

Transforming Ocean Governance



Contents

The ocean challenge	4
Our impacts to date	6
Our goals	8
Our strategy	10
Impact at scale	12
Our strategies in focus	14
Map all human activity at sea	14
Engaging national governments to use open	
data and adopt transparency	18
Promote transparency in international policies	
and forums	22
Communications for influence and impact	26
Our organization	27

Who we are

Global Fishing Watch believes that information about the ocean, our global commons, should be common knowledge. We create and publicly share knowledge about human activity at sea, so that the ocean and its resources can be managed sustainably. We use cutting-edge technology to turn big data into actionable information. We share that information publicly to advance science and drive fairer, smarter policies and practices to protect our ocean, biodiversity and people's livelihoods. And we promote international cooperation and transparency to enable a new era of ocean governance.

Global Fishing Watch was founded in 2015 through a collaboration between three partners: Oceana, an international ocean conservation organization; SkyTruth, a technology firm that uses satellite imagery and data to protect the environment; and Google, whose tools and contributions help process big data. In June 2017, Global Fishing Watch was established as an independent, international nonprofit organization.



The ocean challenge

The ocean is essential to life on Earth. It regulates our weather and water supplies, absorbs the carbon we emit and provides the oxygen we breathe. Billions of people depend upon it for their livelihoods and food security. But our ocean is in trouble.

From coral reefs to sharks and whales, ocean life is in dangerous decline. One-third of the world's major commercial fish stocks have been exploited beyond safe limits. Industrial fishing combined with a huge growth in shipping, offshore energy and other industrial activity is putting marine life under unprecedented stress. And climate change is profoundly altering ocean conditions, heating the water, changing its acidity and depleting its oxygen.

Our ocean desperately needs to be better managed if we are to begin to restore it to health. Today, too much of what happens at sea remains out of sight and out of mind. The institutions, laws and regulatory regimes that govern our ocean are fragmented, weak

and outdated. Industrial fishing, the single biggest threat to marine life, is poorly regulated, while an estimated one-fifth of all wild-caught fish, worth up to \$23.5 billion annually, is illegal or unreported. Though governments have pledged to end overfishing, restore marine biodiversity and protect 30 percent of the ocean by 2030, achieving these goals will be impossible without reliable data, better oversight, international cooperation and greater accountability across vast ocean areas.

Transforming our ocean starts with seeing and understanding what goes on at sea, and empowering people to act on that knowledge.

This is where Global Fishing Watch comes in.

Recent advances in satellite technology and computing power present unprecedented new ways to monitor, manage and protect our ocean. These technologies are appearing as governments finally begin to wake up to their obligations to the ocean, evidenced by new legislation, international agreements and action to strengthen management, tackle illegal fishing and boost ocean protection.

Global Fishing Watch is determined to seize these opportunities. We believe open data and increased transparency hold the key to better ocean stewardship. We have demonstrated the power of artificial intelligence and satellite data to shine a light on ocean activity, building the first map to publicly track the movements of some 70,000 industrial fishing vessels. We have launched innovative partnerships with governments to transform ocean monitoring, management and enforcement. And by

sharing everything—our code, data, models, maps, tools and technology blueprints—we are enabling new research and initiatives, while accelerating progress and equity by making cutting-edge technology accessible to all.

From clamping down on lawless fishing to designating new marine protected areas, our work is already helping to improve ocean management—but this is just the beginning. In the coming years, we will drive fairer, smarter policies and practices that protect our ocean and those whose livelihoods depend on it, unlocking and sharing even more data for the common good, while advancing scientific understanding, transparency, equity and accountability.

This summary of our strategic plan explains how we are going to do it.



Our impacts to date

Driving change in ocean management



Tracking fishing's footprint

We published the first global assessment of commercial fishing activity based on satellite data, revealing that industrial fishing occurs across 55 percent of the ocean—an area four times greater than all agricultural land. The paper sparked debate and gained worldwide media attention, and the data we released with it has been downloaded more than 6,000 times. Read more



Making the case for marine protection

When the fishing industry contested plans for a no-take marine reserve around Mexico's remote Revillagigedo archipelago, National Geographic Pristine Seas used our data to rebut their claims, demonstrating that a fishing ban would have little economic impact. This evidence proved critical in the creation of the largest marine reserve in North America. Read more



Revealing transshipments on the high seas

We published the first global overview of transshipment in the fishing industry, shedding light on a practice often associated with illegal, unreported and unregulated fishing. In 2020, with The Pew Charitable Trusts, we launched a public carrier vessel portal to track the movements of carrier vessels, verify transshipment activities and identify suspicious behavior. Read more



