

Sustainable fisheries management is one of the most vital tools for maintaining resilient fish stocks and ecosystems in the face of climate change. New Zealand is working to incorporate climate considerations in our domestic fisheries management as well as supporting regional and international efforts to do the same.

New Zealand has an extensive marine area which is home to unique species and biodiversity. Like the rest of the world, we are experiencing the impact of climate change. This includes warming waters, extended marine heatwaves, ocean acidification, and an increase in extreme weather events, which all impact on key habitats and contribute to changes in fish stock distribution, abundance and productivity. These changes create further uncertainty in the fisheries system and affect our ability to respond.

New Zealand uses a range of tools and management procedures supported by fisheries legislation to enable the effective management of fisheries. This includes regular stock assessments, setting catch limits for stocks at levels at or above their Maximum Sustainable Yield (MSY), and the ability to set temporary area closures in places where stocks need time to recover. These processes can be resource- and information-intensive, and we are currently exploring opportunities to increase the agility of our decision-making to increase timeliness and efficiency. This involves understanding the gaps in the current system and identifying how we may be able to adapt to an increasingly changeable environment.

We are increasing the level of data we have to use in fisheries management, including through electronic reporting and global position reporting, particularly in our inshore fleet, alongside the rollout of on-board cameras across portions of this fleet. This provides faster reporting across all species, and will support us to make timely decisions with different levels of information. Having fine-scale information on fishing impacts will also allow us to further progress on ecosystem-based management (EBM) approaches, along with more localised management that is responsive to the dynamics of different habitats and ecosystems.

New Zealand invests in research to better understand the effects of climate change. Including research on:

- physical measurements and biological observations of the marine environment;
- fish stock abundance and recruitment, and how this changes in response to environmental shifts;
- and
- understanding the effects of changing marine environmental variables on fish stocks and their associated habitats.

We have conducted preliminary climate risk assessments for three stocks, and will develop a formal framework for fisheries climate vulnerability assessment in New Zealand, drawing from approaches already used in other jurisdictions. This research will identify which species will be most affected by climate change, and help identify next steps for management.

We take a collaborative approach to this work, working directly with the seafood sector to identify how they can plan for the impacts of climate change, by testing adaptation pathways for fisheries and aquaculture specific to individual stocks. New Zealand also funded the Sustainable Seas Challenge, a multi-disciplinary group where research focuses on improving marine resource decision-making and the health of our seas through EBM, and enhancing the blue economy.

To ensure the resilience of Pacific Island fisheries in the face of climate change, Members of the Forum Fisheries Agency (FFA), including New Zealand have agreed a Climate Change Strategy and Implementation Plan. New Zealand remains committed to supporting the FFA in ensuring ambitious action on climate change in the fisheries sector.

Our role as a donor to the FFA reflects the high importance the New Zealand government places on partnership with our Pacific neighbours

New Zealand is an active participant in the Antarctic Treaty System, with long-standing connections to the Southern Ocean and Antarctic Region. As part of this, New Zealand conducts the stock assessment for Antarctic Toothfish in the Ross Sea Region which is presented to the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR).

7. At the 17th CCAMLR Workshop, several recommendations for incorporating climate considerations into the stock assessment are in the process of being implemented to further improve the ability of CCAMLR to continue to sustainably manage the stock. New Zealand was pleased to co-convene the workshop and to host a regional hub in Wellington.

Resilience, and the Ross Sea Stock Assessment, along with the other CCAMLR Toothfish Assessments, were recognised as in-line with global best practice by an independent review panel in 2023. New Zealand is committed to continuing to contribute to the use of best available science in CCAMLR and continuous improvement of precautionary management of Antarctic fisheries.

The implementation of climate considerations into fisheries management will be the responsibility of the fisheries manager, be that the State or regional fisheries body. However, there is still a role for other intergovernmental organisations, such as the FAO, OECD and APEC, to set standards, bring together global experiences and provide guidance on best practice.

New Zealand is committed to this work and encourages these bodies to consider how their guidance can move beyond high-level principles and into implementation-level advice. Climate change is impacting fish stocks now, and the scale will only grow over