From: S.A. Marek

To: <u>DLNR.BLNR.Testimony</u>; <u>Senator Lorraine R. Inouye</u>; <u>senrichards@capitol.hawaii.gov</u>; <u>Representative David A.</u>

Tarnas

Subject: [EXTERNAL] Protect Hawaii's ocean life, put on your big-girl (or boy) pants

Date: Saturday, April 22, 2023 8:19:41 PM

Aloha,

No time this week to put forward a scientific argument, please see prior emails. I'm still alive and ask that commercial collection of reef fish in Hawaii be banned.

Please put on your big-girl pants (or big-boy pants) and protect Hawaii's ocean life.

Cheers,

Sherry A. Marek Big Island resident

Due to formatting errors edits please use this testimony not the previous 2 Thanks.

Hearing April 28th 9:15am Land Board meeting Item F Item 2. "Statewide Marine Resources Assessment" blnr.testimony@hawaii.gov

Testimony in strong support F Item 2 By Ron Tubbs B.S. N.D. 8 years UHM

To effectively manage fisheries, knowing stock values is critical. While many fisheries management techniques have been employed effectively, knowing total fish counts remains the best management base. Many fisheries (like the aquarium fishery-currently closed, and recently reopened bottom fishery) have been over regulated. To better manage effectively we need a better idea of fish stocks.

Working with fishers to effectively manage highly renewable sustainable fisheries in a way that benefits the state economically is a very important key to being a sustainable state! Fishers have the best hands-on direct information regarding their fisheries and could great contribute to fishery management.

Past fish counts have done and have effectively proven the aquarium fisheries sustainability in West Hawaii. We need to know fish stocks statewide to protect fish stocks but to also promote valuable sustainable highly renewable resource use which Hawaii greatly needs

For example: larger breeding fish are left by aquarium fishers which then breed many times producing millions of fry per pair per year renewing reef fish readily. The fishery is taking only small abundant reef fish by location rotation which does not affect overall populations. This is why the fishery is a "model fishery."

Managing effectively highly renewable sustainable resources is key to fighting global warming and is the future for the State of Hawaii

Important map at end please review. Oahu Has a Huge undersea landscape much greater than West Hawaii but had only fished a much small portion of West Hawaii aquarium fish catch. The Oahu HEPA only asks for a small percentage of previous catch due to lack of fish count stock Data. Please approve and fund further stock data collection for Oahu especially. It should be noted that instead of the historical 60 fishers on Oahu the new HEPA is only asking for permits for 15 fishers.

Past fish counts have done nothing but prove the aquarium fisheries sustainability.

In February's BLNR Hearing 2-10-23 you saw how a few tourist businesses lied to keep the perceived "user conflict" aquarium fishery out of business.

One testifier was cautioned that this is public hearing not to slander others! It did not matter Snorkel Bob continued to do just that, slander with unproven and untrue accusations. These untrue highly biased attacks by a few rich tourist groups are why the aquarium fishery is unfairly shut down

Enough with the Misinformation about the Aquarium Fishery-

The Lies Exposed Scientist Speak

Dr. DAN A. POLHEMUS: "This serves to point out that undue focus and hyperbole about aquarium collecting and its impact on the reefs is dangerously shortsighted and counterproductive. We need to think and act holistically." Dr. DAN A. POLHEMUS Division of Aquatic Resources State of Hawaii DLNR 1151 Punchbowl St. Honolulu, HI 96813 Real important ecological issues have been left by the wayside anti aquarium fish propaganda has hurt the environment!

ROBERT E. HUETER, Ph.D.: "I see that TIRN is now taking credit for legislation to stop the Hawaiian aquarium trade. This is not something I would've necessarily supported and, given the chance, would have discussed the sustainability of this trade with you. Please see the attached editorial on this issue by my respected friend and aquarium expert, Dr. Bruce Carlson. If TIRN is going to continue to operate like this, taking semi-scientific positions without consulting its own Science Advisors, then I wish for you to remove me from your list of advisors." ROBERT E. HUETER, Ph.D. Senior Scientist & Director, Center for Shark Research

Perry W. Gilbert Chair in Shark Research Manager, Sharks & Rays Conservation Research Program Mote Marine Laboratory 1600 Ken Thompson Parkway Sarasota, FL 34236 USA

