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Office of the Governor The Honorable Neil Abercrombie Governor, State of Hawaii Executive Chambers, State Capitol Honolulu, Hawaii 96813

Dear Honorable Governor Neil Abercrombie.

I am pleased you were elected in to office and am grateful for your contributions (too many to list) from equal rights for all, to fostering collaboration across government agencies by signing the 2013 Hawaii Ocean Resources Management Plan to ensure sustainable use and conservation of Hawaii's ocean and coastal resources for future generations.

With that in mind, the plight of our oceans, globally and locally, continues to be in jeopardy. Having worked off the Big Island of Hawaii as a marine naturalist for nearly 20 years and as a field assistant for close to a decade for Wild Whale Research Foundation (WWRF) where I co-authored a number of peer-reviewed published papers, I am privy to the changes in the local ocean environment. In Hawaii alone, long liner fisheries were responsible for taking nearly 61,000 sharks as by-catch in 1998 according to Dr. Bruce Monger, an oceanographer at Cornell University. National Geographic reports the number of shark deaths globally to be 100 million, possibly upwards of 270 million. In a 2003 edition of *Nature* magazine, a startling graph was published by Worm and Myers showing just how ghastly the problem of overfishing is. Globally, top predator fish populations (most preferred for human consumption such as swordfish and tuna) had plummeted by more than 90%. In 1989, the industry hits its apex when 90 million metric tons of fish were removed from the ocean in one year. Since then, the numbers have stagnated or continued to decline, with approximately 85 million metric tons being removed annually. Fisheries are no longer sustainable with fish populations disappearing faster than they can reproduce.² The impact is apparent on the Big Island with the annual Hawaii International Billfish Tournament. Once rated as one of the best places on Earth to hook a giant 1,000 pound plus blue marlin, in recent years, granders are clearly an exception, not the rule. Because of humanity's ever growing populace and subsequent appetite for animal-based food, fisheries are beginning to target smaller species of fish due to the lack of favored larger varieties.3 More than half of the fish taken from the ocean annually become feed for livestock production.⁴ Many fish populations are severely threatened and nearing extinction due to over-exploitation with only 10% of the preindustrial fishery population of large ocean fish still remaining.5 One would hope we would learn from industry's decimation of the Steller sea lion population.⁶ Similarly, the lobster fisheries, in the French Frigate Shoals north of the Hawaiian Islands, has impacted the endangered monk seal by effectively starving them of their food of choice, lobster. Sadly, according to the National Oceanic and Atmospheric Administration (NOAA) fisheries, monk seals are now considered to be one of the rarest species on the planet.⁷

Humans literally have the technology to essentially kill every fish in the ocean. We obliterated massive herds of buffalo in the 1800s. will we empty the ocean's next? The ocean is simply not an inexhaustible source.8 It is no surprise that marine biologists, Dan McSweeney of WWRF and Dr. Robin Baird, previously with NOAA and currently with Cascadia Research Collective in Olympia, Washington have implicated long liner and near shore fisheries for the decline of the local false killer whale population in Hawaii, whose insular population is down to only 168 mammals; they are officially listed as an endangered species. Also infamous for getting caught in the long lines are Hawaii's endangered sea turtles and a host of other marine mammals not identifiable by long liner fishermen. Equally threatened are the majestic albatross. Trawling poses an even bigger threat to the islands; more than 70% of what is brought up from the bottom is tossed back, dead. 10 Farm raising fish is also disconcerting and does not offer solutions. Right off the Kona Coast, the National Marine Fisheries Service granted permits to Kampachi Farms for open ocean fish pens, in spite of much controversy and concern by the local community. Open ocean fish pens pose an environmental threat, causing eutrophication of coastal waters, where excess nitrogen (as a by-product of the fish food) is released in to the water through fish excrement, which causes phytoplankton to grow forming algae blooms at the surface that ultimately sink to the bottom of the ocean and get consumed by bacteria that choke out the oxygen and create dead zones where nothing can survive. 11 These pens were placed in the Hawaiian Islands Humpback Whale National Marine Sanctuary which would seem to be a violation of sound environmental policy; part of the mission of the marine sanctuary is to protect the environment. Yet, allowed to go forward with the project, there are at least ten open ocean pens. Dead zones may result from fish pens and as a consequence of fertilizer runoff from big farms, especially those used to produce crops for cattle. 12 Another effect of open ocean farms is an inevitable increase in disease that occurs as fish are unnaturally

forced in to a confined area and fed food that is not their natural fare. If diseased fish escape and they do, this poses a risk to wild populations.¹³ Moreover, the odor from the fish pens travels for miles underwater possibly attracting larger predators like sharks that potentially pose a threat to marine mammals, such as dolphins and whales.

Where am I getting with all of this? Many of the problems with the land and ocean environment stem from the food choices humans make. With our local oceans threatened by current policy, I am writing to you in hopes you will recognize the urgency of this issue and be inspired to instrument change in policy or otherwise. In his book, Whole, Dr. T. Colin Campbell, author, and professor emeritus at Cornell University and long time researcher who worked in public policy for over 20 years, provided an excellent foundation to understand the extent of the misleading information that permeates society in regards to the relationship of nutrition to disease and its subsequent impact on the environment. The way things are going, our oceans are likely to be depleted in a few short decades. A study published in the journal *Science* depicted that if fishing rates continue, all of the world's fisheries will collapse by 2048. Our individual choices affect our own health as well as the health of the planet. Unfortunately, the option of animal-based food production on land has its own disastrous effects on the environment and is quickly approaching unsustainable levels, from soil degradation and erosion, deforestation, air, inland streams, lakes, rivers and ocean pollution, ground water contamination and depletion, to global warming, squandering of vital energy resources and more. The future of our planet and our children is in peril. The need for humans to embrace the value of a plant-based diet has never been greater. The Sierra Club suggests that environmental education of children cannot start early enough. Mr. Abercrombie, while I do not know the solution, here are ideas that come to mind:

