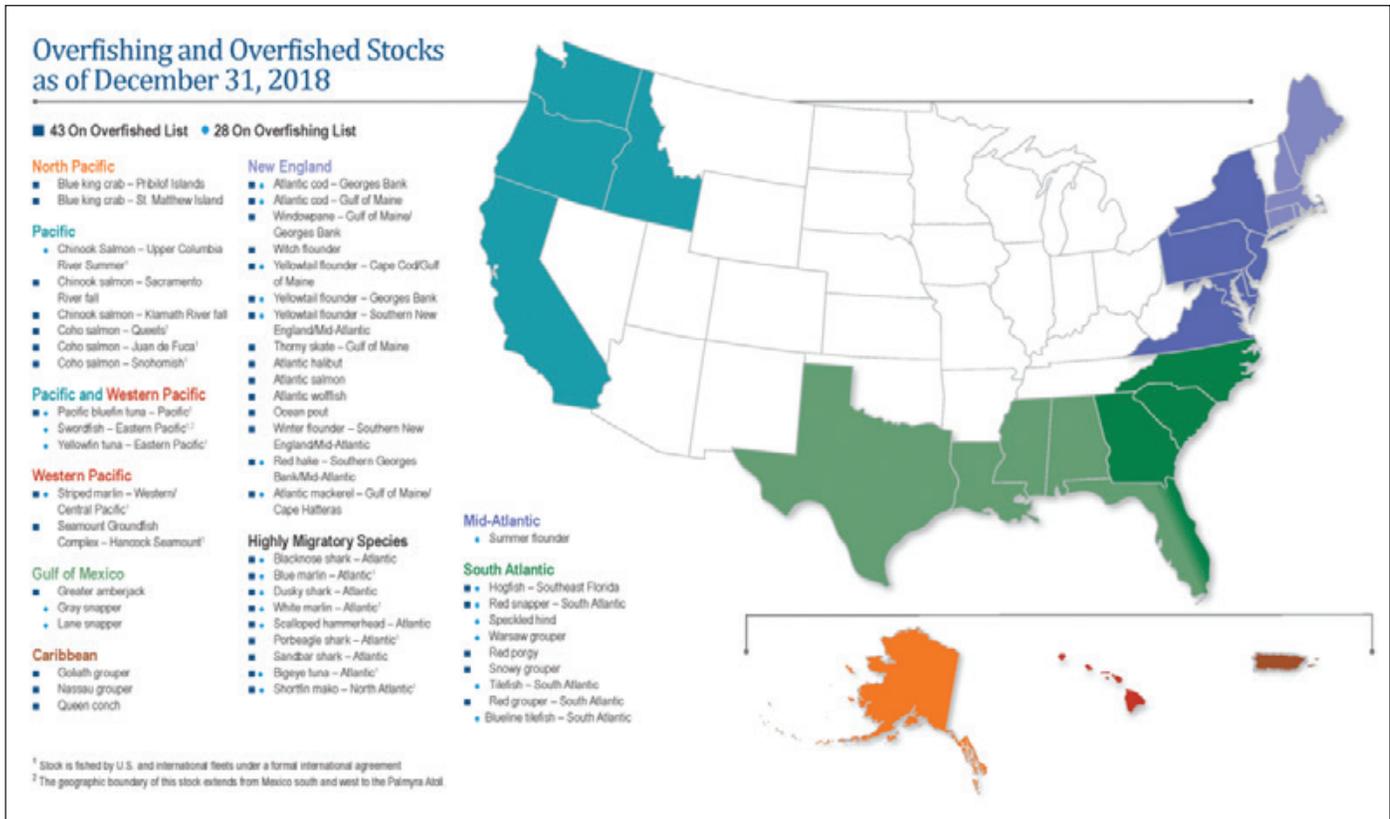


Science and Management 101



What is the difference between “overfishing” and “overfished?”

- Maximum sustainable yield (MSY):** The largest long-term average catch that can be taken from a stock under prevailing environmental and fishery conditions. MSY is the most you can take without causing the stock to decline in the future.
- Overfishing:** A stock having a harvest rate higher than the rate that produces its MSY, or more fish are being removed than is sustainable.
- Overfished:** A stock having a population size that is too low and that jeopardizes the stock’s ability to produce its MSY. With too few fish left in the ocean, the species may not be able to recover.
- Rebuilt:** A stock that was previously overfished and that has increased in abundance to the target population size that supports its MSY. This is a good place to be!

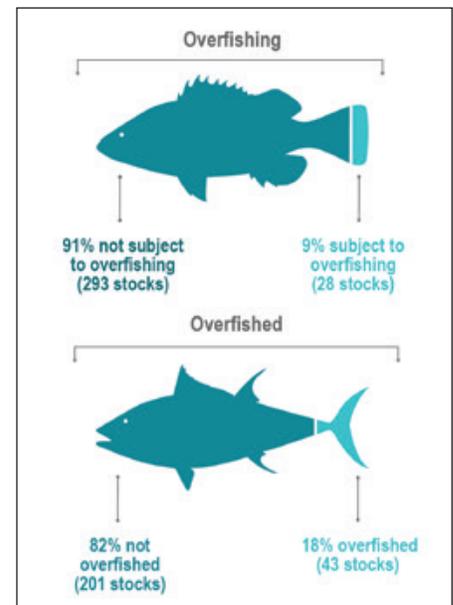
As a harvest rate, overfishing is a direct result of fishing activities. Allowed to continue unchecked, overfishing

is associated with many negative outcomes, including a depleted population. Current management practices—such as annual catch limits and accountability measures—reduce the likelihood of this happening.

As a population size, overfished can be the result of many factors, including overfishing, as well as habitat degradation, pollution, climate change, and disease. While overfishing is sometimes the main cause of an overfished stock, these other factors can also play a role and may affect the stock’s ability to rebuild.

If a fishery is overfished, shouldn’t we stop fishing it to let the population recover?

In some cases of significant depletion, fishery managers have closed a fishery to rebuild, but fishery management has multiple goals, one of which is to ensure well-being for people who depend on a fishery being open. Fortunately, fish stocks can rebuild quickly even without closing fisheries through good management. 🐟



At the end of 2018, the overfishing list included 28 stocks and the overfished list included 43 stocks. Image courtesy NOAA Fisheries.

Sources:

- <https://sustainablefisheries-uw.org/seafood-101/overfished-overfishing-rebuilding-stocks/>
- <https://www.fisheries.noaa.gov/national/2018-report-congress-status-us-fisheries>