Dr. Bruce Carlson, PHD: "You can now see how the misuse of science and scientists (ROBERT E. HUETER) has resulted in the present situation in Hawaii, where one of the best studied inshore (and most

highly regulated) fisheries has been trashed by passionate and very misguided individuals. They are led here by a few master manipulators of disinformation spewing forth wild accusations based on anecdotal evidence. Brian Tissot and Leon Hallacher (2002 Cons. Biol. 17(6): 1759-1768) went out in the field and actually did the hard work to collect data and found no significant differences (algal cover, coral damage) in areas where fish are collected compared to protected areas nearby (DLNR has similar data). They DID report a "significant" difference in the populations of aquarium fishes in the two areas (no one disputes that there should be fewer fishes in areas where they are being collected). But to show you how scientific terms are corrupted by opponents, they equate "significant" with "damaging" (it's reminiscent of the issue we have with the public misunderstanding the concept of "theory" used in a scientific context). For 17 years, DLNR biologists have conducted extensive underwater surveys, nearly 7000, to monitor the populations of aquarium fish species on the Kona coast, where the major aquarium fishery is located. The result is the fishery is stable and sustainable. There is no evidence of ecological harm to the reefs. In fact, the populations of yellow tang and kole on the Kona coast, even in areas that are fished, are significantly higher than marine protected areas on Maui and even Papahanaumokuakea." Dr. Bruce Carlson PHD, former director, Waikiki Aquarium, Atlanta Aquarium

Catisoti FIII, other director, wakts Aquatuili, Atanta Atanta Ilia Office industry and management prevents that goal being reached, then discrediting the benefits and successes of management would seem the only way left to go. And so they have taken that path. They have held community meetings and displayed a lot of false or twisted data, quoting from papers outdated by more than 15 years, and "re-interpreting" data from scientific papers. They have been telling people that "there are no fish left," which is patently untrue. I once had a woman tell me with great passion and assurance that there are no fish left anywhere in West Hawaii. I asked her why she thought that, and she replied that everyone knew it. I asked if she swam in the ocean. No. Did she dive? No. Did she know anything about the management strategies in place? No. She had, however, just come from an "information session" in which she heard these things from Wintner's frontman Rene Umberger and Inga Gibson."

William Walsh Ph.D., Ivor Williams Ph.D., Brian Tissot Ph.D.; Leon Hallacher Ph.D.; Bruce Carlson Ph.D.; Charles Birkeland Ph.D.; Jeremy Claisse Ph.D.; Mark Christie Ph.D.; Richard Pyle Ph.D.; Leighton Taylor Ph.D.; Randy Kosaki Ph.D.; Cynthia Hunter Ph.D.; Brian Bowen Ph.D.; Brian Zgliczynski Ph.D.; Jeff Ebel Ph.D.; Alan Friedlander Ph.D.; Kosta Stamoulis Ph.D.; Delisse Ortiz Ph.D.; Jan Dierking Ph.D.; Rob Toonen Ph.D.; and Jim Beets Ph.D. letter: "What is particularly distressing and demoralizing about the BLNR decision was that it clearly was not based on the best available science and relevant monitoring data. "Relating to the West Hawaii Regional Fishery Management Area." The 2015 and 2020 Report found that the "The Hawaii marine aquarium fishery is currently the most economically valuable commercial inshore fishery in the State with FY 2014 reported landings greater than \$2.3 million." 15. This actually understates the overall economic impact of the aquarium trade, as it includes only the sales of the fish themselves. It does not account for the sales of boats, equipment, fuel, packaging or the related services such as repairs cargo handling, inspectors, or shipping associated with aquarium fish collection. Misinformation about the Environmental Impact of Aquarium Fish Collection 16. There is a great deal of public misinformation about the effects of the aquarium fisher in Hawai'i. In support of and as part of the public record of the Governor's veto this summer of SB 1240, twelve PhD fisheries scientists signed the letter attached as Exhibit 1 to my declaration. Rather than rely on anecdotal reports of citizens who feel like fish populations have declined, they cited to peer-reviewed scientific reports demonstrating: Data collected from 1999 to date from over 6,700 underwater surveys show that populations of the most heavily collected aquarium fish species (yellow tang and DECLARATION OF MICHAEL F. BOBER IN SUPPORT OF INTERVENTION- 5 kole) are increasing, not declining. This clearly indicates that the fishery is sustainable."

- "Adult populations of these species are no different in fished areas than they are in reserve areas (adult fish are not collected). Adult female yellow tang produce up to 20,000 eggs in each of multiple spawning events during the year, ensuring a sustainable fishery. Yearly one pair produces 1.14 million fry. Even larger adult breeding yellow tang populations were no different in open verses closed fishing areas.

 The data and scientific reports show so no significant differences in the health of the coral systems in collection areas as opposed to the system of protected Fish Replenishment Areas where no
- collection is allowed. 17. The signatories to this letter are some of the most respected fisheries scientists in Hawai'i and on the mainland.

