

## GET Committee

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**From:** sam\_agonoy <sam\_agonoy@yahoo.com>  
**Sent:** Tuesday, August 27, 2019 9:30 PM  
**To:** GET Committee

Aloha Chair Michael Molina and members of the Governance, Ethics, and Transparency Committee,

My name is [Samantha Agonoy] from [Lahaina, Maui]. I am writing to ask that you please do not take the Lahaina Injection Well case (HAWAII WILDLIFE FUND, ET AL. V. COUNTY OF MAUI, RELATING TO THE CLEAN WATER ACT) to the U.S. Supreme Court.

I am a member of International Christian Fellowship in Lahaina. The Lord requires us to do justice, love kindness, and to walk humbly with our God (Micah 6:9). Justice is to protect our oceans and coral reefs. Although God gives us stewardship of the environment, God retains ownership of all His creation (Ps. 24:1; 89:11; Lev. 25:23; Col. 1:15-16). For example, Psalm 24:1 states; "The earth is the Lord's, and everything in it, the world, and all who live in it." It is our responsibility to be good stewards of the earth and to protect our oceans. The recycled wastewater that is disposed of through injection wells is a stressor to our ocean quality and has a negative impact. [OPTIONAL] [Note: You do not have to state your affiliation with any organization unless you choose to. You can write on behalf of yourself as an individual]

The Hawaii Federal District Court & the 9th Circuit Court of Appeals already ruled in favor of the environment and found Maui County guilty of violating the Clean Water Act and polluting our oceans. Why is the County planning on wasting \$4.3 million of our hard-earned taxpayer dollars on outside legal counsel to appeal the case to the U.S. Supreme Court, when they should use the money to update our wastewater facilities and ensure no pollutants reach the ocean.

Coral reefs are important for fish habitation and as protection for our coasts and shorelines from waves and storms. In addition, coral reefs provide an economic value through our tourists that visit Maui to enjoy snorkeling. I currently work in the tourism industry for the past [5] years and counting [OPTIONAL... if this is true for you]. It is the livelihood for me and my family. We invest so much into our tourism industry, and then we are going to pollute the ocean and kill the reefs that they are paying lots of money to experience.

I sincerely hope that you will all make the right decision to stop the Lahaina Injection Well case (HAWAII WILDLIFE FUND, ET AL. V. COUNTY OF MAUI, RELATING TO THE CLEAN WATER ACT) from reaching the U.S. Supreme Court.

Mahalo for your consideration,

[Samantha Agonoy]  
[Lahaina, Maui]

## GET Committee

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**From:** Leina Wender <waiokila@gmail.com>  
**Sent:** Tuesday, August 27, 2019 8:22 PM  
**To:** GET Committee  
**Subject:** Settle the Injection Well Case NOW!

Aloha kākou,

Please settle the injection well case now. By failing to settle, you risk having the U.S. Supreme Court make a decision which will have an extremely negative impact on the environment, not only in Hawai'i but throughout the U.S.

Be brave and be on the right side of history.

Mahalo.

Elaine Wender

## GET Committee

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**From:** County Clerk  
**Sent:** Tuesday, August 27, 2019 2:29 PM  
**To:** GET Committee  
**Subject:** FW: Please settle the Lahaina Injections Wells case

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

From: jessica.l.blaylock.9@everyactioncustom.com  
<jessica.l.blaylock.9@everyactioncustom.com>  
Sent: Tuesday, August 27, 2019 11:03 AM  
To: County Clerk <County.Clerk@mauicounty.us>  
Subject: Please settle the Lahaina Injections Wells case

Dear Maui County Clerk Maui County Council,

I support the County seeking to settle the Lahaina Injection Well case (HAWAII WILDLIFE FUND, ET AL. V. COUNTY OF MAUI, RELATING TO THE CLEAN WATER ACT) as per CC 19-225,

The County of Maui should not be spending money attempting to gut the Clean Water Act. Instead, the money should be spent ensuring no pollutants reach the ocean from our wastewater facilities.

By Ignoring the absurdity that is this case and continuing to fight a bill in place to PROTECT OUR OCEAN, Maui county is taking part in causing damage to our ecosystem, our children, our community. There is no right or wrong decision. Injection sites and sewage into our groundwater is proven to damage our reefs, and cause harm to an already suffering system. Take responsibility spend the money to stop pollutants from reaching our ocean. The choice is simple.

