



# Aquaculture has great potential for healthy oceans and the people who depend on them. But we have to do it right.

As global populations soar, producing enough sustainably grown food will be one of the biggest challenges we face.

Seafood can be part of the solution. It provides a complete range of proteins, amino acids and micronutrients. And it typically does so with a smaller carbon footprint. While sustainable wild-capture fisheries are key, they won't be enough to meet demand, even under the best possible management scenarios.

A growing aquaculture industry that includes offshore seafood farming has the potential to play a significant role in improving our food security, and in evaluating the risks and benefits we need to take a careful, science-based approach.

## The risks are real.

Aquaculture, like other forms of food production, presents certain risks.

For example, while more than half of the seafood Americans eat today is farmed, the majority is imported from countries that may not live up to the strong safety protocols, environmental standards, or other best practices that we adhere to in the United States. In addition, fish farm equipment failures, fish escapes, wildlife entanglements, interaction with wild-capture fisheries and pollution from farms can impact ocean ecosystems and coastal communities. Modern aquaculture practices and advancements in technology have come a long way toward solving some of these challenges, but more research is necessary to help develop clear guidelines and best practices, particularly for offshore aquaculture facilities.

## But so are the potential benefits.

The United States is already benefiting from nearshore aquaculture, including seaweed and shellfish farming, which produces low-carbon, sustainable and nutritious seafood while making our oceans healthier in the process. Expanding U.S. aquaculture offshore could:



Produce more fresh, high-quality and sustainably grown seafood right here in the U.S., adding healthier, responsibly grown and climate-friendlier protein to our diets, while making sure the farmed fish we eat lives up to the highest environmental and food safety standards in the world



Reduce carbon output from importing farmed fish into the United States



Create quality, good-paying jobs for coastal and fishing communities, both directly and indirectly throughout the seafood value chain and restaurant industry



Set a high bar for sustainability for the industry globally, much like we already do for wild-capture fisheries

**10 billion**  
people to feed by 2050 <sup>1</sup>

**3 billion**  
people rely on seafood as a  
major source of protein <sup>4</sup>

**1 in 5**  
people in the world rely on  
fish for animal protein <sup>5</sup>

**90%**  
of the seafood Americans  
eat is imported <sup>2</sup>  
More than **HALF** <sup>3</sup>  
of that is **FARMED**

Global demand for seafood is  
projected to grow to at least

**232 Million  
Metric Tons**  
by 2030 <sup>6</sup>

Existing global consumption  
of seafood is growing at

**3.1% per year,**  
faster than any other form  
of animal protein. <sup>7</sup>



# EDF is charting a responsible path forward.

For more than 50 years, EDF has partnered with scientists, fishing communities, businesses, governments, NGOs, tech leaders and policymakers to protect our oceans and mitigate the impacts of climate change on marine life. EDF believes that with the right regulatory and policy framework, both wild-capture and offshore aquaculture can be part of a sound, healthy ocean strategy- one that protects marine life, puts more climate-friendly sources of protein on our plates and delivers good jobs and economic growth to a diverse array of Americans. But there is more work to do before that becomes a reality.

**Research:** EDF is researching, identifying and prioritizing key issues in offshore aquaculture that would benefit from further study, including the impacts of escapes, localized pollution concerns, environmentally responsible approaches to feed and other critical issues.

**Collaboration:** EDF is working with experts and policymakers to develop legislation that would examine the most significant issues.

