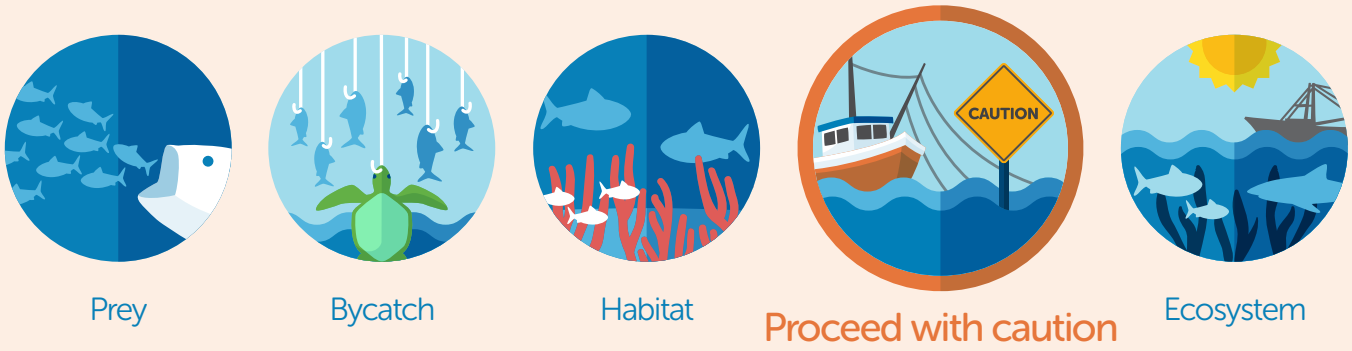

Proceeding With Caution

Ensuring new fisheries will be sustainable

Fish populations are highly sensitive and responsive to environmental conditions. Today, many parts of the ocean are changing quickly due to such factors as warming, acidification, and increased coastal development. As the ocean becomes warmer, scientists are finding that some species have started to move toward the poles, and deeper, in search of cooler water.[1] Before long, this and other trends could lead to fundamental shifts in where fish live, threatening existing fisheries but creating opportunities for new ones in other geographic regions.

In the United States, new fisheries sometimes start before regional councils consider the potential consequences of increased activity. In these instances, fishermen are permitted to use new equipment, fish new waters, and catch new species—all without appropriate study of the potential impact on ocean ecosystems and the local economy and without the management measures needed to ensure sustainability. This approach can contribute to depleted fish populations, damaged habitat, and economic harm to fishermen and coastal communities. And with today's changing ocean shifting the composition of ecosystems, the risks are greater than ever.

By proceeding with caution—proactively evaluating the potential effects of new fisheries—the regional councils can take steps to prevent overfishing and habitat damage and ensure that new fisheries can support fishermen and communities for the long term.

The solution

As part of the reauthorization of the Magnuson-Stevens Act, Congress should ensure that new fisheries will last by requiring managers to:

- **Gather and analyze the best available science** before the development of new fisheries or the use of new gear.
- **Put management measures in place for new fisheries to protect regional ecosystems** and guarantee sustainable fishing.

Proceeding with caution: A closer look

The sustainability of the fishing industry, coastal communities, and fish populations can be safeguarded by using the best available science to evaluate new fisheries and determine necessary management measures. Before approving new fisheries, managers must be aware of the status of the specific fish population to be targeted, its role in the food web, its reproductive capacity, and other biological, ecological, social, and economic factors.

Looking to the past offers cautionary tales in which fishing was allowed to develop without precaution. On the West Coast, fishing of rockfish increased significantly, first by foreign fishermen in the 1970s, then by American fishermen in the 1980s and 1990s. Although the Pacific Fishery Management Council put a management plan in place in 1982, it allowed too much fishing without fully considering the species' biology or how long it could take the species to recover. As a result, rockfish along the coast became severely overfished, and in 2000, NOAA Fisheries declared the West Coast groundfish fishery a disaster. The council developed rebuilding plans, some of which spanned many decades.[2]

Today, some West Coast populations have been restored to healthy levels or are on track to rebuild in coming years, but others, such as cowcod and yelloweye rockfish, will take decades longer. The costs of depleting these fish have been staggering for fishermen: major quota reductions, the adoption of large area closures, and economic dislocation. Had managers studied and factored in fish biology and vulnerability before allowing the West Coast groundfish fishery to accelerate, much of the environmental and economic damage could have been avoided.

In contrast, the North Pacific Fishery Management Council provides a good example of proceeding with caution and ensuring that facts are collected and considered before fishing starts. As the Arctic ice cap melts, new opportunities are opening up for commercial fishing. In 2006, before allowing any new fisheries to begin in the region, the council evaluated potential effects. It hosted meetings with communities in the region and engaged stakeholders, and in 2009, it decided to prohibit commercial fishing in these waters until more scientific information is available to sustainably manage any new fisheries.[3]

Endnotes

1 Malin L. Pinsky et al., "Marine Taxa Track Local Climate Velocities," *Science* 341 (September 2013), 1239–1242, doi:10.1126/science.1239352.

2 Nature Conservancy, "History of the U.S. West Coast Groundfish Fishery" (May 2008).

3 North Pacific Fishery Management Council, *Fishery Management Plan for Fish Resources of the Arctic Management Area* (August 2009), http://www.npfmc.org/wp-content/PDFdocuments/fmp/Arctic/ArcticFMP.pdf.

Contact: Ted Morton, director, U.S. oceans, federal **Email:** wmorton@pewtrusts.org **Phone:** 202-540-6751
Project website: pewtrusts.org/healthyoceans