

Evaluating Maui ocean water quality and human health

The recent news on pollutants in the ocean water we love is **shocking**, but we still don't know which areas are unsafe to swim in or if they are getting better or worse. **Let's get the data analyzed!**

We have scientists ready to process the ocean samples collected by the Department of Health. **We need your help to make it happen**. Your tax-deductible donation to the KCA Water Quality Study will help get us there.

Kihei Community Association (KCA) feels it is very important to complete a March 2016 analysis of turbidity and nutrient content with an evaluation of microbial content of the near-shore waters. That is the element most immediately affecting the health of people in the water; it is not included in reef health or other marine studies. Having this information will help the many ocean users focus their concerns, take action to address the issues, and form public policy around solutions.

KCA is contributing \$3,000 towards completion of this island-wide project, with the total costs estimated to be around \$12,000. Snorkel Bob Foundation and Sierra Club Maui Group have also contributed generously, as have a number of Maui residents. We appeal to organizations and individuals who are concerned about ocean water quality to donate towards this necessary research. Tax-deductible donations may be made through a check to Maui Nui Marine Resource Council (see address below) with a note "KCA Water Quality Study" or by credit card through their Web site:

https://tinyurl.com/kca-ocean.

Maui Nui Marine Resource Council PO Box 331204 Kahului, HI 96733

What do we know about problems with our ocean water?

Two recent studies of Maui ocean water quality produced results that are very concerning for Maui residents and visitors.

The Hawaii Department of Health (HIDOH) has an extensive, public online database for water quality samples, including nutrients (like nitrogen), turbidity (particles), and water quality indicators of microbial bacteria. Researchers Mailea Miller-Pierce and Neil Rhoads studied the nutrient and turbidity data with a focus on near-shore water quality and the results were shocking, as reported in MauiTime:

https://tinyurl.com/kihei-worse

Their March 2016 report is here: http://wq.ecooak.org/

Then in November 2016, UH Mānoa researchers published a new study showing high potential reef damage from Maui wastewater released through injection wells:

https://manoa.hawaii.edu/news/article.php?aId=8256

Researchers Mailea and Neil have agreed to extend their project to include microbial content in the ocean. This study will answer questions such as:

What are the concentrations of microbial bacteria at specific sites on Maui?

Are there impairments and exceedances?

If so, what are the impairments and exceedances compared to the EPA standards for safe water as defined by the clean water act?

Where are the impairments?

Are there trends in locations?

Do the microbial bacterial indicators correlate with the locations of the injection wells or areas of higher population density on Maui?

An overview of the project and a preliminary budget can be found here:

https://tinyurl.com/water-overview https://tinyurl.com/water-budget

This information will help us focus our efforts on the most pressing issues affecting our coastal water quality, identify the culprits, and work with the agencies responsible for water quality to get them addressed.

For more information on the project, email water@gokihei.org or call 354-0490 (Rob).