

**Testimony for the Record
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**Hearing on “The State of Fisheries”
Subcommittee on Water, Oceans, and Wildlife
Committee on Natural Resources
United States House of Representatives
May 1, 2019**

Chairman Huffman, Ranking Member McClintock, and Members of the Subcommittee, thank you for the opportunity to speak today. I am honored to provide testimony on the current state of fisheries on behalf of the Monterey Bay Aquarium.

The growing conservation challenges facing our ocean are well documented, and the United States must continue to rise to these challenges through strong, science-based management to protect our blue economy, coastal communities, and way of life. The United States is not alone in recognizing the urgency of the situation. When the global community adopted the United Nations Sustainable Development Goals, they specifically included Goal 14, which focuses on the conservation and sustainable use of the oceans, seas, and marine resources and states that, “how we manage this vital resource is essential for humanity as a whole.” The world has spoken: our survival depends on healthy seas.

Congress has been instrumental in positioning the United States as a global ocean conservation leader, especially on fisheries issues as evidenced by the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and your support for crucial research and management by the National Oceanic and Atmospheric Administration (NOAA). The decisions made by this Subcommittee impact the lives and prosperity of millions of Americans, and we look to your continued leadership to ensure our ocean can provide the same benefits for future generations. There is no time to waste.

The Monterey Bay Aquarium

The mission of the Monterey Bay Aquarium is to inspire conservation of the ocean. Today, we welcome more than two million visitors per year and have three million social media followers. More than two million schoolchildren and teachers have come through our doors for free, and our science programs for students and teachers reach thousands more. Our exhibits educate and motivate visitors to act on behalf of the ocean.

The Aquarium's conservation priorities aim to tackle critical issues affecting ocean health, including global fisheries and aquaculture sustainability, protection of wildlife and ecosystems, climate change, and plastic pollution. Science underpins our work in addressing these challenges, and we seek a collaborative approach that encourages partnerships with the private sector, governments, academia and other key stakeholders. Our staff experts conduct scientific research on ocean wildlife and ecosystems, influence policy from the local to global levels, and engage industry and markets through our Seafood Watch program. We also partner with the Monterey Bay Aquarium Research Institute (MBARI) to develop cutting-edge technology and information in support of our conservation goals. We raise awareness of ocean issues, inspire individual behavior change, and educate the next generation of ocean leaders so that they take, and engage others in, conservation action.

Our commitment to multi-stakeholder engagement stems from the very foundation of Monterey Bay Aquarium. The Aquarium stands in the space of a former cannery on Monterey’s historic Cannery Row, a site that was the center of the sardine industry until its collapse in the 1950’s. It took decades of work by government, scientists, fishermen, and conservationists, but today we are perched on the shores of a healthy and vibrant ecosystem that supports a booming tourism industry, and where fishermen can be found working the waters year-round for a variety of commercially valuable seafood species. We do not take this for granted—it took strong, science-based management to get us here – and these same forces are working to advance similar success stories around the globe.

The Aquarium’s Seafood Watch Program

The Aquarium’s Seafood Watch program was developed in 1999 to create a market demand for seafood from sustainable sources. It evolved from an Aquarium exhibit about the impacts of fishing on the ocean, which also highlighted solutions ranging from gear modifications to strong science-based management. Our visitors asked us what they could do to help the situation, and, in response, we began to lay the foundation for what has become a globally-respected set of science-based recommendations for use by consumers and businesses to choose environmentally sustainable seafood in the marketplace. We base these recommendations on transparent and peer-reviewed environmental sustainability standards for fisheries and aquaculture operations. Today, Seafood Watch is one of the most respected sources of seafood sustainability information and provides guidance for U.S. consumers and for businesses in the United States and around the world.

