



Sierra Club Hawai'i Chapter

PO Box 2577, Honolulu, HI 96803
808.537.9019 hawaii.chapter@sierraclub.org

LATE TESTIMONY

HOUSE COMMITTEE ON WATER, LAND, & OCEAN RESOURCES HOUSE COMMITTEE ON ENERGY & ENVIRONMENTAL PROTECTION

March 20, 2009, 10:00 A.M.
(Testimony is 4 pages long)

TESTIMONY IN STRONG OPPOSITION TO SB 1008, SD1

Aloha Chair Ito, Chair Morita, and Members of the Committee:

The Sierra Club, Hawai'i Chapter, with 5500 dues paying members statewide, strongly opposes SB 1008, SD1, which reduces pollution standards *to the lowest possible limit allowed under the law*. To have the legislature consider reduced pollution standards -- without scientific evidence or studies establishing the effects this will have on Hawai'i waters -- is troubling, particularly when the standards currently contemplated have never been presented to the public, nor considered by experts in the field. It must be noted that neither this body, nor the public has had the opportunity to review the proposed scientific rationale for this change.

Further, why should the legislature enter into the complex field of water standards -- evaluating the impacts of contaminants (pesticides, heavy metals, bacteria, pathogens, and particulates) on freshwater and marine life -- without any explanation of how the science applies in Hawai'i? Federal standards, based on East Coast studies, have previously been rejected because residents of Hawai'i consume more fish and utilize our sub-tropical beaches year-round.

Hawai'i is also infamously known as the endangered species capitol of the world. Do we know what the impacts of increasing pesticides in our wetlands will be on endangered species like the Ae'o, the Hawaiian Coot, the Hawaiian Moorhen, the Hawaiian Stilt, or the Hawaiian Duck? Egg shells of birds have shown tremendous sensitivity to pesticides in the past. Has DOH made any outreach to experts in the field?

No Scientific Rationale Presented

Looking at Section 1 and 2 of HB SB 1008, SD1, there is no evidence that lowering our water quality standards would offer sufficient protection to human and marine health. These federal standards were developed based on national models -- infrequent use of marine waters, reduced fish consumption, and no tropical reefs or fish -- and no study has been presented establishing these standards are applicable to Hawai'i. These federal studies also have specific statistics demonstrating the impact on human health and marine organisms. These standards have never been extrapolated with regard to the impact they would have on Hawai'i residents. For



Robert D. Harris, Director

example, if a federal standard calculated that “X” number of deaths would occur with certain pesticide levels based on the amount of water usage or fish consumption, shouldn’t a toxicologist establish how those standards apply in Hawai`i?

To proceed with this measure, this Committee must determine that it has been presented with enough scientific analysis to state that, among other things, raising the Chlordane limit by **five times** will have **no impact**.¹ Or that raising the Dieldrin standard by **two times** will be harmless.² To that end, you should ask Department of Health:

- What impact would this have on endangered birds and animals in Hawai`i? Has DOH consulted with experts in the field on how increased pesticide levels would impact these unique species?
- What impact would this have on coral reefs? Has the federal data considered the impacts on subtropical waters?
- What is the impact of consuming more fish, particularly fish known for bioaccumulation of contaminants such as tuna? Didn’t we previously determine Hawai`i residents consume 3.1 times more fish than the national average?³
- Why have many states established stricter standards than the EPA guidelines? Why should Hawai`i adopt the lowest possible standard?
- Has DOH circulated these standards to the Water Quality Standards group created for this very purpose and explained the justification for the changes? Has the DOH received any input from this group? Has DOH made any effort to circulate the current form of this bill -- a wholesale adoption of the lowest contaminant standards allowed -- to the public before this hearing?

No Science Justifying the Greatly Lowered Standard Past 500 Meters

Turning to Section 3, it is unclear how someone could conclude “waters between five hundred meters and three miles from shore [are] infrequent use coastal recreation waters” “Infrequent use coastal recreation waters” are defined under federal regulations as “coastal recreation waters that are rarely or occasionally used.” This is an arbitrary standard, not based on science. “Infrequently used recreational waters” is defined as “coastal recreation waters that are rarely or occasionally used.” See http://edocket.access.gpo.gov/cfr_2008/julqtr/40cfr131.41.htm There is no science establishing this proposed fact.

¹ This assumes the proposed chlordane standard of 0.00080 divided by the corrected standard for fish consumption of 0.00016 established in Hawai`i Administrative Rules § 11-54-4, dated August 31, 2004. Utilizing the uncorrected current Hawai`i Standard results in a standard **fifty times lower** than the current standard.

