILITIES & NET ASSETS

STATEMENT OF ACTIVITIES

Fiscal Year Ended June 30, 2020

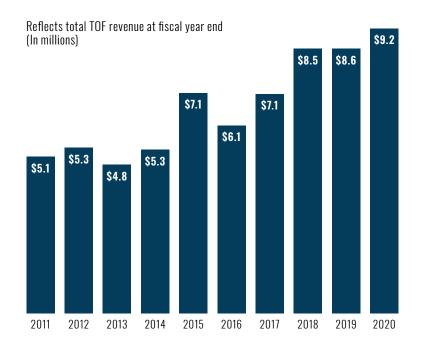
	WITHOUT DONOR RESTRICTION	WITH DONOR RESTRICTION	TOTAL
REVENUE & SUPPORT			
Grants & contributions	\$ 9,926,090	\$ 7,902,282	\$ 17,828,372
Program service revenue	636,145		636,145
Rental Income	38,340		38,340
Investment income – net realized and unrealized gain/(loss)	1,881		1,881
Interest income – other	7,743		7,743
	\$ 10,610,199	\$ 7,902,282	\$ 18,512,481
Net assets released from restriction:			
Satisfaction of program restrictions	7,633,146	(7,633,146)	-
TOTAL REVENUE & SUPPORT	\$ 18,243,345	\$ 269,136	\$ 18,512,481

EXPENSES			
Program Services			
Protecting Marine Habitats	\$ 2,901,101	-	\$ 2,901,101
Protecting Species of Concern	1,909,060	_	1,909,060
Building Marine Community Capacity	1,130,717	-	1,130,717
Ocean Literacy	1,219,186	_	1,219,186
Total program expenses	\$ 7,160,064	-	\$ 7,160,064
Support Services			
Management & general	\$ 808,868	-	\$ 808,868
Fundraising	791,702	_	791,702
Total support expenses	\$ 1,600,570	-	\$ 1,600,570
TOTAL EXPENSES	\$ 8,760,634	_	\$ 8,760,634

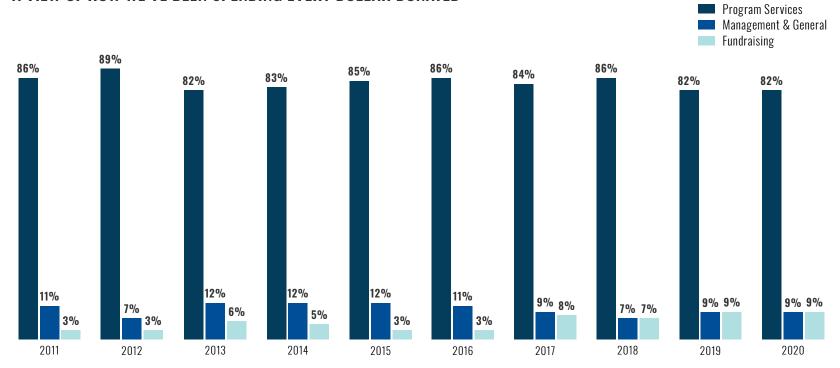
CHANGE IN NET ASSETS (DEFICIT)	\$ 9,482,711	\$ 269,136	\$ 9,751,847
Beginning net assets	2,698,652	2,408,631	5,107,283
ENDING NET ASSETS	\$ 12,181,363	\$ 2,677,767	\$ 14,859,130

