

Aloha Maui County Council members:

My name is Jeff Bagshaw, I am the Volunteer Coordinator, outreach and information staff for `Ahihi-Kina`u Natural Area Reserve - the third most visited outdoor site on Maui, and sadly home to the only reef in Hawaii that is not declining.

When I last had the chance to speak here with you folks, I shared how myself and volunteers try to contact as many visitors as we can at our small site to inform them about the problems surrounding sunscreen use. I had to leave out one piece I hope will be useful to you now.

Early on when we began the educational campaign it became clear that people could not grasp how their individual actions become a larger problem, their collective impact. When we talk about these compounds in parts per trillion or even comparisons of drops-per-swimming-pool volume are hard to visualize. And every day at the reserve we hear (these are direct quotes): "Its just me, its just today, I'll only use a little."

And occasionally: "My doctor told me that if I sunburn just once, I'll get skin cancer."

The latter usually comes from someone wearing the smallest bathing suit they could possibly buy, instead of sun-protective clothing. And finally: "Sunblock looks funny - I won't get a nice Hawaiian tan if I use the white stuff."

So I dusted off an old college text on environmental estimation. Which is a way to estimate the impact of something based on available data when its impractical to measure some variables exactly.

- So first, imagine that just 10 percent of the island's residents and visitors go into the ocean each day somewhere around Maui, either a Sunday afternoon or a Tuesday morning. (Maui County residents are about 140,000; how many visitors here on any given day?)
- Now imagine that just one half of those people put on some brand of sunscreen, instead of sunblocks. Just one half since some tell us they don't wear any sun protection at all. (7,000 residents plus same amount of visitors = 1,400)
- Next, imagine that 1/2 of 10 percent put on just one 1/2 ounce of sunscreen - less than the recommend use by most of these manufactures. ~ 7,000 ounces, or ... about 55 gallons (1 gallon = 128 ounces)
- Given all that, this comes to approximately 55 gallons of sunscreen going into the ocean around Maui, one swimmer at a time, each day, everyday. Today.
- This very rough estimate does not include the compounds that get washed off in the showers from people who do not even enter the ocean on a given day. These compounds can last 90 days in the ocean – I don't know of studies showing if they enter the oceans via our sewage discharges.

If a truck pulled up to the ocean somewhere on Maui, the tailgate was dropped and the driver rolled out a plastic, industrial barrel and began dumping gallons of goo into the water.... I'd like to think one of us would call the EPA, the MPD or someone to make it stop.

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If these compounds really were dumped like that the EPA could take action, and the dumpers would be made to pay fines and reparations. They are dumping their toxins on our environment one ocean-goer at a time and it does not affect their own lives as it does ours. The manufacturers of these products, have no offices, employees, factories or anyone directly impacted by prohibiting sales here in the islands. I fear at some point our County may face legal challenges to these proposed bills. Perhaps some creative bargaining can be done to hold these companies accountable for their deposition of these compounds in our waters for the decades since they created them in the labs.

I am sad to report that since I last testified, we have gotten back new results from our latest samples testing for these compounds in the reserve waters. We now stand at 1,084 ppt Oxibenzone and octinoxate, and again, these are toxic to corals at 64 ppt, our levels are now 17 times the lethal amount. Despite all our education efforts, the numbers have gone up, possibly because so has our visitation.

I'm proud to see that Maui County may once again lead the way in protecting our reefs and the fish we eat and I applaud your efforts and support these measures.

Mahalo,
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