 Brian Bowen, Ph.D., Research Professor, Hawai'i Institute of Marine Biology, U.H.
- Bruce Carlson, Ph.D., former Director, Waikiki Aquarium (retired)
 Michael Domeier, Ph.D., Director, Marine Conservation Science Institute (Kona)
- Cynthia Hunter, Ph.D., Director, Marine Option Program & Assoc. Prof., Dept. of Biology, U.H. Randall Kosaki, Ph.D., Hawai'i Coral Reef Biologist

- Richard Pyle, Ph.D. Associate Zoologist, Bernice P. Bishop Museum John E. Randall, Ph.D., Senior Ichthyologist, Bernice P. Bishop Museum (retired)
- Andrew Rossiter, Ph.D., Director, Waikiki Aquarium, U.H. Andrew Rhyne, Ph.D., Assoc. Professor, Roger Williams University
- · Leighton Taylor, Ph.D., former Director, Waikiki Aquarium (retired)

Brian Tissot, Ph.D., : Rob Toonen, Ph.D., : "The Aquarium Fishery, especially in West Hawai'i, is an example of community involvement working with government to create a fishery management system that is a model for other fisheries. We are concerned with the level of false information and lack of data these individuals have used to support their assertions, and the havoc they have created over a wellmanaged fishery that has benefited from the aforementioned good-will partnerships. It is not possible to provide a detailed analysis of all the scientific methods, data, and conclusions available on this issue in this brief letter, but these peer-reviewed findings have been independently checked by researchers at multiple Universities across the country and have subsequently been supported by additional independent surveys performed by the Coral Reef Ecosystem Division of the federal National Oceanic and Atmospheric Administration (NOAA).

There were no significant differences in damaged coral between control and collected sites to indicate the presence of destructive fishing practices. In addition, there were no increases in the abundance of algae where the abundance of herbivores was reduced by aquarium collecting. DLNR has more recent data showing no significant differences in herbivore biomass or macroalgal cover between Fish Replenishment Areas and open areas.

A Hawaii Tourism Sustainability and Fisheries Review 2023

- A. Intro The Problem
- Conclusion Suggested Legislation ne
- C. The Science
- D Tourism High carbon Footprint
- Tourism High Tourist Death Rate
- F. Tourism Whale Strikes
- Tourism Manta Ray Strike H. Tourism Dolphin Tours
- . Tourism Corals Damaged
- Tourism Effects on Fish Populations
- K. Tourism Vulnerabilities Tourism Effects on Fish Population
- M. Tourism Closing Sustainable Fisheries over "User Conflict"
- N. Tourism and Cultural Impacts

Intro The Problem

"Don't Look Up" Netflix movie meaning: The climate crisis and the pandemic are the two most obvious metaphors for the film's comet. Through Don't Look Up, McKay points out that we live in a society that allows us to bypass scientific fact and ignore the threat of our own self-destruction for individual short-term gain. (Embedded Links in Blue)

A satire about the foolishness of political officials ignoring science and believing misinformation for self-gain.

The point is that the State of Hawaii desperately needs to increase renewable sustainable resource use to fight global warming and meet Hawaii's Zero net carbon footprint plans.

Instead, Hawaii allows rich lawyers to shut down opposing businesses with Endless Environmental Litigation using defective HEPA (Hawaii Environmental Policy Act HRS 343 Ch 189) laws. Even if you pass the HEPA you face endless environmental litigation and will never get permits just look at TMT. The Superferry knew it could not pass HEPA and just pulled out. Hawaii business is at extreme risk due to the defective laws.

Legally the aquarium fishery when West Hawaii HEPA review in 2022 it should have received permits right away. Instead, the state chose to delay giving out the aquarium permits. Why? Maybe the fact that every permit DLNR issues should also have to do an environmental review and pressure received by eco groups to sue is why. Blackmail! Justice is not being served!

The environmentally friendly Superferry was effectively shut down by tour boat, airline, and inter-island cargo businesses. It was a lower carbon footprint way of traveling. The scientifically proven sustainable aquarium fishery was closed by tourist businesses spouting misinformation for private gain and with tourist billionaire business (Michael Dell Four Seasons Kona) money paying off Earth Justice to perpetuate the continuing lawsuits.

Why is the aquarium fishery the only DLNR issued permit who must do a HEPA permit process? Legally all permits DLNR issues should have to do HEPA permit processes too, if they have any environmental impacts. Any lawsuit would force the issue very quickly. All DLNR permits are at risk to lawsuits.

The states only argument fighting for the aquarium fishery permits was legal definition. The state lawyers did not use any of the science of the fishery. Unscientific opposing profiting tourist user group misinformation was allowed into depositions without any scientific opposition. The miscarriage of justice continues for the overly regulated highly proven sustainable "Model Fishery" when it was closed due to "User Conflict".



ion Suggested Legislation Needed

Instead of penalizing highly sustainable fisheries and depending on highly destructive tourism; Hawaii needs to support and develop renewable resources. Fishery laws are being made with out proper studies and fish counts. Over regulation of renewable resource use is being done every year! Do fish counts on every Island. Manage stocks with science.

Fisheries are the solution not the problem!

