



From: Wendy Wiltse, Ph.D. (420keani@gmail.com)  
Date: May 16, 2019  
To: Governance, Ethics and Transparency Committee  
Chair Mike Molina  
Vice Chair Keani Rawlins-Fernandez  
And Committee members  
RE: HAWAII WILDLIFE FUND, ET AL. V. COUNTY OF MAUI, CIVIL  
1 2-00198 SOM (GET-26) BMK, U.S. SUPREME COURT DOCKET 18-  
260 (GET-26)

I am writing in reference to recent discussions at Maui County regarding settlement of Claims and Lawsuits in Hawaii Wildlife Fund, et al., vs. County of Maui. I worked for the US Environmental Protection Agency (EPA) for 32 years; I was stationed in Hawaii for 24 years until I retired two years ago. Now I serve as President of Oahu Waterkeeper's Board of Directors, working for clean water in Hawaii.

I worked in Lahaina from 1993-1997 on detail to Hawaii Department of Health (DOH). My position was "West Maui Watershed Coordinator" similar to the position now held by Tova Callender. At the time, nuisance macroalgal blooms along West Maui shores caused noxious odors and hurt resort occupancy. Our watershed project worked to reduce sediment and nutrient inputs to the coastal ocean. I coordinated with Maui County Wastewater Department to start reclaimed water irrigation at Kaanapali Resort and to successfully adjust the treatment process at Lahaina Wastewater Reclamation Facility (LWRF) to reduce nitrogen loads in the treated wastewater.

During my years working at EPA's Honolulu Office after 1997, I frequently participated in discussions related to the Lahaina wastewater injection wells. I participated in internal EPA meetings and meetings with DOH, and reviewed correspondence to and from Maui County and DOH regarding the Lahaina Wastewater Injection Wells and EPA's UIC permits for Lahaina. I also helped design and provided review comments on the Lahaina Tracer Study conducted by Dr. Craig Glenn of University of Hawaii.

I support the very doable proposed settlement of this lawsuit. I have followed this issue with great interest for 26 years through many Maui County administrations. It's time to stop fighting and using hyperbole to scare people about the projected implications of NPDES. It's time to work on the solutions to managing Maui's wastewater in ways that protect the reefs and coastal waters.

Speculations are being made about the ramifications of a NPDES permit for LWRF. Below I address the speculations about (1) the feasibility of drafting a NPDES

permit, (2) the ability of UIC permits to protect marine life, and (3) the likelihood that that an NPDES for Lahaina will lead to new cesspool regulation. My comments are based on my historical first hand perspective and knowledge of the issues.

1. An appropriate NPDES permit can be developed for LWRF's injection wells and EPA offered help.

An NPDES permit for a point source discharge to groundwater that eventually flows into coastal surface waters would be an unusual NPDES permit but not impossible to prepare. The notion that this permit is difficult and not formulaic is not a reason to avoid NPDES. The NPDES program in Hawaii is delegated to DOH but EPA retains oversight authority. One of EPA's regular roles is providing DOH with training and technical assistance on the application of NPDES for Hawaii. EPA has offered multiple times to provide technical assistance to help DOH prepare a NPDES permit for LWRF.

There is much recent and relevant data available to inform calculations of assimilative capacity and zones of mixing. EPA and DOH's UIC permits require regular effluent monitoring; DOH collected several years of water quality monitoring data from the wastewater seeps in the ocean, and for nearby ambient waters near the seeps, and at control sites. All of these data will be helpful in drafting an appropriate NPDES permit.

2. Underground Injection Program (UIC) permits cannot adequately address concerns about coastal water quality.

The UIC program falls under the Safe Drinking Water Act (SDWA) and is intended to protect underground sources of drinking water from underground injection. It does not address protection of surface waters or the aquatic life that lives in waters the injected chemicals may reach. The LWRF has for decades been regulated by UIC permits for wastewater discharge from both DOH and EPA. The poor water quality, algal blooms, and degradation of corals reported by scientists at Kahekili have all occurred under existing UIC permit regulations, so the UIC permits currently lack adequate protection for Maui's coastal waters.