- ✓ Publicize industry ties to the Dietary Guidelines Committee (run by the USDA) and the Food and Nutrition Board (FNB) that determine RDAs and provide information to shape three vital programs: the school lunch program, the hospital food program and the Women, Infants and Children's program.¹¹ (These boards that are trusted to deliver unbiased factual information are responsible for misinformation, for the environmental quandary and promoting generations of ill health. In 2003, only by court order was it revealed that 6 of the 11 members of the Dietary Guidelines Committee had ties to the dairy industry and the chairman of both not only had ties to the dairy industry but had personally accepted more than the maximum amount of money allowed.)¹¹8
- Prohibit funding from industry, corporate interests and the private sector for public policy boards.
- ✓ Develop government legislation and/or policy to criminalize conflict of interests in government policy.
- ✓ Promote education in public arenas on the personal and environmental consequences of food choices.
- ✓ Endorse the books, The China Study and Whole by Dr. T. Colin Campbell.
- Promote continuing education courses that study the environmental plight.
- ✓ Instill steeper fines for industry for the waste generated by runoff from land crops and excrement from fish farms and livestock operations and require adequate sewage treatment facilities.
- ✔ Provide incentives to farmers to ban the abuse of toxic pesticides.
- → Halt permits for open ocean fish farms and land based operations that inherently poison the environment.
- ✓ Protect the habitat of the marine sanctuaries; safeguard the immediate and surrounding environment.
- ✓ Enforce high penalties for fisheries that neglectfully kill and waste un-targeted species.
- ✓ Withdraw support for government subsidies for the meat, dairy and fish industries that artificially allow these products to be affordable to consumers and violate trade practices according to the World Trade Organization.¹⁹Dr. Monger reasons if consumers had to bear the real cost of animal-based foods, likely consumption and demand would decrease potentially relieving the pressure on the land environment and on the oceans.
- ✓ Support government subsidies* for organic fruit and vegetable industries which are environmentally sustainable.

We are facing a major epidemic of heart disease, cancer, obesity, and diabetes.²⁰ As Dr. Campbell illustrates, these are westernized diseases; the same food choices that lead to these diseases leads to environmental peril. Mr. Abercrombie, if you are not already informed on these issues, I would be grateful if you would seek more information on the environmental burden of the food industry. I don't believe Hawaii has ever been so fortunate to have a governor in office as genuinely concerned about the real issues as you. I feel there is potential for positive change to prevent further damage to human health, to Hawaii's ocean and to the planet. I hope you agree. (Please do not feel obliged to respond to my letter; I would rather the time be spent pro-actively to learn about and address the plight at hand.)

With warmest and sincere regards,

LaRen Kristen Antoine Cummiskey

^{*} There are currently none, while the government provides millions of dollars to support the environmentally irresponsible meat and dairy industries.21

Sources:

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- ⁶ Hennen, D. (2006). Associations Between the Alaska Steller Sea Lion Decline and Commercial Fisheries. Ecological Applications 16:704–717
- ⁷NOAA Fisheries Office of Protected Resources on-line site Hawaiian Monk Seal: Monachus Schauinslandi Species Description http://www.nmfs.noaa.gov/pr/species/mammals/pinnipeds/hawaiianmonkseal.htm
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- 14 TCC Center for Nutrition Studies at Cornell University Certificate Program in Plant Based Nutrition, Course Three: (TCC503) Principles in Practice: The Environmental Impact of Food Production Part II Chapter 1: Introduction, Chapter 7: Some Basic Facts by Dr. Bruce Monger, pg. 8.
- ¹⁵ National Geographic, <u>Overfishing: Plenty of Fish in the Sea? Not Always</u> on-line article: http://ocean.nationalgeographic.com/ocean/critical-issues-overfishing/ When It Will End, paragraph 2.
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- ¹⁷ TCC for Nutrition Studies at Cornell University Certificate Program in Plant Based Nutrition Course Three: (TCC503) Principles in Practice: Understanding and Interpreting Scientific Research III: Industry and Public Policy, Chapter 2 About Public Policy by Dr. T.C. Campbell, pgs. 3-4.
- ¹⁸ TCC Center for Nutrition Studies at Cornell University Certificate Program in Plant Based Nutrition Course Three: (TCC503) Principles in Practice: Understanding and Interpreting Scientific Research III: Industry and Public Policy, Chapter 8 Introduction to the USDA and FNB by Dr. T. C. Campbell, pgs. 7-8.
- ¹⁹ TCC Center for Nutrition Studies at Cornell University Certificate Program in Plant Based Nutrition Course Three: Principles in Practice: The Environmental Impact of Food Production Part II (TCC503) Chapter 5: Subsidies by Dr. Bruce Monger, pgs. 5 -6.
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For Further Inquiry - Online Resources:

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Eating, 3rd edition, a documentary by Mike Anderson (2008) https://archive.org/details/Eating2ndEdition_201305 National Geographic article: Overfishing: http://ocean.nationalgeographic.com/ocean/critical-issues-overfishing/

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For Further Inquiry – Books:

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Healthy Eating, Healthy World: Unleashing the Power of Plant-Based Nutrition J. Morris Hicks and T. Colin Campbell Ph.D.

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