Step back, review and promote sustainable agriculture, aquaculture, fisheries and look at Hawaii's renewable resources with a new perspective. The fate of the planet lies in the use of renewable resources and their sustainable use! More legislation against highly renewable resources is the worst thing Hawaii can do.

https://www.hawaii.edu/news/2020/09/10/can-aquaculture-repair-hawaii-ec

Marine fish are the most reproductive vertebrates on the planet. Making fish the most renewable resource there is. The state has greatly ignored the potential the 100-billion-dollar a year pet industry could offer. The state allowed Tourists to shut down the fishery with lawsuits. Opah Moon Fish produce 300 million eggs a year, many other reefs fish produce tens of thousands to millions of fry per spawn per pair. We need to support a managed sustainable fishery to create a more sustainable society.

The State of Hawaii public officers' oath is to uphold the states constitution. If decisions are made that are biased and not based in facts it violates that oath. It is unconstitutional (State, Federal and International Laws, <u>UN resolution</u> 2749) to shut out any ocean user group. Fishery management, not closure is the government's role in fisheries. No one group can lay claim to any part of the ocean, it is a public trust. The court's decision for the aquarium fishery to do an environmental review was not based at all in science but on legal interpretation.

Leading scientist spoke out in objection to these decisions. To favor the huge ecology impacts of tourism over a proven sustainable aquarium fishery is unconstitutional, a miscarriage of justice and poor decision making. The lies perpetuated by antiaquarium fishery groups were used in lawsuits and even earth justice lawyers spouts this misinformation, to knowingly lie under oath in court or legislative testimony is perjury. Yet even the new bill this year continue the lies. Science if read will give t
truth but few bother to read the lengthy data, believing instead in biased for profit propagating from who-tourist groups not scientists.

Hawaii's Aquarium Fishery has been studied more than any other fishery in the world. Both the 2_460 page Environmental Review of the West Hawaii fishery, and the Oahu Environmental Review. (links removed by state why? But available upon
request) based in State fish counts and reports covering nearly. 20 years of data, scientifically prove Hawaii's Aguarium fishery is a Caparium Fishery is a Kaparium Fishery is a Vaded Fishery. She later created this statement in favor of tourism. With many reef fish populations on the rise overall, Hawaii's Aquarium Fishery is a whole Fishery. She later created this statement in favor of tourism. With many reef fish populations on the rise overall, Hawaii Squarium Fishery is the true definition of "Sustainability." Abundant small fish are taken leaving breeders to repopulate making the aquarium fishery a "Model Fishery".

Hawaii's leganding scientist speak out in opposition to DLNR Land Boards decision not to approve the environmental review of the West Hawaii Aquarium fishery. This review was based on many of these scientist research and then they were not even questioned or consulted about the board decision. It was like the science did not matter.

Hawaii's log marine biologists William Walsh Ph.D., Irow Williams Ph.D., Brian Tisso Ph.D.; Brian Edwaria Tisso Ph.D.; Brian Edwaria Tisso Ph.D.; Brian Edwaria Tisso Ph.D.; Brian Edwaria Tisso P

resources.
Hawaii S teading exports are fron steel scrap, aircraft parts, aluminum waste, copper waste from goods that were imported. Only one renewable export made the top ten export list, shrimp aquaculture. Aquarium aquaculture is a must for a sustainable Hawaii. Aquaculture and many other businesses depend on the aquarium fishery.

Hawaii S major problem we face is that "Exercida; 30,000 tourist flying to Hawaii reates more Global Warming CO2 gas emissions than if you drove your car for 13,000 years".

Hawaii S Tourism is the most unsustainable business activity with the highest earchon footprint produced. 80% of tourists also do ocean activities and create huge ocean impacts much more so than any Hawaii fishery. Tourism is also too vulnerable to be depended on, just look at what happened during covid and 91.1 Tourism crashes will happen again and may take many years to recover.

For Hawaii to become usustainable or susstainable, low carbon footprints, and concentrate or nerewable resources use for Hawaii's major exports and businesses.

In ancient Hawaiian culture in order to survive with the only resources available on these tiny islands you had to be sustainable, or you were dead. A major part of that renewable resource survival was fishing! Sustainable fishing is historically an important Hawaiii necessories! Many Hawaiiian exponered Many Hawaiiian exponered Many Hawaiiian easured when the anuarium fishery.

important Hawaiian resource! Many Hawaiians and their families are supported by the aquarium fishery