Sincerely,  
Jessi Blaylock  
2187 Kokomo Rd Haiku Haiku, HI 96708-5028 jessica.l.blaylock.9@gmail.com

## GET Committee

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**From:** County Clerk  
**Sent:** Tuesday, August 27, 2019 2:29 PM  
**To:** GET Committee  
**Subject:** FW: Please settle the Lahaina Injections Wells case

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

**From:** prakashmackay@everyactioncustom.com <prakashmackay@everyactioncustom.com>  
**Sent:** Tuesday, August 27, 2019 12:05 PM  
**To:** County Clerk <County.Clerk@mauicounty.us>  
**Subject:** Please settle the Lahaina Injections Wells case

Dear Maui County Clerk Maui County Council,

I support the County seeking to settle the Lahaina Injection Well case (HAWAII WILDLIFE FUND, ET AL. V. COUNTY OF MAUI, RELATING TO THE CLEAN WATER ACT) as per CC 19-225,

The County of Maui should not be spending money attempting to gut the Clean Water Act. Instead, the money should be spent ensuring no pollutants reach the ocean from our wastewater facilities.

Sincerely,  
Prakash Mackay  
57 Poko Way Haiku, HI 96708-6042  
prakashmackay@gmail.com

## GET Committee

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**From:** County Clerk  
**Sent:** Tuesday, August 27, 2019 2:28 PM  
**To:** GET Committee  
**Subject:** FW: Please settle the Lahaina Injections Wells case

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

From: junshinbusiness729@everyactioncustom.com  
<junshinbusiness729@everyactioncustom.com>  
Sent: Tuesday, August 27, 2019 2:10 PM  
To: County Clerk <County.Clerk@mauicounty.us>  
Subject: Please settle the Lahaina Injections Wells case

Dear Maui County Clerk Maui County Council,

I support the County seeking to settle the Lahaina Injection Well case (HAWAII WILDLIFE FUND, ET AL. V. COUNTY OF MAUI, RELATING TO THE CLEAN WATER ACT) as per CC 19-225,

The County of Maui should not be spending money attempting to gut the Clean Water Act. Instead, the money should be spent ensuring no pollutants reach the ocean from our wastewater facilities.

Sincerely,  
Jun Shin  
1561 Kanunu St Honolulu, HI 96814-3245  
junshinbusiness729@gmail.com

## GET Committee

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**From:** County Clerk  
**Sent:** Tuesday, August 27, 2019 10:49 AM  
**To:** GET Committee  
**Subject:** FW: Please settle the Lahaina Injections Wells case

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

**From:** mfsm819@everyactioncustom.com <mfsm819@everyactioncustom.com>  
**Sent:** Tuesday, August 27, 2019 10:28 AM  
**To:** County Clerk <County.Clerk@mauicounty.us>  
**Subject:** Please settle the Lahaina Injections Wells case

Dear Maui County Clerk Maui County Council,

Dear Council,

I support the County seeking to settle the Lahaina Injection Well case (HAWAII WILDLIFE FUND, ET AL. V. COUNTY OF MAUI, RELATING TO THE CLEAN WATER ACT) as per CC 19-225,

The County of Maui should not be spending money attempting to gut the Clean Water Act. Instead, the money should be spent ensuring no pollutants reach the ocean from our wastewater facilities.

sincerely,  
Mary Santa Maria

Sincerely,  
Mary Santa Maria  
211 Ulana St Makawao, HI 96768-8034  
mfsm819@hotmail.com

## GET Committee

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**From:** County Clerk  
**Sent:** Tuesday, August 27, 2019 10:20 AM  
**To:** GET Committee  
**Subject:** FW: Please settle the Lahaina Injections Wells case

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

**From:** jandcmax@everyactioncustom.com <jandcmax@everyactioncustom.com>  
**Sent:** Monday, August 26, 2019 7:46 PM  
**To:** County Clerk <County.Clerk@mauicounty.us>  
**Subject:** Please settle the Lahaina Injections Wells case

Dear Maui County Clerk Maui County Council,

I support the County seeking to settle the Lahaina Injection Well case. We do not want Maui to forever be associated with the nation's worst polluters. Just look at the entities that Maui will be associated with. Let's work together to protect our reefs, the reef ecosystem and tourism.