The Seafood Watch Sustainability Standard for Fisheries

As stated above, Seafood Watch uses a science-based standard to assess the environmental sustainability of fisheries and aquaculture operations. For wild-caught commercial fisheries, this standard is based on the U.N. Food and Agriculture Organization’s (FAO) Code of Conduct for Responsible Fisheries and closely aligns with the National Standards of the MSA. To conduct our assessments, we rely on publicly available science, including data and stock assessments for U.S. fisheries from NOAA. The Seafood Watch standard includes four criteria that we use to assess the environmental sustainability of fisheries including: stock health, impacts of the fishery on other species, the effectiveness of management, and impacts of the fishery on habitat and the ecosystem. The Seafood Watch standards, assessments, and resulting recommendations are publicly available at seafoodwatch.org.

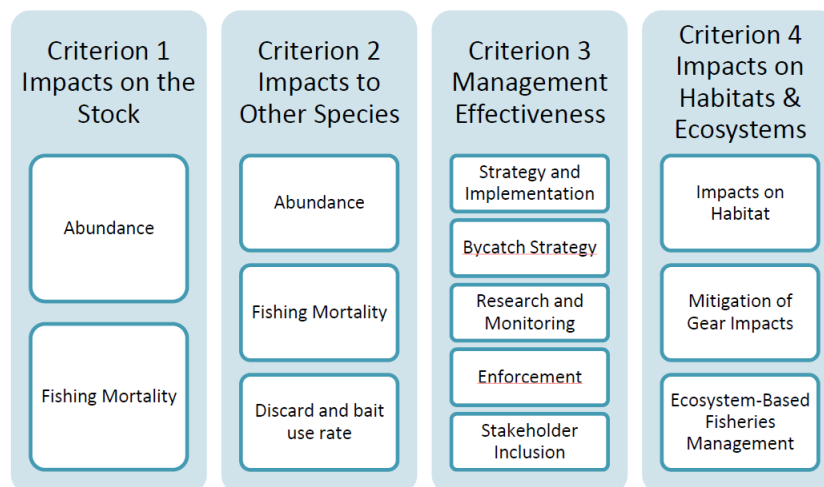


Figure 1 Criteria of the Seafood Watch sustainable fisheries standard.

Fisheries assessed by Seafood Watch that perform well in all four criteria are green-rated, which is our highest sustainability rating. Yellow-rated fisheries perform well in most, but not all, criteria, or there may be a lack of data to fully assess the fishery. Those fisheries that perform poorly against some criteria are red-rated indicating that there is significant room for improvement. Seafood Watch recommends consumers and businesses preferentially source green-rated seafood, followed by yellow-rated fisheries or those fisheries certified to a standard found to be equivalent to that of Seafood Watch.¹ Our assessments are also intended to be used by stakeholders, such as seafood producers and governments, to identify and address sustainability shortfalls in lower-rated fisheries. Our goal is to help move red-rated fisheries to a yellow rating and, ultimately, to a green rating – an evolution that we believe can help ensure a viable fishery in the future.

Increasing Demand for Environmentally Sustainable Seafood

Awareness of environmentally sustainable seafood has increased significantly over the last twenty years, reflecting a global trend toward sustainability. In a recent poll, 70 percent of consumers in North America indicated they want to hear more from companies about the sustainability of their products.² A 2017 survey of consumers and restaurant purveyors in the United States found that one out of six U.S. seafood shoppers consult environmental sustainability purchasing guidelines, such as those produced by Seafood Watch.³ Significantly, over 55 percent of U.S. consumers state that they would pay more for sustainable seafood.⁵

At the same time, an increasing number of companies that sell seafood have made public-facing commitments to source environmentally sustainable seafood. For example, over 90 percent of U.S. retailers and over 75 percent of retailers in the European Union market now have sustainable seafood commitments.⁶ U.S. retailers and other companies have reported that their commitments are driven by concerns over long-term seafood supply, company brand identity, and consumer demand.⁷

At Seafood Watch, we work with some of the largest U.S. retailers, restaurant chains, distributors, and foodservice companies—including Whole Foods Market, Aramark, and Red Lobster—to help them develop and meet their environmentally sustainable seafood commitments. Over the past several years, these companies have shifted all or most of their purchasing to Seafood Watch recommended seafood. Our network also extends to nearly 300 other businesses and institutions located across the country that use our information to improve the sustainability of their seafood purchasing.