Ocean tourist groups have complained that there are no more fish at their dive and snorkeling sites, News article discusses the loss of fish in tourist areas. Recent studies showed the return of fish to Hanauma bay when tourism stopped due to covid. Now that tourism has returned to the bay, more research showed fish are disappearing again? The large groups of tourists have scared the fish out of these areas. Huge tourist snorkel and dive groups greatly impact fish feeding and reproduction behavior effecting fish populations not just in Hanauma Bay but it was shown on Molokini too. Unlike tourists Fishermen too to same areas day in and day out in large numbers, fishermen rotate their sites to prevent overfishing, Are tourism impacts being used to blame the aquarium fishery? Aquarium fishermen do not go to tourist areas, but more and more tourists are coming into and taking aquarium fishing areas away from fishermen. The 20 years of FRA fish replenishment aquarium fish fish counts off West Hawaii show increase in overall fish populations so why are tourist areas, but more and more tourists are accoming into and taking aquarium fishing areas away from fishermen. The 20 years of FRA fish replenishment aquarium fish fish counts off West Hawaii show increase in overall fish populations so why are tourist areas, but more and more tourists are coming into and taking aquarium fishing areas away from fishermen. The 20 years of FRA fish replenishment aquarium fish fish counts off West Hawaii show increase in overall fish populations so why are tourist areas, but more and more tourists are coming into and taking aquarium fishing areas away from fishermen. The 20 years of FRA fish replenishment aquarium fish fish counts off West Hawaii show increase in overall fish populations so why are tourist areas, but more administration of the properties of

Tourism High carbon Footprint

Hawaii's major problem we face is that "Everyday 30,000 tourist flying to Hawaii creates more Global Warming CO2 gas emissions than if you drove your car for 13,000 years".

Over 10 Million visitors to Hawaii in 2019 created one of the biggest environmental impacts globally. It is not just the overseas travel on planes! Overseas travel to Hawaii emits over two tons of carbon dioxide per passenger! A one person Hawaii trip overseas produces as much CO2 as driving an average car (4 tons CO2 per year) for 6 months! Multiply that time 30,000 a day and that is 60,000 tons of CO2 per day in tourist air travel to Hawaii alone. Overseas tourism is one of the highest CO2 carbon footprint activities!

It is not just the overseas travel on planes! It is also the carbon footprint of tens of thousands of additional cars on the road and all the imported goods needed to support tourism.

8 million visitors on average per year participated in Hawaii Marine commercial activities and greatly impacted Hawaii's oceans. The impacts of these 8 million visitors to our oceans far outweighs impacts by fishermen. It is Global Warming not fishers that are the greatest threat to our oceans.

Tourism going up with no end in sight.

https://impace.good.org/support/suppo

Tourism High Tourist Death Rate

Ocean activities causes about 60 deaths a year. Most of those deaths being tourist. Most of those tourists who died were snorkelers. No ocean safety training was provided but everyone must sign liability release forms. Of the 60 ocean deaths every year most of them are tourists. It is OK to kill tourists but God forbid you want to keep a fish alive as a pet!

Snorkeling In Hawaii 1s A Leading Cause Of Tourist Deaths...

Jan 11, 2016 — Despite being touted as a leisure activity, snorkeling deaths are the most ... Stand Up Or Die: Snorkeling In Hawaii Is A Leading Cause Of Tourist Deaths ... Snorkel Bob's, the largest snorkeling outfit in the state, teaches ...

https://m.facebook.com/story_php?story_fbid=503782077721446&id=109509517148706 News 2 | Snorkel Safety Study

dv.com > index.php > news-2

Stand Up Or Die: Snorkeling In Hawaii Is A Leading Cause Of Tourist Deaths ... Lifeguards pulled Alexa DiGiorgio from Hanauma Bay just before 10am on a ...

Researchers probe for answers to snorkel-related fatalities ...

Jan 22, 2021 — Maui had more deaths than other islands from 2009-2018 ... however the vast majority of visitor drownings are while snorkeling, yet very few ... While wearing the snorkel gear in his experiment using sensors, oxygen levels ... Hawaii Struggling To Find Out If Full-Face Snorkel Masks Are ...

Search for: How many people have died from full face snorkel masks?

Search (or . <u>from maily people more cite</u> (min min ale senote mass).

How many people die snorkeling in Hawaii?

Search underway near Molokini rate from missing snorkeler from California
https://www.hawainewsnow.com/201/09/15/search-underway-missing-california-snorkeler-off-molokini-crater/

How many people have died from full face snorkel masks?

A full-face mask was worn in five drownings and a traditional two-piece mask and snorkel was worn in 11 drownings, according to state health department data. Oct 8, 2019

https://www.mauinews.com/news/local-news/2021/01/researchers-probe-for-answers-to-snorkel-related-fatalities/

https://www.miamiherald.com > local > article251092309

There is a class action lawsuit against snorkel tour groups. Snorkel rental companies do not provide any safety education and should be held responsible! They do how ever make you sign a liability release form.

