We're doing a lot, but more needed in climate change fight

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MY TURN

The ocean is getting warmer, and our reefs are paying the price. Over the coming month, continued coral bleaching is predicted across the Hawaiian islands at Alert Level 2, the highest risk level classified by the National Oceanic and Atmospheric Administration (NOAA) Coral Reef Watch.

The current coral bleaching is the result of the high marine temperatures associated with this summer's El Niño, the first since the heat wave and mass coral bleaching of 2015-2016. West Hawaii's reefs lost about half of their coral cover during that event, according to data collected by Lindsey Kramer and colleagues at the University of Hawaii and the DLNR Division of Aquatic Resources.

Those of us who know and love our reefs have seen firsthand the destruction caused by rising temperatures and mass coral bleaching in recent years. Our islands are among many places around the world experiencing the impacts of climate change on our lives, our livelihoods, and our hope that our children and grandchildren will experience vibrant, thriving ecosystems, as we once did.

When faced with this kind of crisis — watching corals turn bone-white, then algae-covered, then crumbling away — it is easy to despair. But the crisis on our coastlines calls for action, vigilance, and optimism. As individuals, as an island, and as a state, we can take steps to strengthen our reefs' resilience to bleaching and aid the reefs' recovery.

NEAR-SHORE WATER QUALITY

Research globally and in Hawaii specifically has shown that sites with cleaner water recover faster from bleaching events. For example, although corals have been gradually re-growing in West Hawaii since the 2015-2016 bleaching, coral coverage at Puako has continued to decline. Researchers hypothesize that the continued coral loss is caused by nutrient contamination at Puako, where residential cesspools and septic tank leach-fields experience daily groundwater tidal exchange directly with coastal waters.

Addressing this major ecosystem and human health threat and improving wastewater treatment at Puako is a top priority for our office. Last legislative session, working with State Sen. Lorraine Inouye, we gained support from the Legislature to include in the state budget $500,000 in State Capital Improvement Project (CIP) funds to plan for a wastewater collection system at Puako. We remain committed to working with our county government, Puako residents, the Puako Community Association, and partners to find a sustainable solution for Puako. We are also eager to hear the recommendations of the State's Cesspool Conversion Working Group as they work to find solutions for cesspool conversion statewide.

COMMUNITY-BASED FISHERY MANAGEMENT

Thriving fish populations also support coral reef resilience. Within the West Hawaii Regional Fishery Management Area, from Upolu Point to Ka Lae (South Point), the West Hawaii Fishery Council supports communities to effectively manage their marine resources, based on solid science, survey data, and stakeholder advice. The West Hawaii Fishery Council meets monthly and is open to input from all members of the community. To learn more about the council or find out about the next scheduled meeting, please visit https://westhawaiifisherycou.ipower.com/ or contact whfc@hawaii.rr.com.

Expanding this kind of community-based management statewide is key to supporting reef health and ensuring the sustainability of our coastal fisheries and marine ecosystems for generations to come. In the 2019 Legislative Session, we led the successful legislative effort to include an additional $250,000 in the state budget for the DLNR Division of Aquatic Resources to conduct stakeholder consultation about a plan to effectively manage at least 30% of our state's coastal ecosystems and sustain fisheries statewide. By supporting this effort, the Legislature demonstrates its commitment to stakeholder engagement as a crucial step to create local, sustainable management frameworks that preserve our marine resources, protect our corals, and work for everyone.

SUNSCREEN POLLUTION

Chemical sunscreens containing oxybenzone, octinoxate, octocrylene, microbeads, and nanotized particles all stress corals, exacerbating the effects of heat and bleaching. A legislative ban on sunscreens containing oxybenzone and octinoxate will go into effect in 2021. In the meantime, the Legislature needs to continue moving forward as new research provides data demonstrating how other synthetic chemicals, such as octocrylene, also damage coastal ecosystem health.

DAY-USE MOORING BUOYS

We can also reduce direct damage to corals from feet, fins, and anchors. As a legislative office, we are committed to finding a way for the state to take responsibility to build and maintain a network of day-use mooring buoys statewide. These buoys are a critical part of our boating infrastructure and are key elements in protection of coral reefs. (Find a mooring buoy near you: https://bit.ly/2ntUewy)

Looking to the future, researchers at the State of Hawaii and University of Hawaii are developing technologies and techniques for coral propagation and reef restoration. However, as long as our climate keeps warming, these projects will be re-introducing corals into an ocean where they are still being stressed by rising temperatures. While these projects provide an important long-term hope for our reefs, the coral crisis demands that we act now to stop damaging our coral reefs.

HAWAII AS A LEADER

Realistically, we can't stop global climate change by changing only our state policies: Hawaii accounts for less than one-third of 1% of global greenhouse gas emissions. If we stopped all our cars and power plants today, the planet would still keep warming.

But that does not mean we are powerless. Hawaii can – and must – set an example of what a society who knows and loves the aina will do to protect it. We can defend our ecosystems here at home by eliminating pollution from runoff, sunscreen, and wastewater; ending anchor damage to near-shore reef sites; and managing coastal resources and fisheries sustainably. And we can do our part for the planet and for our own people by transitioning from a fossil-fuel based economy to one powered and transported by renewable, sustainable energy.

Last session, the Legislature made great progress supporting electric vehicle infrastructure, energy efficiency, and improved energy systems by passing bills including HB401, HB556, HB560, HB1585, and SB661. Since then, the Public Utilities Commission has taken important steps to better regulate our energy utility companies by adopting a "performance-based regulation" system, in which the utilities' profit motive is now directly aligned with renewable energy goals and reduced costs for consumers. Our office will continue to track this regulatory process and to advocate for funding and legislation supporting renewable energy development, electric vehicle infrastructure, emissions reductions, and energy efficiency.

TAKE PART IN CITIZEN SCIENCE

In the coming weeks, as we brace for continued warm water temperatures, citizens statewide are invited to take part in monitoring and reporting any coral bleaching that you see. You can quickly and easily report bleaching on www.hawaiicoral.org, or learn more and provide a detailed report to Eyes of the Reef Hawaii (www.eorhawaii.org). This citizen-science data helps researchers understand which reefs are bleaching, how severely, and why.

We are grateful for the opportunity to work together with you on these pressing issues facing our corals, coastlines, and planet. Please contact us at any time with your questions, concerns, comments, and ideas at 586-8510 or reptarnas@capitol.hawaii.gov.

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