Powerful partnerships

Using satellite and radar imagery, we uncovered illegal fishing on a massive scale around North Korea—900 industrial vessels from China were violating U.N. sanctions, while 3,000 small-scale North Korean vessels, unable to compete, had ventured dangerously far from port into Russian waters. After we helped bring international attention to the issue, illegal fishing in the region fell by 75 percent. Read more



Keeping squid fleets away from the Galapagos

In 2020, our analysis revealed a vast, largely unregulated Chinese fishing fleet operating near the protected waters of the Galápagos, a critical region for fish stocks and biodiversity. Our findings gained media attention and supported regional governments to monitor their waters. The following year, the fleet kept well away. **Read more**



Improving accountability

Years of civil war and unrest had left Somalia and Yemen susceptible to illegal fishing from foreign fleets. In 2020, we produced an analysis that revealed almost 200 Iranian and Pakistani vessels fishing illegally in their waters—this led to international action to strengthen surveillance and hold Iran and Pakistan accountable for enforcing regulations. Read more



Supporting more effective patrols

Since 2019, we have supported the U.S. Coast Guard's annual patrols in the Northwest Pacific Ocean. Using our data and analytics to identify and locate suspicious vessels, patrol boats have been able to board more vessels and uncover nearly 10 times as many violations as before.

Read more



Catching illegal fishers

Working with INTERPOL and authorities from Indonesia and Panama, we played a vital role in the capture of the MV NIKA, a notorious vessel wanted for illegal fishing. We used our technology to predict its course and identify rendezvous points where patrol vessels could intercept it. Read more

Our goals

By 2030, we will empower institutions and people across 30 countries to:

Reduce illegal, unreported and unregulated fishing and destructive fishing practices.

Better enforce and protect the rights of 1 million small-scale fishers.

Improve effective designation and management of marine protected areas and other effective area-based conservation measures.

Theory of change

Global Fishing Watch creates, transforms and distributes data to increase the transparency of human activities in the global ocean. Applying this knowledge leads to greater accountability, improved governance, reduced ecological threats and an ocean that is healthy, productive and resilient.



Our strategy

Three interlinked strategic priorities will guide our work leading up to 2030

Map all human activity at sea

To provide the data needed to address ocean challenges, we will monitor and map all commercial activity at sea, including all industrial fishing vessels, hundreds of thousands of small-scale fishing boats, all large non-fishing vessels, and all fixed infrastructure such as aquaculture and oil rigs. Processing millions of gigabytes of satellite data and combining this with data from governments, scientists and other sources, we will share information that can drive change in fishing, marine conservation and climate action. All of our data will be open and free for everyone to use.

Engage national governments to use open data and adopt transparency

We will engage 30 selected countries to adopt transparency as a principle and share their ocean data more widely. This increased transparency and our technology will enable specific actions and policy shifts to help these countries address threats to the ocean and become international advocates for transparency. We will work with governments and other partners—including small-scale fishers, conservation groups, scientists, journalists and civil society—to co-develop solutions and build capacity to tackle illegal, unreported and unregulated (IUU) fishing and strengthen marine protection.

Promote transparency in international policies and forums

What holds for governments holds for multinational institutions too; U.N. agencies, regional bodies, development banks and other international institutions need to embrace transparency principles for the ocean. By showcasing and evidencing the benefits, we will secure a landmark resolution in support of ocean transparency in a global intergovernmental forum. We will use this to strengthen policy and law, and encourage other multinational organizations and agreements to adopt transparency.



To support each of these strategic priorities, we will grow our global and regional networks of trusted partners from civil society— including communities, nonprofits and academia—and the private sector. We will use partnerships and collaborations to advance policy and practice, and build momentum around the use of open data in general. We will work with civil society, responsible business, scientists and the media to harness our map and open data to showcase problems and solutions, hold governments to account and push for reform. These partners will also inform the type of technology we develop, so that we can have the widest possible impact.





Impact at scale

Through our strategy, we pursue two pathways to impact

Core impacts

"Core" impacts are central to achieving our goals and are where we invest most of our capacity and resources. We hold ourselves directly accountable for delivering these impacts, though they require close partnership with governments, civil society and others.

Enabled impacts

"Enabled" impacts are those which others are able to achieve by using our open data and technology. To make the most of our data and tools, we actively seek to support and collaborate with partners whose goals contribute to our own mission—these enabled impacts are not our primary focus and remain our partners' responsibility.