Tourism Whale Strikes



Photo by Ron Tubbs-topaz enhanced zoom

Every day during whale season tourist boats chase down whales to increase tourist viewing. Tourists' tours from kayaks, sailboats to big tour boats all have been observed chasing whales. Many social media posts show these activities with no prosecutions for NOAA law violations. I have watched in horror as big tour boats drive right up on top of whale calves and moms to try and get at close-up view of the whales. The biggest Boats on Maui have the most horrendous violations and whale strike documentation. How many strikes have occurred that we do not know about! Tourists are loving our valueles to death. Recent years have seen less whales visiting Hawaii, what role does tourist boats play in this. See links:

Boat strikes humpback whale calf off south Mau.17 bethilder on board watch as boat hits whale mom and calf?

iiinewsnow.com/2019/03/30/boat-strikes-humpback-whale-calf-off-south-maui/ v.com/2020/12/floppy-newborn-whale-and-man-overboard-caught-on-video https://www.haw. https://ftw.usatoda



Maui tourist whale watching tours hit whales and caves! Many of the nation wide 115 whales run into are done by Hawaii whale watching, dolphin tours every year! NOAA: "Injury and death occurs", Whales find boats a deadly hazard off Hawaii - NBC News

May 8, 2006 - Humpback whales are a popular tourist attraction in Hawaii, but this ... and 2005, there were 33 reported strikes involving whales and boats among the ... Boat captains are required to notify NOAA officials of any accidents by ...

https://www.hawaiinewsnow.com/2019/03/30/boat-strikes-humpback-whale-calf-off-south-ma

https://sanctuaries.noan.gov/science/sentinel-site-program/hawaiih over 115 whate strikes WOW! https://hawaiihumpbackwhale.noan.gov/science/permittedresearch https://hawaiihumpbackwhale.noan.gov/science/permittedresearch

nds-people-to-watch-out-for-humpback-whales-as-they-migrate-to-hawaii/ onservancy.org/wp-content/uploads/2014/03/lwssdata.pdf

https://iwc.int/ship-strikes

https://www.google.com/search?g=noaa+hawaii+boat+whale+strikes&tbm=isch&source=univ&client=firefox-b-1-d&sa=X&ved=2ahUKEwj6iYXdr\$ToAhULqZ4KHa26AjAQ7Al6BAgIEBk https://sanctuaries.noaa.gov/science/sentinel-site-program/hawaiihumpbackwhale/vessel-impacts.html

https://sanctuarics.noon.gov/science/scinnel-stric-program/havaitin/umpback-what/vessel-impacts.html https://sanctuarics.noon.gov/science/scinnel-stric-program/havaitin/umpback-what/vessel-impacts.html https://www.kitv.com/story/418778/70/whatevessel-collisions-nine-total-instances-reported-this-season https://www.kitv.com/story/418778/70/whatevessel-collisions-nine-total-instances-reported-this-season https://www.kitv.com/story/418778/70/whatevessel-collisions-nine-total-instances-reported-this-season https://www.kitv.com/story/418778/70/whatevessel-collisions-nine-total-instances-reported-this-season-https://doi.org/10.1006/10.1

https://www.hawaiinewsnow.com/2019/03/30/boat-strikes-humpback-whale-calf-off-south-maui/
https://www.chsnews.com/news/moon-humpback-whale-broken-spine-vessel-strike-last-journey-canada-hawaii/
Whales Dolphin's, furtles and fish at snorked and scuba dive sites are releatellesty pursued, harassed and hurt by large numbers of tourists. Corals are stepped on, trampled and anchors dragged though them. Tourist take corals and shells as souvenirs home with them greatly impacting the environment. The number of tourists has increased 65% over the last 20 years and is only expected to continue to rise. Over 80% of these tourists participate in marine tourism activities throughout the five main islands; Oahu, Maui, Kauai, the Big Island, and Lanai. Marine tourism includes active activities such as scuba diving and snorkeling, as well as passive activities such as dolphin and whale encounters on boats. Hawaii's tourism.

Corals damaged by Tourism
"Tourism and Recreational Impacts | Reef Resilience" https://recfresslience.org/stressors/ocal-reefs-tourism-and-recreational-impacts/
"As Tourism Returns, We Carl', Allow Cruise Companies to Destroy Coral Reefs for Profit - EcoWatch" https://www.ecowatch.com/coral-reefs-destruction-lourism-conservation-2653139944.html
"Division of Aquatic Resources | Coral Reefs" https://din.hawaii.gov/dar/habita/coral-reefs/
https://www.kiw.com/story/44090398/maui-sea-turfle-photo-causes-uproar-on-social-media

Enforcement Action against John Joseph Barry III and Avalanche Adventures Corp. for Alleged Stony Coral and Live Rock Damage Resulting from the May 28, 2021, Avalanche Anchoring Incident Within the Waters of the Kaloko-Honokōhau Fish Replenishment Area / Netting Restricted Area, Hawai'i Island

Enforcement Action against Kimberly Brady for Alleged Stony Coral Damage Resulting from the March 24-25, 2021, Blaze II anchoring incident outside the Māla Wharf, Lāhainā, Maui.

