

# Climate-Ready Fisheries

## WHAT YOU NEED TO KNOW

Climate change poses an existential threat to the future of our fisheries and the American communities that depend on them. From warming waters to acidification, the climate crisis is fundamentally changing the ocean and jeopardizing our fish populations and their habitats. Productivity of fisheries is already on the decline, and the maximum potential catch globally could decrease as much as 25% by the end of the century.

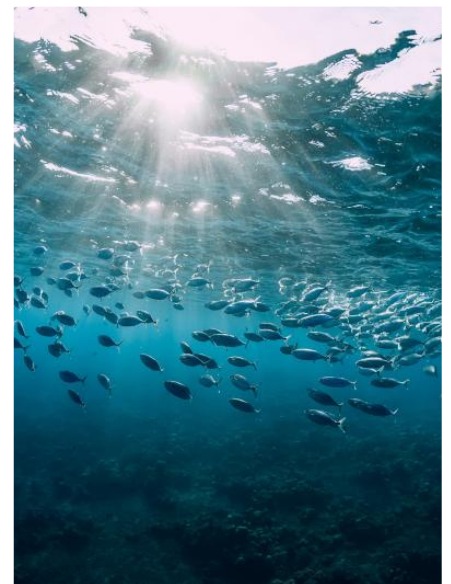
Currently, the primary U.S. federal fishing law, the Magnuson-Stevens Act, **fails to acknowledge the existence of climate change** and the urgent threat it poses to the resilience of our fisheries and the communities that rely on them. Climate-ready management of fisheries, built on a strong foundation of preventing overfishing, has the capacity to help restore ocean health and maintain healthy fisheries while uplifting American communities and uphold the U.S.'s reputation as a global leader in fishery management.

Climate change is fundamentally shifting the ocean's ability to produce food, sustain communities, and provide recreational opportunities for people to enjoy.

## WHAT ARE CLIMATE-READY FISHERIES?

Climate-ready fisheries integrate climate considerations throughout fishery management and draw on climate science and data to inform best practices. This includes implementing management plans that account for climate impacts, promoting resilience in climate-vulnerable fisheries, improving coordinated management of shifting stocks, and integrating climate science and data into decision making.

In the Ocean Climate Action Plan, the Biden Administration set a blueprint for building climate-ready fisheries, including the implementation of NOAA's Climate, Ecosystems, and Fisheries Initiative (CEFI), which would provide scientists and managers with the climate and ecosystem information and decision support tools to build climate-ready fisheries.



## WHY WE NEED ACTION



Climate change is throwing the ocean out of balance



Fishery managers are not taking action.



As the climate changes, so does the range, resilience, and behavior of fish.



Much work remains to ensure catch levels are consistent with science.



The maximum potential catch of fish is projected to decrease



More tools are needed to help decision makers support fishermen.

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## WHY WE NEED ACTION

### Climate change is throwing the ocean out of balance.



Worsening impacts such as ongoing warming and extreme events like marine heat waves, harmful algal blooms, hurricanes, and storms are harming the fishermen, communities, and businesses that depend on reliable and abundant fisheries.

### As the climate changes, so does the range, resilience, and behavior of fish.



Some species are moving to find more suitable environments because the habitats and food they require to survive and reproduce are changing. Over the past 40 years, more than 70 percent of commercially valuable fish species along the Atlantic coast have moved northward or into deeper water.

### The maximum potential catch of fish is projected to decrease.



This could be by as much as 25% by the end of the century under high emissions scenarios. Although impacts will not be uniform across regions or species, ocean temperature increases are expected to depress maximum catch potential in most U.S. regions under current trends.

### Fishery managers are not taking action.



A recent GAO report found that the vast majority of fishery management plans do not consider climate change, and most fishery managers are unaware of climate initiatives that other fisheries are implementing. More guidance would help fishery managers to obtain the climate information they need and collaborate with climate scientists and others to adapt fisheries to climate impacts.

### Much work remains to ensure catch levels are consistent with science.



There are 26 fish stocks remaining on the overfishing list and 51 fisheries that are overfished and need to be rebuilt. Now is not the time to weaken conservation safeguards. With effective catch limits, more robust rebuilding measures for overfished fisheries, and stronger habitat protections, managers can prevent overfishing and habitat damage as fish populations change and move into new areas.

### More tools are needed to help decision makers support fishermen.



Fishermen rely on abundant and sustainable fish populations. While a variety of “climate-ready” management approaches are being tested in various regions, there is a need for centralized guidance and increased resources for fishery managers and fishing communities to work toward climate-ready fisheries.