² Based on the proposed dieldrin standard of 0.000052 micrograms per liter divided by the 0.000025 current standard.

³ As noted in a recent Declaration of Laurence K. Lau, the Deputy Director of Health for the State of Hawai`i Department of Health, Hawai`i’s Water Quality Standards for “fish consumption standards are 3.1 times more stringent than the EPA Criteria, because the average daily consumption of fish locally was estimated to be approximately 3.1 times higher than the average underlying the EPA Criteria.”

Further, setting these waters as "infrequently used recreational waters" sets the lowest possible bacterial standard. The other federal standards, which have higher restrictions, are "designated bathing beach waters," "moderate use coastal recreation waters," and "light use coastal recreation waters." By using the lowest standard, nearly five times as much bacteria is authorized on a per day sample -- 501 samples per 100 ml.

It should also be noted that the Department of Health proposed a higher standard in 2005. What is the justification for lowering this standard now?

Fundamentally, this section requires a beach by beach analysis. Surfers frequently paddle out five hundred meters or more along the south and east coasts of Oahu (like Waikiki). Paddlers go out even further and frequently swim in the water during relays and races. This list could go on.

Moreover, coastal boundaries should be set through a process of thorough data collection and analysis. Each beach has seasonable changes in stratification and upwelling, which can bring deep offshore waters to the surface as a function of temperature gradients, wind speeds, and tidal direction. Each beach is used differently by recreational users. Each beach has different marine ecosystems. The proposed boundary, however, is finite and arbitrary.

Water boundary definitions have their own independent legal meaning. They allow for relaxed standards for all federally regulated contaminants. Similar to the discussion noted below, it is possible this definition would stand even if the water quality standards are not approved by the EPA.

Elimination of Inconsistent Water Quality Standards

As currently phrased, Section 4 would result in the elimination of all "inconsistent" regulations. Under the Federal Clean Water Act, no water quality standards can be adopted until they are approved by the EPA. Section 4 voids all inconsistent standards, meaning the current standards, boundaries, and other regulated matters would be void if the EPA takes time to review the proposed lowered standards or denies the request.

Thank you for this opportunity to provide testimony.

UNIVERSITY OF HAWAI'I AT MANOA

Kewalo Marine Laboratory
Pacific Biosciences Research Center
41 Ahui Street, Honolulu, HI 96744

LATE TESTIMONY

March 19, 2009

Dear Chair and Committee Members,

I am submitting this testimony in opposition to Bill S.B.1008 S.D.1.

I am a marine biologist, and my expertise includes reproductive biology, larval ecology, conservation biology, ecotoxicology and evolutionary biology of tropical marine invertebrates, especially corals and related coral reef organisms. My research programs include studies of coral spawning, focusing on fertilization mechanisms and barriers, hybridization and speciation events, recruitment of corals, and the effects of environmental quality on reproduction and recruitment success.

I am aware of the concerns being raised over compliance with established EPA water quality standards, including the overall costs, and that the purpose of this bill is to reduce water quality standards in State waters to reduce or remove violations and fines. I do not believe this is an appropriate course of action to meet the needs of the broader community at present and for the future. Coastal water quality is an important issue for both human and environmental health, and should be addressed using the best available science rather than politics. For example, the establishment of waters five hundred meters past the shoreline as "infrequently used recreational waters" allows for the application of the lowest standard for water quality, and appears to be an arbitrary designation, lacking scientific support. Also, the use of Federal standards set in areas devoid of corals and coral reefs is inappropriate, and Hawaii should be applying a higher standard in recognition of its unique and important coastal marine resources. Hawaii has well-qualified individuals with the expertise to assess the efficacy of present standards, and to assist policy makers in determining options to insure the safety of our people and our coastal marine resources. While the sewage issue may be considered the most pressing, as a marine biologist, I can attest to the fact that coastal water quality has much broader implications ecologically, economically and culturally.

Rather than reduce water quality standards state-wide, it would be prudent to focus on those areas (Honouliuli and Sand Island) of greatest concern at the moment if such action is deemed essential by the Hawaii State Legislature, and any proposed reductions in water quality standards should be limited in scope and time, until the proper studies can be conducted and data analyzed.