Enforcement Action against Anthony Hodgson and 2G Vessel Owner Limited for Alleged Stony Coral and Live Rock Damage Resulting from the September 29-30, 2021. Endless Summer Anchoring Incident within the Kailua Bay Fisheries Management

https://www.seattletimes.com/life/travel/hawaii-tour-boat-company-to-pay-almost-400000-for-damaging-coral-reefs/

https://nypost.com/2020/09/05/yacht-owners-fined-after-extensive-damage-to-hawaiian-coral-reef/

Tourism Manta Ray Strikes

Video shows serious Manta Ray injuries from boat prop strikes off West Hawaii, one person recently died from a boat strike there too.

https://www.khon2.com/video/state-proposes-manta-ray-tour-regulation-amid-increasing-popularity/8117101/

https://www.khon2.com/local=news/second-manta-ray-in-less-thin-a-month-has-been-found-injured-off-kona/ https://www.khon2.com/local=news/big-island-may-injurent-new-manta-ray-viewing-rules/ https://www.kasaiinewsnow.com/2022/09/07/calls-more-protection-grow-after-belowed-manta-ray-dies-oahus-north-shore/

https://www.khon2.com/local-news/young-manta-ray-dis-safte-apparent-anchor-line-entanglement/
Wow how many manta rays have been hit by tourist boats in west Hawaii, oo sad, these same people sued the aquarium fishery, we never had any whale or manta ray strikes effects like these.
https://www.ktaradvertiser.com/2022/10/30/hawaii-news/the-state-is-proposing-the-first-ever-rules-for-manta-ray-viewing-at-two-popular-spots-off-the-kona-coast/

KAILUA-KONA — Manta ray viewing site rules have yet to be implemented nearly six years after the state set out to regulate the industry, and over a year after a draft of the proposal was published.

Tourism Dolphin Tours

Dolphins feed at night and rest during the day. Interrupting this can have huge impacts. Tour boats for years chase down dolphins endlessly daily with dozens of boats waiting in line to jump in the water with dolphin schools. It is now illegal but that does not stop them. Giving tourist a close view of whales and dolphins is always going to happen especially without enforcement. Pacific Whale foundation has received many tickets! They continue.

https://www.civilbeat.org/2021/05/will-hawaii-spinner-dolphins-finally-get-a-rest-from-the-crowds/ https://www.dolphinsandyou.com/why-cant-we-swim-with-dolphins-in-hawaii/ toxoplasmosis https://www.staradvertiser.com/2022/11/18/hawaii-news/hawaii-spinner-dolphins-at-risk-of-disease-study-finds/ https://www.staradvertiser.com/2022/11/18/hawaii-news/hawaii-spinner-dolphins-at-risk-of-disease-study-finds/ https://catalog.data.ov/dataset/species-distribution-dolphins-hawaii

Tourism Corals Damaged

Iourism Corals Damaged
Uneducated tourist will always step on corals. It has been going on for years. It is not just the divers and snorkelers it is also the ankors!

"As Tourism Actums. We Can't Allow Cruise Companies to Destroy Coral Reefs for Profit - EcoWatch" https://www.ecowatch.com/coral-reefs-destruction-tourism-conservation-2653139944.html
"Tourism and Recreational Impacts] Reef Resilience dystissersors/local-stressors/coral-reefs-tourism-and-recreational-impacts/
"Division of Aquatic Resources [Coral Reefs" https://dlnr.hawaii.gov/coral-reefs/recreational-impacts-to-reefs/
https://www.kitv.com/story/44090398/maii-sect-urtle-photo-causes-uproare-on-social-media

Tourism Vulnerabilities

Hawaii was greatly impacted by the 911 terrorist attack, 2008 stock market crash, Covid, and God forbid airplane accidents. It is a leisure industry and not essential so highly dependent on economy. We must diversify! The state of Hawaii has a bad reputation for being a very difficult place to do business. When Covid hit: Hawaii Panies. Not Enough Tourists. Diversification Never Happened. Issues will soon arise again. The legislature needs to be the ones leading the way!

BH: ... Many in Hawaii travel are worried about the latest visitor statistics and data just starting to come in about our fast-cooling and non-diversified economy. It's becoming increasingly evident that managing tourism may not be as big an issue as was thought a month ago. Wasn't it just yesterdry that people were complaining about too many tourists. A'd well, now, be honest, we heart that far less frequently...

The latest forecast by the state's UH Economic Research Organization (UHERO) shows that the state of Hawaii's economy is worse than it had predicted six months earlier. That is due to high inflation, with the US heading towards a recession and a slipping global economy. The only bright light at this point is the return of Japaneses visitors, which recovery is finally underway....

https://www.stgate.com/hawaii/article/lary-ellipson-blocks-lanab-beach-17446613.php

... folks who seem to rank high on the milking list: tourists....

Hawaii's love-hate relationship with tourism

... It's not just Hawaii residents who are being priced out of paradise. Slowly but surely, tourists are also wondering whether they can still afford to visit here read more...

