

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



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In reply, please refer to:
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Aloha:

The Hawaii State Department of Health (DOH) is pleased to provide this synopsis of our recently completed statewide scan to identify the presence of pesticides in our environment.

In collaboration with the Hawaii Department of Agriculture and the U.S. Geological Survey, the DOH Clean Water Branch and Hazard Evaluation and Emergency Response Office gathered baseline data on the levels of 136 different pesticides in surface water samples from 24 sites across the state.

The study was conducted in response to the growing concern from communities across the state about potential environmental contamination by currently used pesticides.

Every location sampled had a trace detection of one or more pesticides. However, the majority of these detections represented minute concentrations that fall far below state and federal benchmarks for human health and ecosystems. Interestingly, urban areas on Oahu showed the highest number of different pesticides, some of which have not been in use for many years.

The Department will share the results of this study with community and government stakeholders throughout the State. We will help facilitate discussion and explain the study results with all who are interested. Additional study beyond this one time "snap shot" is dependent upon future funding.

Mahalo for your support.

A handwritten signature in blue ink, appearing to read "Gary Gill", is written over the typed name.

Gary Gill
Deputy Director
Environmental Health
Hawaii Department of Health

Executive Summary

Pesticide Scan at a Glance

Key findings:

- Every location sampled had a trace detection of one or more pesticides; however, the majority of these represented minute concentrations that fall below state and federal benchmarks for human health and ecosystems.
- Land use significantly impacted the number and type of pesticides detected. Urban areas on Oahu showed the highest number of different pesticides.
- Oahu's urban streams had the highest number of different pesticides detected. Manoa Stream at the University of Hawaii showed 20 different pesticides and breakdown products.
- Dieldrin, a termite treatment that has been banned from sale in Hawaii since 1980, exceeded State and Federal Water Quality standards in three urban locations on Oahu.
- Fipronil detected in Manoa Stream and Waiialae Iki Stream exceeded aquatic life benchmarks for freshwater invertebrates. Fipronil is an insecticide commonly used in residential settings and applied by commercial pest companies to treat soil for termites.
- Atrazine and metolachlor, two restricted use herbicides, were detected on Kauai at agricultural sites downstream of seed crop operations. One location had levels that exceed aquatic life guidelines, but remain below regulatory standards.
- The number of pesticides detected in water samples on Hawaii Island was lower than that of Kauai and Oahu.
- Atrazine, a restricted use pesticide, was the most commonly found pesticide in the study. Of the sites tested, 80 percent had atrazine detections. Only two sites, one on Kauai, and one on Maui, reflected elevated concentrations suggestive of current use of atrazine. All of the remaining detections were trace level concentrations far below state and federal benchmarks.
- The pilot study tested stream bed sediment at seven sites and found glyphosate, in all samples. Glyphosate (trade marked as Roundup) is widely used for residential, commercial, agricultural and roadside weed management,