Importantly, these corporate-level actions are now driving on-the-water improvements around the world as the companies engage their supply chain to find environmentally responsible sources of seafood or to support improvements toward that end. Today, the Aquarium is working with some of the largest producers of seafood to advise their efforts to improve fishing practices and management in response to U.S. market demand.

¹ Seafood Watch recognizes fisheries certified to standards with thresholds equivalent to our yellow rating or better. For more information visit www.seafoodwatch.org/seafood-recommendations/eco-certification.

² Marine Stewardship Council and Globescan (2018). Understanding & Activating Seafood Consumers – North America. https://www.msc.org/docs/default-source/default-document-library/for-business/msc-globescan-understanding-consumers-webinar-deck---north-america.pdf?sfvrsn=5983a2de_6

³ Dataessentials (2017). MenuTrends Keynote Report: Seafood.

⁴ Through outreach and online tools, the Aquarium has distributed over 63 million pocket guides and reaches over 10 million consumers a year.

⁵ California Environmental Associates (2017) Seafood Metrics Report.

⁶ California Environmental Associates (2017). Seafood Metrics Report.

⁷ Monterey Bay Aquarium and GlobeScan (Publication in preparation). Uncovering Business Motivations for Sustainable Seafood Commitments in the United States.

Status of Global and U.S. Fisheries

Environmental Performance of Global Fisheries

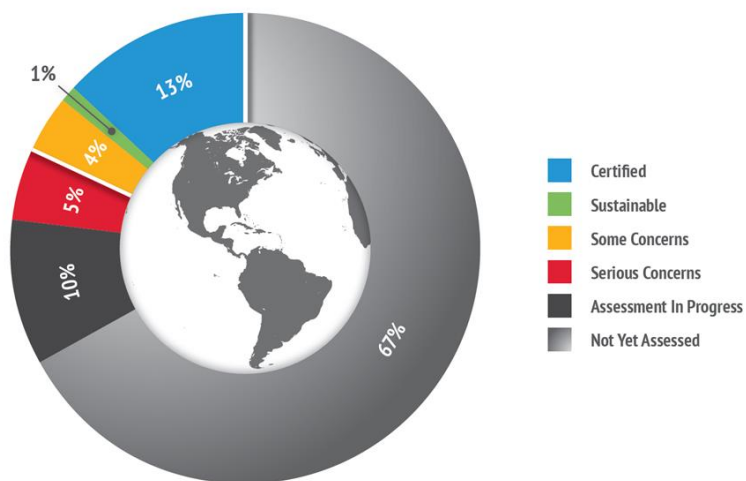


Figure 2 Performance of global fisheries (by production volume) with respect to the Seafood Watch standard for environmental sustainability.

Global Fisheries by Production Volume:

- 20 percent have been assessed/are currently being assessed by Seafood Watch
- 13 percent have been certified by a program recognized by Seafood Watch
- Approximately 1 percent are green-rated as a high level of environmental sustainability
- 4 percent are yellow-rated, indicating that improvements are possible to achieve greater environmental sustainability
- 5 percent are red-rated, indicating a significant need for improvement
- 67 percent have not been assessed yet

Globally, 45 percent of seafood production comes from wild-caught sources. According to the FAO, the percentage of global wild-caught fish stocks fished at biologically unsustainable levels increased from 10 percent in 1974 to over 33 percent by 2015.⁸ Overfishing is on the rise globally. Seafood Watch is working to assess the majority of global fisheries supplying the U.S. in response to market expectations for sustainability. Currently, we recommend as procurement options the 18 percent of global fisheries that are yellow-rated, green-rated, or certified. The environmental sustainability status of the remaining global supply is red-rated (5 percent) or unknown and likely has significant sustainability concerns.