PROJECT GROWTH

REVENUE GROWTH



A VIEW OF HOW WE'VE BEEN SPENDING EVERY DOLLAR DONATED

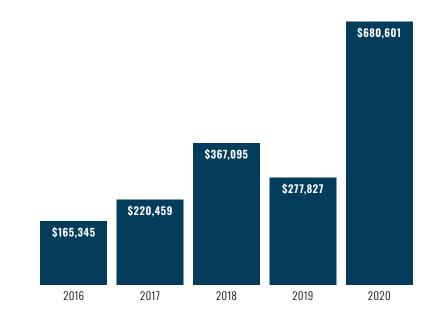




FUNDS SPENT INTERNATIONALLY

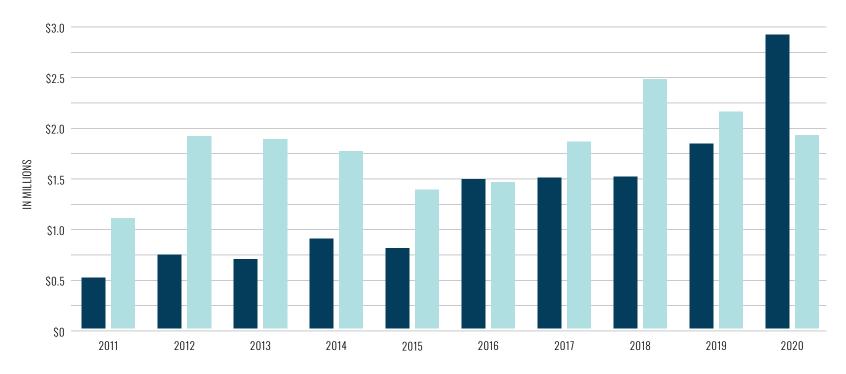
In millions \$1.6 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

FUNDS RAISED FOR "71 PERCENT"

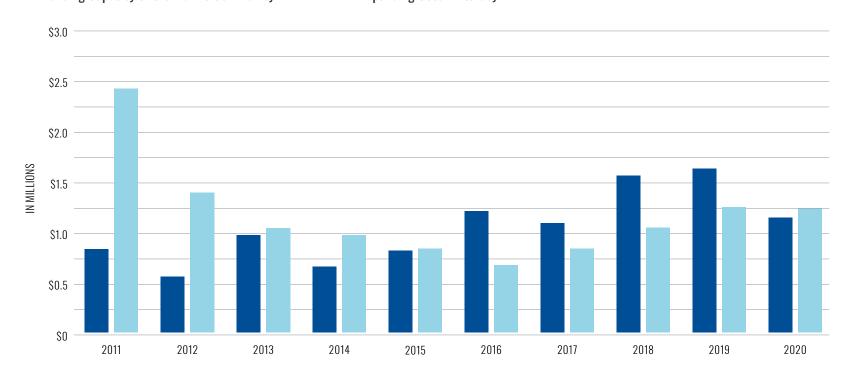


FUNDS SPENT



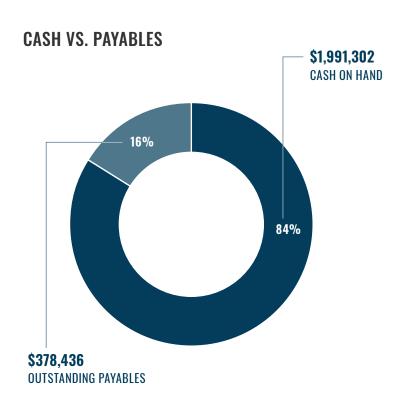


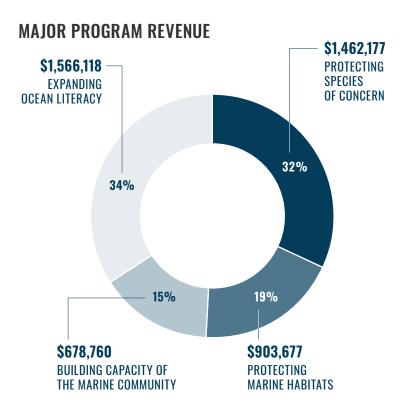
Building Capacity of the Marine Community Expanding Ocean Literacy





© BELLA WHITE FROM PEXELS







THE OCEAN FOUNDATION PROJECTS

OUR CHANNELS

SeaGrass Grow Offset Partners

Bee Sure

Confluence Philanthropy

Diversified Communications

11th Hour Racing

Jackson Hole Wild

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Peak Design

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Fiscally Sponsored Funds

Alabama River Diversity Network

Anchor Coalition

Big Ocean

Blue Climate Solutions

Caribbean Marine Research and Conservation Program (CariMar)

Coastal Coordination

Deep Sea Mining Campaign

earthDECKS.org Ocean Network

Eastern Pacific Hawksbill Initiative

High Seas Alliance

Inland Ocean Coalition

International Fisheries Conservation Program

Laguna San Ignacio Ecosystem Science Program

Ocean Connectors

Ocean Conservation Research

Ocean Revolution

Ocean State of Mind

Proyecto Caguama

Redfish Rocks Community Team

Saving Ocean Wildlife

SEVENSEAS Media

Shark Advocates International

SmartFish International

St. Croix Leatherback Project

Superfish Tracking Research Partnership

SURMAR-ASIMAR

TAG-A-GIANT

The Last Ocean Project

The Live Blue Foundation

The Ocean Project

The Science Exchange

The Wise Laboratory Field Research Program

Tracking Turtles Thru Time

Uncharted Blue

Who Saved The Whale Lagoon

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