The ocean outfalls release more than sewage; a variety of toxicants, pharmaceuticals, pathogens, nutrients and particulates are also being released into our coastal waters, where they can affect human health, coastal coral reefs, fishes and marine mammals. Considering Hawaii is an ocean state, heavily dependent on our ocean for the quality-of-life of residents and visitors, alike, careful consideration must be given to any decisions that will determine water and bottom quality. As Hawaii's population continues to grow, impacts will only increase, and ignoring present problems will make it harder and more expensive to control these in the future. A perceived lack of evidence that contamination is occurring really reflects the lack of data rather than the proof of no harmful effects.

UNIVERSITY OF HAWAI'I AT MANOA

Kewalo Marine Laboratory
Pacific Biosciences Research Center
41 Ahui Street, Honolulu, HI 96744

I strongly recommend that a broad-based group of researchers, managers, policy-makers and stakeholders be established to address coastal water quality and sewage concerns over three time scales: immediate (1-3 years), mid-term (5-10 years) and long-term (10 – 20 years) to insure good decisions are being made today that do not compromise Hawaii's future.

I respectfully recommend that Bill S.B. 1008 be withdrawn, and the approach to addressing Hawaii's sewage issues be reconsidered based on solid science.

Respectfully submitted

Robert H. Richmond, Ph.D.
Research Professor

As part of our ongoing quality control efforts for these revisions, we produced an **errata sheet** for the March 18 Rationale Document.

This includes a few corrections to the Comparative Table of Existing and Proposed Toxic Pollutant Criteria. This Comparative Table serves as the basis for interpreting the narrative requirements of this bill and promulgating the table of Numerical Standards for Toxic Pollutants Applicable to All Waters that is attached to our testimony as recommended language for a new part 2(C) of this legislation.

We do have one correction to this table, and request that it be inserted into the next version of the bill.

In the table of Numerical Standards for Toxic Pollutants Applicable to All Waters (C), page 14, insert an additional line between Endosulfan and Pentachloroethanes, and insert on that line the criteria for Nitrophenols as found in HAR 11-54.

Numerical Standards for Toxic Pollutants Applicable to All Waters (C)		carcinogen	Freshwater		Saltwater		Human Health for the consumption of Organism Only	FR Cite/Source
Pollutant Name			CAS Number	CMC 1 (acute)	CCC 1 (chronic)	CMC 1 (acute)		
	DDT - metabolite TDE	X		0.03	ns	1.2	ns	
	Dichlorobenzenes	X		370	ns	660	ns	850
	Dichloropropanes			7700	ns	3400	ns	
	Dinitrotoluenes	X		110	ns	200	ns	3
	Endosulfan			0.22	0.056	0.034	0.0087	52
	Nitrophenols	X		77	ns	1600	ns	
	Pentachloroethanes			2400	ns	130	ns	
	Polynuclear aromatic hydrocarbons	X		ns	ns	ns	ns	0.01
	Tetrachloroethanes			3100	ns	ns	ns	
	Tetrachlorophenol (2,3,5,6)		58902	ns	ns	ns	440	ns

Errata Sheet: March 19, 2009

RATIONALE FOR THE PROPOSED REVISIONS TO DEPARTMENT OF HEALTH WATER QUALITY STANDARDS. House Bill 834, HD2 and Senate Bill 1008, SD1, in the Twenty-fifth Legislature Regular Session of 2009. STATE OF HAWAII DEPARTMENT OF HEALTH ENVIRONMENTAL HEALTH ADMINISTRATION, HONOLULU, HAWAII. March 18, 2009 Version.

- Page 1. In table labeled CONTENTS (at top of page), in the row for IX. Comparative Table of Existing and Proposed Toxic Pollutant Criteria, in the column for "PAGE," change "19" to "18".
- Page 2. Throughout the last paragraph (at bottom of page), change "26" to "36" and "2" to "4".
- Page 3. At the top of the page, in the first complete sentence of the continuation of the paragraph from page 2., change "8" to "10"; "one pollutant" to "four pollutants"; "more stringent" to "less stringent"; and "less stringent" to "more stringent".
- Page 3. In the first complete paragraph at top of page, change "6" to "8"; "2 more stringent" to "3 more stringent"; and "4" to "5".
- Page 7. In the paragraph beginning "The standards ..." (middle of page), in the last sentence, change "chlordane and dieldrin" to "toxic".
- Page 22. In Part IX.A Comparative Table of Existing and Proposed Toxic Pollutant Criteria (Priority Pollutants), on line 33 for Ethylbenzene, in the column "Organism Only (ug/L)," change the font for the value "2,100" from regular type to bold type.
- On the next line (unnumbered) for Ethylbenzene, in the column "Organism Only (ug/L)," change the font for the value "1,070" from bold type to regular type.
- On the line (unnumbered) for Tetrachloroethanes (two lines below line 37 for 1,1,2,2-Tetrachloroethane), change the font for "Tetrachloroethanes" from regular type to bold type.
- Page 27. In Part IX.A. Comparative Table of Existing and Proposed Toxic Pollutant Criteria (Priority Pollutants), on line 106 for delta-BHC, in the column "Organism Only (ug/L)," delete "0.0123 H".
- In the line (unnumbered) for DDT, in all the columns, change the font for each entry from bold type to regular type. Then move the entire line up so it is in between line 108 for 4,4'-DDT and line 109 for 4,4'-DDE.
- Page 31, In Part IX.B. Comparative Table of Existing and Proposed Toxic Pollutant Criteria (Non-Priority Pollutants), on line 19 for Hexachlorocyclo-hexane-Technical, in the column "CAS Number," change "319868" to "608731".

