California Climate Resilience Plan | Oceans

Oceans make our lives possible, from our climate to the air we breathe. But our oceans are under threat. From habitat destruction to overfishing and pollution, we are putting some of the world's most critical ecosystems in peril. The global climate crisis is compounding the problem resulting in ocean warming and acidification. In California, we have experienced the loss of 96% of our kelp forests along the North Coast, a whale entanglement crisis and fisheries disasters resulting in over $40M in lost revenue. These impacts threaten the livelihoods of our coastal communities and put marine species at risk. Without urgent action, the coming decades could see the wholesale collapse of many of these ecosystems, catastrophic biodiversity loss and massive impacts to the health and well-being of communities in California and around the world.

With an unprecedented level of funding for coastal resilience committed through the state budget over the next two years, we have an incredible opportunity to drive change. If we invest now, we have the potential to build back the resilience needed to give our oceans a fighting chance in the future, but we can't wait. We must work to reset, restore and manage key marine ecosystems now, while gathering the critical data we need to be proactive in the face of increasingly dynamic ocean condition

TNC has identifiedthesetop funding and policy priorities to put California on the path to ocean resilience:

1. Advance the timely, strategic and scaled restoration of kelp forests and the recovery of threatened species they support along the California coast.
2. Transition to climate-ready and adaptive fisheries management to ensure sustainable harve

Advance timely, strategic and scaled kelp restoration:

- **Grants for kelp restoration**: Without targeted interventions to recover kelp, recent science suggests recoverycould take decades. Investments in restorative farming practices can build on previous investments and support kelp recovery in the near term whilepromotinghealthy and resilient kelp forests in the long term. The Ocean Protection Council mustprioritize grants that accelerate the pace and scale of strategic kelp restoration across the state.Additionally, financial incentives could fund innovation and design frameworks to make kelp cultivation practices more cost-effective and encourage private sector engagement in kelp recovery.
- **Evaluate pathways to permit streamlining**: The ability to spend earmarked restoration dollars is tied to permitting constraints around access to potential restoration areas.Prioritizing permit streamlining is a critical and complementary action that will ensure that restorationactivities are happening in the highest priority sites and/or where conditions are optimal to support in-water growth of kelp outplantings cultivated from source populations. Additionally, this streamlining would support the necessary pivot towards the kind of larger-scale demonstration projects needed for more rapid kelp recover

The Nature Conservancy

Transition to climate-ready fisheries management to ensure sustainable harvests:

- **Modernize California's Fisheries Data Systems and Close Data Gaps**: As climate change exacerbates existing crises and creates new ones, we need better and faster data to allow for proactive fisheries management decisions. Managers need to act based on the best available scientific information and proactively respond to changing environmental conditions.California still largely relies on paper-based data collection, limiting the type and amount of ocean data available to managers. This delays responses by months or even years, leaving many of California's fished species to be managed with outdated and limited information. It's time to digitize fisheries data systems to improve the timeliness and accuracy of data delivery. This is a critical step towards proactive, climate-ready management that can improve outcomes for fishing communities, fishermen and marine ecosystems. The Ocean Protection Council should support accelerating the adoption of digital data collection tools and the development of a three-year strategy for the California Department of Fish and Wildlife to improve digital infrastructure along the entire data lifecycle from collection to analysis and communication.
- **Implement adaptive and cooperative fisheries management**: California can be a leader in mobilizing fisheries management that meets the challenges of unpredictable and rapidly changing ocean conditions. In order to do this, it is critical that the state support on-the-water experiments to rapidly inform management practices and adapt to climate-driven changes. In 2018, California established an Experimental Fishing Permit program, which will begin this year and allow fishermen, scientists and NGOs to develop new sustainable fishing strategies and conduct conservation science on the water to inform management. Funds already earmarked to advance climate-ready fisheries management should be used to fund proposed priority experiments by subsidizing permit fees, supporting experimental design and incentivizing collaborative partnerships to carry out proposed projects