Core impacts

By informing and influencing governments and policy shifts, evidencing the benefits of transparency, and demonstrating the value of our technology and tools, we will drive positive changes in:

- Industrial fishing: reducing IUU fishing and destructive fishing by industrial fleets.
- Small-scale fishing: protecting the rights of small-scale fishers through enhanced monitoring and management of their fishing areas.
- Marine protection: improving design, monitoring and management of protected areas and other effective area-based conservation measures.

Enabled impacts

By sharing our data and technology with other organizations, carrying out joint research and supporting collaborations that align with our own vision and mission, we will enable further positive changes for the ocean. We are excited to see what others can do with our data and tools, and what new opportunities develop in the coming years. We have already identified partnership opportunities in:

- Ocean climate solutions: reducing emissions from vessels and offshore oil and gas production, protecting ocean carbon sinks, reducing new fossil fuel production at sea and accelerating adoption of offshore renewables.
- Marine pollution: limiting pollution from ocean-going vessels and fixed infrastructure.
- Conservation: preventing direct harm to marine life from shipping, mining and other industrial activity at sea.
- Science and governance: supporting research into critical questions around marine science and ocean governance.



Our strategies in focus

Map all human activity at sea

Using satellite imagery, other data sources and machine learning, we will map all significant industrial activity at sea in near real-time—from fishing and shipping to oil rigs, mining, aquaculture and wind farms.

We will show who is doing what, when and where across our ocean, and share this knowledge freely for all to use. The result will be a new detailed understanding of human activity as well as a tool to monitor it, powering solutions to numerous ocean challenges.

Currently, there is no free and open system that reveals all this activity. Cutting-edge tools are routinely available to wealthy governments via commercial providers, but are mostly out of reach for lower-income countries where they are most needed. Our monitoring system will be freely

available to everyone. Whereas proprietary data increases power imbalances, our open system will exist for the common good.

The data platform and technologies we produce will serve as the foundation for our engagement with governments and international institutions, and powerful partnerships with other organizations. This new view of human activity at sea—and the ability to inexpensively monitor it—will enable new ways to improve ocean governance and secure the future of our ocean.



What we will achieve

Industrial fishing: Our current platform is already transforming fisheries monitoring and helping to clamp down on IUU fishing, but we are only tracking around 20 percent of commercial fishing vessels. By adding more data sources, we will map the activities of the entire global fish fleet—some 350,000 vessels—and reveal its environmental and social impacts.

Small-scale fishing: By mapping the activities of small-scale fishers, we can better protect their fishing grounds and livelihoods, including by helping create and manage preferential access areas for local, artisanal fishers. We will add several hundred thousand small boats to our map, with an emphasis on countries where coastal communities depend on fishing.

Marine protection: Our data on fishing, industrial activity, biodiversity and climate will enable better design and management of marine protected areas (MPAs) and other effective area-based conservation measures (OECMs). We will make this information widely available and build it into our marine manager portal to support better marine spatial planning.

Enabled impacts: While focusing on the above core impacts—and making our platform available for anyone to use—we will also support selected partners to use our data and technology for the good of the ocean. Potential partnerships we have identified are tackling issues which include:

- Holding the offshore fossil-fuel industry to account.
- Quantifying carbon emissions from shipping to support decarbonization efforts.
- Identifying and mitigating threats to ocean carbon sinks known as "blue carbon" ecosystems.
- Detecting oil spills from vessels and offshore drilling rigs.