FW: Testimony for SB1008 on 3/20/2009 10:00:00 AM

EEPttestimony

Sent: Friday, March 20, 2009 9:29 AM

To: WLOtestimony

LATE TESTIMONY

-----Original Message-----

From: mailinglist@capitol.hawaii.gov [mailto:mailinglist@capitol.hawaii.gov]

Sent: Friday, March 20, 2009 9:22 AM

To: EEPtestimony

Cc: [REDACTED]

Subject: Testimony for SB1008 on 3/20/2009 10:00:00 AM

Testimony for EEP/WLO 3/20/2009 10:00:00 AM SB1008

Conference room: 325

Testifier position: oppose

Testifier will be present: No

Submitted by: John Seebart

Organization: Individual

Address: [REDACTED]

Phone: [REDACTED]

E-mail: [REDACTED]

Submitted on: 3/20/2009

Comments:

From: [REDACTED]
Sent: Friday, March 20, 2009 1:32 PM
To: WLOtestimony
Cc: Rep. Sharon Har; Rep. Ken Ito
Subject: Opposition to SB1008 and HB834

LATE TESTIMONY

THE SURFRIDER FOUNDATION

HAWAII CHAPTERS

Mar. 20, 2009

Water, Land and Ocean Committee
Re., Strong Opposition to SB1008 and HB834

Dear Chair Ken Ito, Vice-Chair Har and Honorable Committee members,

My name is Stuart Coleman, and I am the new Hawaiian Islands Field Coordinator for the Surfrider Foundation. We have more than 1500 dues-paying members in Hawaii and almost 60,000 across the country. On behalf of all our members and chapters across the state, I am writing to express our strong opposition to SB 1008 and HB 834. Thanks for hearing my testimony today. I was asked to resubmit my original testimony that was sent out on March 9.

Although these bills may seem like a practical way to adjust our high water quality standards and get around the EPA's current lawsuit against the City & County, they are not in the best interests of the public and the constituents you represent. Dr. Bruce Anderson, the former Director of the Dept. of Health who came up with the current standards, recently said, "It's very inappropriate to set the standards through legislation. It may be politically expedient, but it's not the right thing to do."

I have also spoken with several water quality specialists and scientists, including Surfrider's own Dr. Rick Bennett, Dr. Rick Wilson and Dr. Carl Berg, and they are all opposed to this legislation for the following reasons:

- The EPA is under a court order to conduct research by 2010 and issue new standards by 2012, so it is inappropriate and premature to change HI's standards now and then have to change them again in 3 years.
- The standards should be established by scientific (epidemiological) studies conducted in HI or in similar tropical climates, not dictated by the legislature.
- HI's current geo-mean standard of 7 CFU *enterococci* per 100 ml should not be changed without climate and location-specific epidemiological studies justifying a different standard.

Marvin Heskett, one of our Executive Committee members, served on the Water Quality Advisory Board that made the recommendations for this bill, said that he thought the final version did not accurately represent the group's findings. Heskett did say that the enterococci counts could probably be raised to the current EPA standards, but he disagreed with some of the other provisions. Regardless of the bacteria standards, we urge that the DOH aggressively follow up on health standard exceedences to identify and eliminate sources of pathogens, including cesspools and septic systems that discharge directly or indirectly to recreational waters. These bills set a bad precedent by attempting to bypass the scientific review process and serious public debate. Thanks for your consideration.

Aloha,

Stuart H. Coleman
Hawaiian Islands Field Coordinator
The Surfrider Foundation

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