U.S. fisheries, overall, have achieved a much higher level of environmental sustainability than global fisheries. In recent years, many U.S. fish stocks have recovered, and the number of overfished stocks has fallen, unlike the situation faced by global stocks. We have Seafood Watch assessments or other certification of environmental sustainability status for 95 percent of U.S. fisheries by production and can recommend 91 percent as green-rated, yellow-rated, or certified.

⁸ Food and Agriculture Organization of the United Nations (2018). The State of World Fisheries and Aquaculture 2018. License: CC BY-NC-SA 3.0 IGO. <http://www.fao.org/3/I9540EN/I9540en.pdf>.

Environmental Performance of U.S. Fisheries

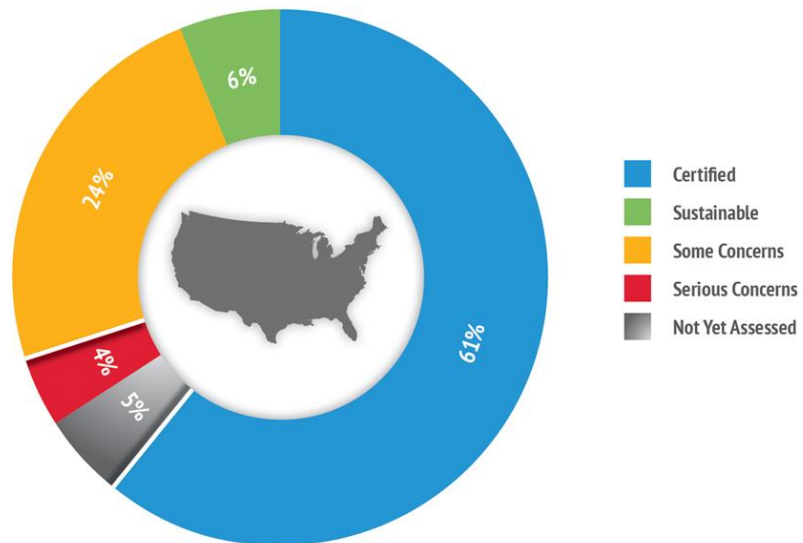


Figure 3 Performance of U.S. fisheries (by production volume) with respect to the Seafood Watch standard for environmental sustainability.

U.S. Fisheries by Production Volume:

- 95 percent of U.S. fisheries have been assessed by Seafood Watch or certified by a recognized program
- 91 percent can be recommended by Seafood Watch as either yellow-rated, green-rated, or certified by a recognized program
- 61 percent have been certified by a program recognized by Seafood Watch
- 6 percent are green-rated as a high level of environmental sustainability
- 24 percent are yellow-rated, indicating they perform well in some criteria but there are some concerns that could be addressed to achieve greater environmental sustainability
- 4 percent are red-rated, indicating a significant need for improvement

Strong Fishery Management Underpins the Environmental Sustainability of U.S. Fisheries

The MSA has established the U.S. as the global leader in science-based, sustainable fisheries management. Countries around the world, as well as the UN, are now using the U.S. approach as a model for improving fisheries management. The core conservation provisions and accountability measures of the MSA ensure the health of U.S. fishery resources that support our economy, jobs and coastal communities no matter where you live in the U.S.⁹ In 2016, the U.S. commercial, recreational fishing, and seafood industries generated \$212 billion in sales impacts, contributed \$100 billion to gross domestic product, and supported 1.7 million full and part-time jobs.¹⁰

Both Seafood Watch assessments and NOAA data suggest that the MSA has been very successful in rebuilding U.S. stocks, decreasing the risk of overfishing, and elevating the long-term sustainability of fisheries around the country. The science-based management framework and accountability requirements within the MSA are addressing the fundamental tenets of sustainability and have

⁹ National Marine Fisheries Service (2018). Fisheries of the United States, 2017. U.S. Department of Commerce, NOAA Current Fishery Statistics No. 2017.