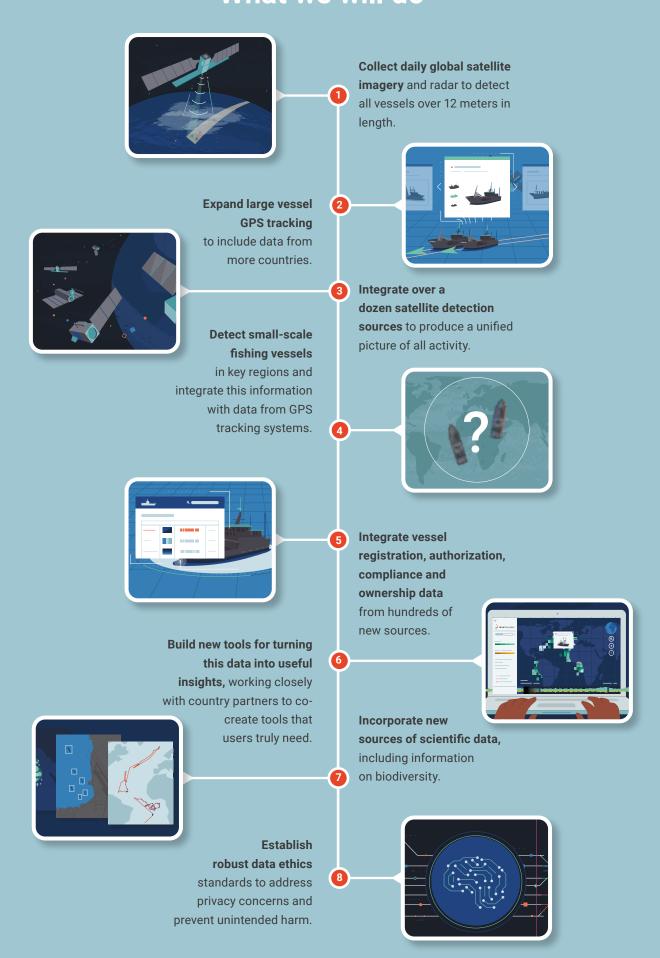
- Reducing direct risks to marine wildlife such as ship strikes on whales and seabird bycatch in longline fisheries.
- Mitigating impacts from deep-sea mineral mining and near-shore sand mining.

We will allocate a small, flexible innovation team to explore potential collaborations, focusing on opportunities where our data, technology and unique capabilities will contribute to outcomes that align with our own mission. Across all projects, we will enable our partners in the wider ocean community to gain insights from our data by making it easy to download and integrate into their own platforms.

Enabling new science and technology

Our global network of research institutions is using our data to advance ocean science and answer critical questions on issues ranging from the footprint of industrial fishing to fisheries subsidies and forced labor on fishing vessels. We will continue to strengthen and empower this growing research network and expand its geographical scope. And in collaboration with technology and software developers, we will enable our data to become part of new technology solutions. To complement this, we will establish a science advisory board to explore what science and technology is needed to support better fisheries and a healthy ocean to 2030 and beyond.

What we will do



Engaging national governments to use open data and adopt transparency

National governments are the most critical actors in ocean governance. They regulate their own waters and fishing fleets, contribute to international negotiations and initiatives, and implement conservation measures. To transform ocean management, we need governments to understand, embrace and champion the benefits of transparency and open data.

Building on our existing partnerships, we will engage the governments of 30 countries to adopt transparency as a principle and share their data to improve ocean governance. With our technology platform, analytical and policy capabilities, and capacity development efforts, we will support governments to strengthen policies and take action to address threats to the ocean. As countries realize the benefits of partnering with us and demonstrate their commitment to transparency and ocean leadership, demand for our solutions will grow—and so will our impact.

We will prioritize countries where we can have the greatest impact, and those that are willing to lead and advocate for transparency on the international stage. Our active engagement will continue until we have secured the changes we want to see. We will leave these countries with powerful tools that they are well equipped to use and a culture of transparency and accountability. After this, we can move on to other countries without compromising the gains achieved.



Putting transparency into action

What does transparency in ocean governance look like in practice?
We expect the countries we engage with to commit to the following minimum requirements to combat illegal fishing and human rights abuses at sea and support equitable, effective fisheries management:

- **Identification:** Every vessel is allocated with a unique identifier that follows it from construction to scrapping.
- Authorization: Authorizations to fish and transship catch are made public.
- **Ownership:** A vessel's ultimate beneficial owner, registered owner, and operator or manager are recorded.
- Registration: Public vessel registers are maintained with up-to-date identification, authorization and ownership details and all data is submitted to the U.N. Food and Agriculture Organization (FAO) Global Record.
- · Tracking: All industrial vessels are publicly trackable.
- Transshipment: All transshipment activity is published.
- **Compliance:** Vessels and organizations that have engaged in IUU activity are listed publicly.
- **Policies:** All policies and decision-making processes that govern fishing and related activities at sea are made publicly available.

How our engagement works

- By using our platform and co-created tools, governments improve the management of their waters to better protect the marine environment and the people who rely on it.
- Positive engagements with the first set of countries will help us engage successfully with the next batch.
- As more governments share their data, transparency in ocean governance improves, increasing the benefits.
- A tipping point is reached when a critical number of countries embrace transparency, leading to a reform of the ocean governance system to become inclusive and open.

