Global Ocean Innovation Challenge

Powering Tech Solutions for Conservation and Sustainable Fisheries

Advancing ocean conservation is one of the most cost-effective ways to tackle biodiversity loss and climate change—and help people on the front lines of a changing world.

Covering more than 70% of Earth's surface, the ocean is the heart of our planet. It provides the air, food and water that we need to live and forms the backbone of our economies. Yet, as the world faces the dual crises of biodiversity loss and climate change, the ocean has never been more threatened.

As a global leader in ocean conservation, The Nature Conservancy (TNC) has the tools, resources and partnerships to help save ocean habitats—but we know we need to move beyond business as usual. To truly move the needle, we must address the underlying issues, such as poor data and labor-intensive monitoring, that enable overfishing and ocean habitat loss. We believe technology can play a vital role in accelerating these changes—we just need to find the right solutions and apply them at a scale that's big enough to make a lasting difference.

In 2025, TNC launched the Global Ocean Innovation Challenge, a bold initiative to accelerate technology-driven solutions that address key bottlenecks in ocean conservation. We are working with deep-tech innovation hub Newlab to source ideas from tech minds around the world and align them with real-world ocean conservation needs to:

- Identify ocean conservation challenges that can be addressed with tech solutions
- Drive collaboration among governments, communities and tech providers to test potential solutions
- Launch pilot projects to apply, validate and adapt solutions as needed
- Share the results to drive widespread adoption of new technologies
- Deliver measurable conservation outcomes that advance TNC's 2030 goals for ocean protection and sustainable livelihoods

Emerging technologies offer new ways to meet ocean conservation challenges head-on. For example, intelligence-led marine protected area (MPA) monitoring can potentially reduce enforcement costs by up to 60% compared to physical patrols, and AI innovations on fishing vessels could deliver near-real-time monitoring results. The Challenge will test and share a portfolio of tech solutions that can be applied to strengthen MPAs and fisheries.

TNC worked with regional partners to define priority conservation challenges, identify pilot sites, issue a call for tech solutions and evaluate the responses. After announcing the winning startups at the Philanthropy Asia Summit in Singapore, we plan to launch three cutting-edge tech pilots:

Pilot 1: Deploy a small fleet of four autonomous surface vessels within Indonesia's Savu Sea MPA to test cost-effective surveillance of MPA boundaries.

Pilot 2: Deploy fixed buoys and on-shore acoustic sensors within Indonesia's remote TNS Maluku MPA to detect vessels and marine mammals.

Pilot 3: Build a detailed training and analytics library for electronic monitoring inputs to help transform Indo-Pacific fisheries data into timely, decision-ready insights.

We will share what we learn from the pilots to help scale up ocean innovation and expand our impact across Indonesia into Southeast Asia, Oceania and beyond.

By 2030, TNC aims to:

Conserve **4 billion hectares of ocean**, an area larger than Brazil, Canada, China, and the United States combined

Work toward **100% transparency at sea** in global industrial fisheries through electronic monitoring

Help multiple countries protect **30% of their ocean area** through durable MPAs and effective management

Improve the lives of **billions of people** throughout the world who depend on the ocean for food, jobs, coastal protection, and recreation

Outcomes and Funding Needs

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The Global Ocean Innovation Challenge is advancing tech-driven approaches to protect marine ecosystems, strengthen fisheries governance, and promote sustainable livelihoods for coastal communities. The three tech pilots launched in 2026 will create pathways to scale successful solutions across Indonesia, the Pacific and beyond. With additional funding, we could also launch a fourth pilot focused on fisheries tracking and begin laying the groundwork to replicate and scale up TNC's work.

ESTIMATED FUNDING NEED: US $5 million ($3.5M raised; $1.5M remaining)

Indonesia Marine Protected Areas

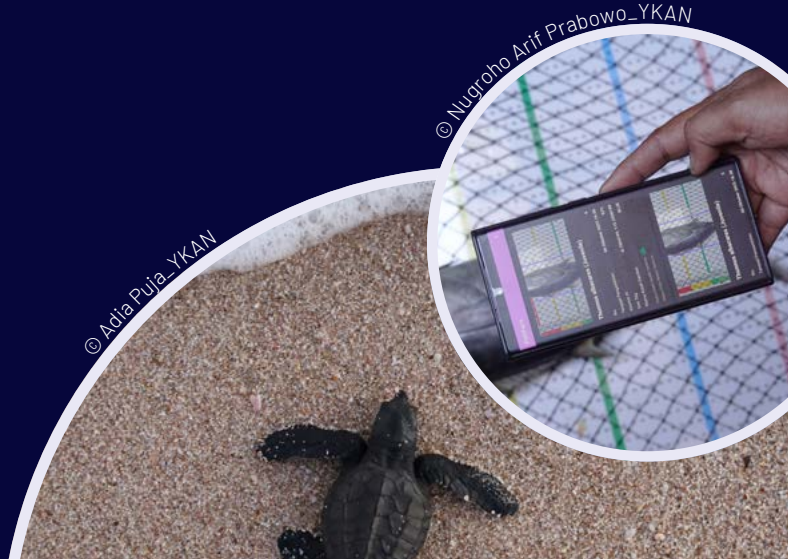
Indonesia has made a bold pledge to protect 30% of its marine area. To support this goal, TNC is developing a comprehensive strategy for the future of MPAs in Indonesia that integrates technology, strengthens their operational and financial resilience, and generates value that can support new models of sustainable financing. TNC and our partners aim to help the government designate new MPAs and strengthen the management of existing MPAs and national parks across 41 million hectares—an area larger than Japan—benefitting more than 45,000 people. Integrating tech solutions from the Challenge into new and existing protected areas will be a crucial part of bringing this strategy to scale.

ESTIMATED FUNDING NEED: US $40 million

Electronic Monitoring

More than 3 billion people around the world rely on fish for protein, but 90% of global fisheries have reached maximum sustainable catch levels. TNC is working with seafood suppliers, retailers and governments to improve fisheries management across 10% of our ocean—3.3 billion hectares—by 2030 by implementing at least 20 durable electronic monitoring programs. Our goal is comprehensive at-sea monitoring for every large-scale fishing vessel in the ocean. With input from the Challenge, we hope to scale up advanced tech solutions to deliver supply chain transparency and sustain the fisheries that feed the world.

ESTIMATED FUNDING NEED: US $40 million



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Investing *in* Ocean Conservation

The Nature Conservancy aspires to one vision: a livable climate, healthy communities and thriving nature. To achieve this, we need to rapidly scale up our work by developing new and innovative ways to deliver conservation results.

Technologies that enable monitoring, surveillance and data gathering over vast ocean areas can reshape the trajectory of ocean conservation and help us meet our goals faster and more efficiently.

With your support, we can refine and apply cutting-edge solutions to protect the ocean—and build a more resilient future for people and nature around the world.

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The Nature Conservancy

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