¹⁰ National Marine Fisheries Service (2018). Fisheries Economics of the United States, 2016. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-F/SPO-187, pg 6.

drastically reduced overfishing and helped recover 45 U.S. fish stocks.¹¹ Analysis of Seafood Watch assessments reveals that the scores for stock health and management effectiveness are particularly strong for many U.S. fisheries. This sets the United States apart from most foreign fisheries.

Consumer and business demand for sustainable seafood continue to shape market expectations. The strong environmental sustainability of U.S. fisheries creates potential to differentiate from foreign products, offering a competitive advantage in the global marketplace. Major companies are implementing specific, time bound commitments to sustainable seafood, and U.S. fisheries can capitalize on this economic opportunity. Several elements are needed to continue the U.S. competitive advantage, enable the long-term health of the resource, and protect fishing and coastal communities. We offer the following recommendations:

- Maintain the core conservation provisions of the MSA, including science-based management, ending overfishing, rebuilding depleted stocks, and ensuring strong accountability. These provisions are critical to maintain the health of our fisheries at sustainable levels and provide an opportunity to differentiate U.S. fisheries in the global marketplace.
- Support investments in research, technology, and innovation, including cooperative research, to guide management decisions through the Regional Fishery Management Council process.
- Work with fishing communities to build critical infrastructure, supply chains and domestic marketing opportunities. In Monterey, we're working with the Monterey Bay Fisheries Trust to keep fishing permits in the community, rebuild a local, sustainable fishery and support a diverse fleet of fishing vessels. This type of stakeholder-driven collaboration can increase profitability, and market opportunities that support U.S. fishing communities and consumer demand for sustainable seafood.
- Advance new research, tools and ecosystem-based approaches to ensure continued sustainability into the future.
 - Analysis of Seafood Watch assessments of U.S. fisheries indicates that the lowest scores within the four criteria are consistently related to bycatch concerns. If bycatch were reduced or mitigated, 20 percent of yellow ratings could qualify for a green rating. New congressional support for NOAA's bycatch reporting¹² and reduction programs may also accelerate improvements.
 - Our analysis also indicates some challenges with managing habitat and other ecosystem impacts in U.S. fisheries. Several Regional Fishery Management Councils are already working toward more operational ecosystem-based management plans that incorporate habitat, forage fish and climate impacts, and this work should be prioritized.
 - Climate change impacts on fisheries are increasingly observed in some regions of the United States, and collaboration between NOAA, the Councils, academics, and

¹¹ NOAA Fisheries (2018). Fishery Stock Status Updates, December 2018. <https://www.fisheries.noaa.gov/national/population-assessments/fishery-stock-status-updates#2018-quarterly-updates>.

¹² Benaka, L.R, D. Bullock, A.L. Hoover, and N.A. Olsen (editors) (2019). U.S. National Bycatch Report First Edition Update 3. U.S. Department of Commerce, NOAA Technical Memorandum NMFS-F/SPO-190.

stakeholders will support mitigation strategies¹³ that will prepare fishermen and coastal communities for the future.

Global Challenges and Leveling the Playing Field for U.S. fisheries

U.S. fisheries are part of a complex global seafood supply chain and must compete with seafood produced around the world. Seafood is the most globally traded commodity, and fisheries from countries with strong management – like the United States - must compete in the same marketplace with product from weak management. Currently, there is not strong evidence that seafood from well-managed fisheries experience a market premium. However, thanks to the number of business commitments to sustainable seafood, the U.S. market is actively looking to source from environmentally sustainable fisheries, including our domestic product.

The United States imports over 90 percent of our seafood from abroad, which poses challenges of sourcing from countries with weak management and from sources that experience illegal, unreported, and unregulated (IUU) fishing, including human rights abuses.