What we will achieve

Transparency: We want each country we engage with to adopt transparency as a central pillar of its ocean governance and to share data openly, accessibly and equitably. This includes publicly sharing vessel tracking data on our map, along with information such as vessel ownership and authorizations.

Industrial fishing: Our tools will help governments identify and address IUU fishing and harmful fishing by foreign fleets, the country's domestic fleet and the country's distant-water fleet, if it has one. We will support them to ensure fishing vessels comply with international, regional and national legal obligations, and ports are not used to land or transship IUU fish.

Small-scale fishing: We will work with governments and coastal communities to protect the rights of small-scale fishers, improving their livelihoods and cementing their role in ocean stewardship. Our tools and engagement can help expand, manage and enforce preferential access areas designated for small-scale fishers, prevent incursions by industrial vessels, and enhance co-management and community-based governance models.

Marine protection: Our data, analysis and tools will help governments and communities design, monitor and manage MPAs and OECMs more effectively. This includes designating new MPAs and OECMs, designing and implementing effective management and monitoring plans, and ensuring only authorized activities take place in these areas.

Partnerships for impact

We are just one component of a larger community striving to address ocean challenges. In our country engagement, we will identify, cultivate and mobilize networks of partners to develop complementary strategies and hold governments to account. Together, we will advocate for policy changes and government action, and promote the value of transparent, data-driven governance and decision-making. Potential partners include:

- Nonprofit organizations at national and community level.
- Private sector partners, such as progressive fishing industry actors.
- Academic and research partners in our target countries.
- Coalitions such as the Joint Analytical Cell and the Coalition for Fisheries Transparency.
- Small-scale fisheries and community organizations and networks.





Promote transparency in international policies and forums

Establishing transparency as a core component of ocean governance will be a major step towards securing the future of our ocean.

The value of transparency is increasingly recognized; support is widespread among scientists and civil society, along with a small but growing number of progressive governments. But many governments and international organizations have yet to embrace the idea.

Our challenge over the coming decade is to make the international community adopt transparency as a key principle, leading to more accountable and equitable ocean governance. We will demonstrate the positive impact that a transparent approach to policymaking and implementation can have, particularly in lower-income countries with limited resources. By showcasing the benefits and championing its importance in key forums,

we will help shape international and regional policies and requirements that spur action even in those countries unlikely to embrace transparency of their own accord.

As one of the very few organizations that puts transparency at the center of its work and can turn commitments into practical action, Global Fishing Watch is already at the heart of this conversation. But we cannot do this alone; it will require the active involvement of engaged governments, a broad civil society base and a network of high-level champions.

Establishing transparency as a fundamental principle in ocean governance will lead to real change on the water, bringing material gains for fisheries, biodiversity conservation, sustainable development and the climate. As transparency becomes internationally recognized and adopted, those that are reluctant to accept it today will come on board until it becomes the norm.

Spheres of influence

Ocean governance: U.N. agencies and departments such as the Food and Agriculture Organization, Department of Economic and Social Affairs and the Convention on Biological Diversity.

Fisheries management: regional fisheries management organizations.

International finance: multilateral development banks, the World Bank and the Global Environment Facility.

What we will achieve

Transparency in ocean governance: We will secure a global U.N. or intergovernmental resolution that recognizes, for the first time, the value of transparency in ocean governance. This language will provide both a legal and a political means of making countries adopt transparency actions in their own jurisdictions.

Fisheries management: Our advocacy will lead

to stronger requirements on vessel transparency—both globally, as part of new binding provisions developed through the FAO, and regionally through regional fisheries management organizations (RFMOs). By accelerating change in organizations that influence multiple actors through binding or voluntary agreements, we can make transparency ubiquitous.

International commitments: Transparency will support science-based, inclusive efforts to: protect 30 percent of the ocean by 2030 under the Convention on Biological Diversity; protect and restore blue carbon habitats; and ensure the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction.

Development finance: We will make the economic development case for ocean transparency, so that bilateral and multilateral finance institutions and development banks use it as a criterion for funding, rewarding good practice and penalizing regressive actors.



What we will do Influence institutions—including U.N. agencies, development banks, RFMOs and other regional groupings—to acknowledge the value of transparency in ocean governance and introduce practical measures to encourage and require it. Use our engagement with national governments to create champions and success stories, while also working with other political actors favorable to transparency. Demonstrate how transparency, open data and technology can help implement regional monitoring, control and surveillance measures. Work with partner governments and others through thought leadership opportunities and targeted campaigns. Mobilize and collaborate with allies from science, civil society and the private sector. Use our data, case studies and other evidence to make the case for transparency across ocean issues. Develop targeted campaigns and thought leadership opportunities, such as providing a platform to our political supporters to reach high-level decision makers. Support partnership networks to build momentum for transparency, notably the IUU Fishing Action Alliance and the Coalition for Fisheries Transparency.