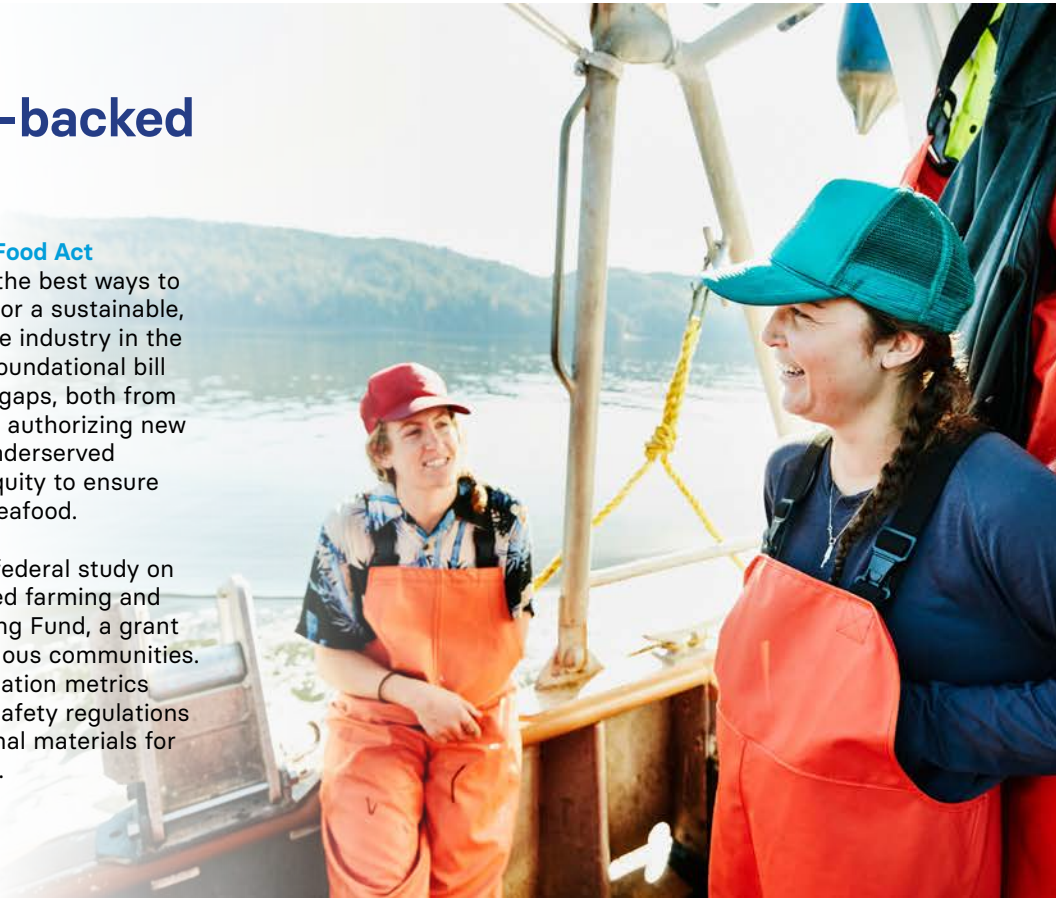
**Regulation:** EDF is helping to shape a strong regulatory framework to make the industry as safe, sustainable and environmentally sound as possible.

**Inclusion:** EDF is advocating for a plan that will be as inclusive as possible, connecting the opportunities and benefits from an expanding aquaculture industry to more Americans.

## Supporting science-backed legislation

**The Science-based Equitable Aquaculture Food Act (SEAfood Act)** catalyzes studies to assess the best ways to minimize risk while laying the groundwork for a sustainable, equitable and inclusive offshore aquaculture industry in the U.S. It is not a regulatory bill, but rather a foundational bill that collects data needed to fill knowledge gaps, both from existing on-the-water projects and through authorizing new studies, invites diverse stakeholders and underserved communities to the table, and prioritizes equity to ensure more Americans will benefit from farmed seafood.

**The Coastal Seaweed Farm Act** calls for a federal study on the benefits and impacts of coastal seaweed farming and establishes the Indigenous Seaweed Farming Fund, a grant program to reduce cost barriers for indigenous communities. The bill also develops regulations and evaluation metrics based on the federal study, develops food safety regulations for farmed seaweed and provides educational materials for training incoming coastal seaweed farmers.



<sup>1</sup> FAO. 2020. The State of World Fisheries and Aquaculture 2020. Sustainability in action. Rome.  
<sup>2</sup> Department of Homeland Security. Public-Private Analytic Exchange Program 2021. Threats to Food and Agricultural Resources.  
<sup>3</sup> NOAA Fisheries (2021). Global Wild Fisheries, <https://www.fisheries.noaa.gov/national/aquaculture/us-aquaculture>.  
<sup>4</sup> Bennett, A., Patil, P., Kleisner, K., Rader, D., Virdin, J., & Basurto, X. (2018). Contribution of Fisheries to Food and Nutrition Security. 46.  
<sup>5</sup> Gummerman, Etan, and Tibor Vegh. 2017. "Modeling Energy Efficiency as a Supply Resource." NI WP 17-06. Durham, NC: Duke University. [https://nicholasinstitute.duke.edu/sites/default/files/publications/ni\\_wp\\_17\\_06.pdf](https://nicholasinstitute.duke.edu/sites/default/files/publications/ni_wp_17_06.pdf).  
<sup>6</sup> Holland, J. (2015). Here's what we'll need for seafood in 2030 and how to get there. Seafood Source. September 28, 2015. <https://www.seafoodsource.com/features/here-s-what-we-ll-need-for-seafood-in-2030-and-how-to-get-there>.  
<sup>7</sup> FAO. 2018. The State of World Fisheries and Aquaculture 2018. Meeting the sustainable development goals. Rome.