Tourism Effects on Fish Populations

Pandemic drop in visitors to Molokini increased reef fish

Decreased tourism during the COVID-19 pandemic positively affects reef fish in a high use marine protected area

https://www.hawaii.edu/news/2023/04/13/visitors-to-molokini-maui/

Marine life in Hawaii improving due to lack of humans during pandemic..

Ocean tourist groups have complained that there are no more fish at their dive and snorkeling sites. News article discusses the loss of fish in tourist areas. Recent studies showed the return of fish to Hanauma bay when tourism stopped due to covid. Now that tourism has returned to the bay, more research showed fish are disappearing again? The large groups of tourists have seared the fish out of these areas. Huge tourist snorkel and dive groups greatly impact fish feeding and reproduction behavior effecting fish populations. Dulkit courists Fishermen do not go to some areas day in and day out in large numbers, fishermen of not go to tourist areas, but more and more tourists are coming into and taking aquarium fishing areas away from fishermen. The 20 years of FRA fish replenishment aquarium fish fish counts off West Hawaii show increase in overall fish populations so why are tourist sens having less fish and why is the proven sustainable fishery closed?

Changes in the Behavior of Marine Life
Marine Life interactions, such as fish feedings and encounters with charismatic or rare species, are increasingly popular activities for divers and snorkelers. Recreational impacts on marine ecosystems and species may be caused by diver presence or harassment, or from the feeding of marine life. In some cases, diving has been shown to reduce fish abundance at high-use sites (e.g., Kaneohe Bay, Oahu),ref while in other areas, no significant effects on reef fish communities have been observed (e.g., Bonzio); nere

Fish feeding has been shown to result in a number of negative changes in fish behavior, including changes in time spent obtaining food, the size of the animal's home range, reproductive activity, population density, migration patterns, and species composition due to an increase in the larger, more aggressive species, ref Fish feeding has also been shown to greatly increase the aggressive behavior of the larger species and may result in divers being bitten.

Tourism Closing Sustainable Fisheries over "User Conflict"

Sources: Fishery info Sustainability proven but Aquarium fishery still closed.

Video links aquarium fish EIS you tube, amazing video of the environmental review:

https://www.voutube.com/watch?v=xt8sRh493UI

https://www.youtube.com/watch?v=Z45MzI_Nkt8

https://www.youtube.com/watch?v=psTHLKfsdIA&t=8s

https://hawaiitropicalsaltwateraquariumfish.com

Tourism and Cultural Impacts

https://www.hawaiinewsnow.com/2021/06/02/survey-majority-of-residents-prefer-limiting-the-number-of-visitors-coming-into-hawaii/limiting-into-hawaii/limiting-into-hawaii/limiting-into-hawaii/limiting-into-hawaii/limiting-into-hawaii/limiting-into-hawaii/limiting-into-hawaii/limiting-into-hawaii/limiting-into-hawaii/limiting-into-hawaii/limiting-hawaii

https://www.traveloffpath.com/hawaii-faces-overtourism-with-maui-planning-to-limit-number-of-tourists/

https://beatofhawaii.com/hawaii-summer-travel-starts-dizzving-influx-towering-frustrations/

https://beatofhawaii.com/kauai-tourism-plan-will-include-new-fees-and-enforcement/.https://www.hawaiinewsnow.com/2021/06/18/residents-east-maui-beg-relief-island-experiences-visitor-boom/

r-hawaii-to-get-serious-about-managing-to Hawaii's love-hate relationship with tourism

awan's love-nate relationship with fourism

It's not just Hawaii residents who are being priced out of paradise. Slowly but surely, tourists are also wondering whether they can still afford to visit here

Study: If Hawaii Tourism is Called 'Regenerative' Locals will Like Tourists
... regenerative tourism makes the tourism industry and tourists more attractive to residents. An overwhelming 96.3% of Kaua'i residents responded favorably ...

... regenerative tourism makes the tourism industry and tourists more attractive to residents. An overwhelming 96.3% o read more...
2022 links
http://www.hawaiifreepress.com/Articles-Main/ID/33988/Is-Hawaii-is-being-run-for-tourism-at-the-expense-of-locals

Oahu Has a Huge undersea landscape much greater than West Hawaii but had only fished a much small portion of West Hawaii aquarium fish catch. The Oahu HEPA only asks for a small percentage of previous catch due to lack of fish count stock Data. Please approve and fund further stock data collection for Oahu especially. It should be noted that instead of the historical 60 fishers on Oahu the new HEPA is only asking for permits for 15 fishers.

Oahu (597 mi² Land Area) Ocean Depth (0 - 200 ft) Surface Area: 212 mi² Big Island (4,028 mi² Land Area) Ocean Depth (0 - 200 ft) Surface Area: 90 mi²

0-200 ft Recreational Dive Limit Ocean Depth 0 feet-200 feet

0 5 10 20 Miles

0 5 10 20 Miles

Projection: GCS WGS 84. Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community GISPacific, LLC