Communications for influence and impact

To deliver this ambitious agenda, we need a stronger voice. We will increase our influence and amplify our impact by building communications into all our work.

Advocacy communications

To achieve our goals, we need to influence key decision makers and shape public opinion and policy. We will develop targeted communications tailored to regional and national contexts to ensure our messages resonate with target audiences.

Influential voices

We will identify and enlist influential voices who can increase the visibility and credibility of our work—high-profile individuals who can help attract media attention, engage new audiences, build trust and open doors.

Impact storytelling

By demonstrating our impact and leadership, we can inspire further positive action. Using narratives, data and other forms of media,

we will make the link between our work and priority issues such as climate change, food security and the blue economy. These success stories will serve as a powerful tool for influencing governments, building trust and credibility, and connecting with audiences on an emotional level.

Engaging media

We will expand our reach and influence by supercharging our collaboration with journalists and influential news outlets. We will support journalists to use our tools, and aim to create a media support hub to promote cutting-edge journalism and special features that bring the issues we work on to a wider audience.

Science storytelling

We need to translate our scientific research and innovation into a language that governments and wider audiences can understand and act on. Along with our partners, we will generate high-profile media coverage for flagship scientific papers, and produce supporting data visualizations, multimedia assets and digital storytelling.





Our organization

We will build and strengthen our organization in order to deliver all elements of our strategy. This means increasing its scale, diversity and resourcing, while living our core values and supporting all our staff.

Delivering the strategy

To achieve our goals, we need to expand and diversify the team. At the same time, we aim to remain nimble and flexible, aligning the size and location of our workforce with the needs of our operation, and further diversifying our staff via more inclusive recruiting.

We will ensure that all staff have the opportunity to thrive within the organization. We will continue to implement best working practices as we expand our fully remote operations and continue to offer flexible working schedules, equitable pay and adaptive benefits to remove potential barriers to work. We will invest in effective internal communication as well as training and development opportunities. We will ensure our human resources capacity allows us to fully support all our staff.

Living our values

We will continue to put transparency at the center of how we operate, providing insights not just on what we achieve but how we achieve it.

We will further embed respect—respect for each other, our partner organizations and the multiple

cultures across which we work. Through our diversity, equity and inclusion roadmap we will institutionalize policies that support equity and implement cross-cultural best practices. We will be respectful stewards of resources such as data that others provide to us. We will demonstrate respect for our cause by undertaking a full audit of our carbon footprint and implementing measures to limit it.

We will commit to innovation in our work and in the organization itself. We will empower all staff to contribute creative ideas, foster an atmosphere of free thinking and co-produce solutions with sometimes unfamiliar partners.

Increasing robustness and resilience

To realize our mission, we need to at least double our annual funding over the coming decade, with a robust and diverse funding pipeline to avoid dependence on any one source. We will continue to engage our donors as partners. We will build relationships with additional foundations and advance our ambition of securing grants from mechanisms such as multilateral and bilateral funds. We will increase our unrestricted support to ensure that less visible but mission-critical activities are well resourced. We will take additional steps to manage and reduce risks, implement a robust monitoring, evaluation and learning process, and report impact and outcomes transparently.

Our vision

A healthy, productive and resilient ocean where transparency drives fair and effective governance of marine resources in support of biodiversity and sustainable development.

Our mission

We advance ocean governance through increased transparency of human activity at sea. By creating and publicly sharing map visualizations, data and analysis tools, we enable scientific research and drive a transformation in how we manage our ocean.

By 2030, we aim to monitor and visualize the impact of ocean-going vessels, both industrial and small-scale, that are responsible for the vast majority of the global seafood catch.

Get involved

If you would like to contribute, participate or just learn more, we want to hear from you.

Contact



f /globalfishingwatch

@globalfishingwatch

globalfishingwatch.org

(globalfishwatch

M /global-fishing-watch

Global Fishing Watch is an international nonprofit organization dedicated to advancing ocean governance through increased transparency of human activity at sea. By creating and publicly sharing map visualizations, data and analysis tools, we aim to enable scientific research and transform the way our ocean is managed. We believe human activity at sea should be public knowledge in order to safeguard the global ocean for the common good of all.