Each year, IUU fishing costs law-abiding U.S. and international fishing fleets and governments between \$10 and \$23.5 billion.¹⁴ It poses a serious threat to the effectiveness of fishery management efforts, and directly impacts the overall health of the ocean. Recent investigations also revealed clear links between IUU fishing and human rights abuses, including seafood supply networks that ultimately ended in U.S. markets.¹⁵ IUU and these human rights issues in the seafood supply chain impact U.S. fishermen, businesses, and consumers and must be exposed and addressed.¹⁶

The United States has been a leader in the fight against IUU fishing, including leading the development and ratification of the U.N. Port State Measures Agreement in 2016 to enhance enforcement and implementation of the U.S. Seafood Import Monitoring Program (SIMP) in 2018 to improve seafood traceability and transparency within the supply chain. These government programs to improve international enforcement and improve transparency within markets are being complemented by efforts of the private sector and NGOs, such as the [Global Dialogue](#) on Seafood Traceability and the [Seafood Alliance for Legality and Traceability](#).

Seafood traceability is particularly important to leverage U.S. market influence globally to level the playing field. Consumers and businesses need information about the seafood they buy, including where and how the fish was caught, to be able to incentivize change. SIMP officially started in January 2018 and included 11 priority species “at risk” of IUU fishing, and last year Congress added shrimp and abalone to the program. This important program collects key harvest and landing data from importers and requires that importers maintain chain of custody for the species covered. It gives NOAA authority to conduct audits and works with states and other federal agencies to inspect and ensure compliance.

¹³ NOAA has recently published guidance for fisheries managers grappling with the challenges posed by climate change, and financial resources will be needed to provide the data and the capacity to put this guidance into practice.

¹⁴ Agnew, D.J., J. Pearce, G. Pramod, T. Peatman, R. Watson, J. R. Beddington, T. J. Pitcher (2009). Estimating the worldwide extent of illegal fishing. *PLOS ONE* 4, e4570. <https://doi.org/10.1371/journal.pone.0004570>

¹⁵ According to the ILO, approximately 1.8 million people worldwide were in forced labor in fishing and agriculture industries. (International Labour Organization (2017). *Global Estimates of Modern Slavery: Forced Labour and Forced Marriage*. https://www.ilo.org/global/publications/books/WCMS_575479/lang--en/index.htm)

¹⁶ To help fill the need for publicly available resources to identify the risks in supply chains, Seafood Watch and the Sustainable Fisheries Partnership developed the [Seafood Slavery Risk Tool](#). The tool provides information on the likelihood that forced labor, human trafficking, or hazardous child labor are occurring on fishing boats in a specific fishery.

Increased congressional funding and strong U.S. leadership in the international arena can help to level the playing field and support U.S. fishermen, businesses, and consumers. We offer several recommendations:

- Fully execute SIMP and expand the program to cover all species. SIMP is a crucial first step to increase transparency and traceability of imported seafood products and address IUU fishing globally. However, it must be fully implemented with all necessary resources and expanded to cover all seafood products. These actions will eliminate current loopholes and incentivize international action toward sustainable, legal fisheries globally.
- Advocate for precautionary, science-based management and strong compliance at the Regional Fisheries Management Organizations (RFMOs). All countries must be held accountable to their international obligations to achieve sustainable management of highly migratory species (*e.g.*, tunas, billfish, sharks), and bring others up to standards consistent with the MSA.
- Utilize existing authorities and programs to advance on-the-water enforcement capacity globally, such as NOAA international enforcement trainings, collaboration with technology providers (*i.e.* Global Fishing Watch), and authority provided by the High Seas Driftnet Moratorium Protection Act in the MSA.
- Increase government oversight by NOAA, the State Department, and other agencies to identify challenges and opportunities to ensure our markets are supporting safe labor and social responsibility.

At a time when our oceans and global fisheries are under threat, we are seeing strong new private sector leadership, and the MSA has positioned the United States as a global model of science-based, environmentally sustainable fisheries management. Working together, the public and private sectors can continue to strengthen U.S. fisheries and leverage our purchasing power to bring global fisheries up to our standards. The Aquarium stands ready to work with Congress and this Subcommittee to support solutions that ensure the long-term health of our ocean's fisheries – in U.S. waters and beyond.

Thank you for your consideration of this testimony.