The NPDES program is a component of the Clean Water Act (CWA). The objective of the CWA is to restore and maintain the chemical, physical and biological integrity of the nations waters (Sec 101(a)). The CWA made it unlawful to discharge any pollutant from a point source into navigable surface waters without a Clean Water Act permit.

The concentration limits used in permits for various pollutants are based on standards promulgated by EPA. SDWA/UIC and NPDES/CWA permits use different standards because these programs are designed to protect different uses of water. UIC permit limits founded in the SDWA protect human health

from chemical exposure through drinking. NPDES permits under the CWA use limits that are protective of the aquatic and marine life living in streams and rivers, wetlands, and coastal and marine waters. In many cases the CWA limits are far more stringent than the SDWA limits.

I provide two ecologically important examples of these differences to show that the UIC permits are inadequate to protect marine life. Nitrate is a nutrient that fuels plant growth and is also toxic to aquatic life at some concentrations. The SDWA's MCL or maximum safe contaminant concentration for nitrate in drinking water is 10mg/L. Marine and aquatic life are far more sensitive than humans to nitrogen and nitrate concentrations in water. Hawaii's water quality standard for nitrate that cannot be exceeded in open coastal waters is 0.005 mg/L (5 ug/L). In another example, the EPA action level for copper in tap water is 1.3 mg/L whereas the maximum allowed concentration to protect marine life is 0.0029 mg/L. Copper is highly toxic to many marine organisms. Obviously the drinking water MCLs used to set pollutant limits in UIC permits do not protect sensitive marine organisms.

Public concern over former nuisance algal blooms in West Maui led EPA to propose stricter nitrate limits in previous draft versions of their UIC permit for Lahaina. Maui County successfully challenged EPA's authority to impose stricter limits under the UIC program. These limits were removed from the final permit. An NPDES permit can regulate discharges of chemicals to levels that are safe for marine organisms.

3. An NPDES permit for LWRF will NOT lead to NPDES permits for cesspools.

The LWRF injection wells and the fate of the effluent are uniquely well studied. Top scientists from UH and the US Geological Survey have used indigenous wastewater chemicals and dye tracers to identify the travel path, travel time, biological degradation, and exit points (seeps) in the ocean for Lahaina's treated wastewater effluent. Scientists have also documented exceedances of Hawaii's water quality standards for marine life, and direct harm to corals in the vicinity of the wastewater seeps. These studies were highly technical, time consuming, and costly. Similar convincing bodies of facts do not currently exist for other injection wells in Hawaii. Further application of NPDES to injection wells in Hawaii would likely require a high bar of site-specific information.

Onsite wastewater systems such as cesspools and septic systems are regulated as Class V UIC wells and differ in significant ways from the Class 1 municipal waste disposal injection wells at LWRF. According to EPA's NPDES website, NPDES permits are NOT required for individual homes that use onsite wastewater systems or do not have a surface discharge. EPA and DOH have limited resources and far higher priorities for the

NPDES program including major dischargers and municipal stormwater. Speculation about NPDES regulation of cesspools is unfounded.

Closing the 88,000 cesspools in Hawaii is a priority for EPA and DOH but NPDES is not the right tool. The legislature already required replacement of all cesspools by 2050 and the agencies are working to develop appropriate affordable technologies and funding mechanisms to assist homeowners with upgrades.

I appreciate the opportunity to provide testimony relative to the NPDES regulation of the LWRF's injection wells. My long employment by EPA Region IX provides useful perspective and history on the important decisions before Maui County. If you wish to discuss my comments further, I can be reached at (808) 358-6206 and email at [420keani@gmail.com](mailto:420keani@gmail.com).

With sincere aloha,  
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Oahu Waterkeepers  
President, Board of Directors