Sincerely,  
Jim Maxwell  
213 Omalu Pl Lahaina, HI 96761-8774  
jandcmax@gmail.com

## GET Committee

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**From:** County Clerk  
**Sent:** Tuesday, August 27, 2019 10:20 AM  
**To:** GET Committee  
**Subject:** FW: Please settle the Lahaina Injections Wells case

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

**From:** carletta@everyactioncustom.com <carletta@everyactioncustom.com>  
**Sent:** Monday, August 26, 2019 9:11 PM  
**To:** County Clerk <County.Clerk@mauicounty.us>  
**Subject:** Please settle the Lahaina Injections Wells case

Dear Maui County Clerk Maui County Council,

I support the County seeking to settle the Lahaina Injection Well case (HAWAII WILDLIFE FUND, ET AL. V. COUNTY OF MAUI, RELATING TO THE CLEAN WATER ACT) as per CC 19-225,

The County of Maui should not be spending money attempting to gut the Clean Water Act. Instead, the money should be spent ensuring no pollutants reach the ocean from our wastewater facilities.

Sincerely,  
Charles Carletta  
51 Mano Dr Kula, HI 96790-8525  
carletta@hawaii.edu



## GET Committee

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**From:** County Clerk  
**Sent:** Tuesday, August 27, 2019 10:20 AM  
**To:** GET Committee  
**Subject:** FW: Please settle the Lahaina Injections Wells case

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

**From:** emi.soga@everyactioncustom.com <emi.soga@everyactioncustom.com>  
**Sent:** Tuesday, August 27, 2019 2:21 AM  
**To:** County Clerk <County.Clerk@mauicounty.us>  
**Subject:** Please settle the Lahaina Injections Wells case

Dear Maui County Clerk Maui County Council,

I support the County seeking to settle the Lahaina Injection Well case (HAWAII WILDLIFE FUND, ET AL. V. COUNTY OF MAUI, RELATING TO THE CLEAN WATER ACT) as per CC 19-225,

The County of Maui should not be spending money attempting to gut the Clean Water Act. Instead, the money should be spent ensuring no pollutants reach the ocean from our wastewater facilities.

We all depend on the same waters to live. Please represent our interest in our health.

Sincerely,  
Emi Soga  
32 -1511 Maluhia Rd Ninole, HI 96773  
emi.soga@gmail.com

## GET Committee

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**From:** County Clerk  
**Sent:** Tuesday, August 27, 2019 10:20 AM  
**To:** GET Committee  
**Subject:** FW: Please settle the Lahaina Injections Wells case

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

From: kosherkimchee@everyactioncustom.com <kosherkimchee@everyactioncustom.com>  
Sent: Tuesday, August 27, 2019 7:24 AM  
To: County Clerk <County.Clerk@mauicounty.us>  
Subject: Please settle the Lahaina Injections Wells case

Dear Maui County Clerk Maui County Council,

I support the County seeking to settle the Lahaina Injection Well case (HAWAII WILDLIFE FUND, ET AL. V. COUNTY OF MAUI, RELATING TO THE CLEAN WATER ACT) as per CC 19-225,

The County of Maui should not be spending money attempting to gut the Clean Water Act. Instead, the money should be spent ensuring no pollutants reach the ocean from our wastewater facilities.

Sincerely,  
Koohan Paik  
PO Box 5133 Honokaa, HI 96727-5133  
kosherkimchee@yahoo.com

## GET Committee

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**From:** County Clerk  
**Sent:** Tuesday, August 27, 2019 10:20 AM  
**To:** GET Committee  
**Subject:** FW: Please settle the Lahaina Injections Wells case

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

**From:** andreea.o.petric@everyactioncustom.com <andreea.o.petric@everyactioncustom.com>  
**Sent:** Tuesday, August 27, 2019 8:43 AM  
**To:** County Clerk <County.Clerk@mauicounty.us>  
**Subject:** Please settle the Lahaina Injections Wells case

Dear Maui County Clerk Maui County Council,

I support the County seeking to settle the Lahaina Injection Well case (HAWAII WILDLIFE FUND, ET AL. V. COUNTY OF MAUI, RELATING TO THE CLEAN WATER ACT) as per CC 19-225,

The County of Maui should not be spending money attempting to gut the Clean Water Act. Instead, the money should be spent ensuring no pollutants reach the ocean from our wastewater facilities.

Sincerely,  
Andreea Petric  
68 -1768 Laie Pl Waikoloa, HI 96738-5510 andreea.o.petric@gmail.com

## GET Committee

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**From:** E. John List <ejlist@flowscience.com>  
**Sent:** Tuesday, August 27, 2019 12:35 PM  
**To:** GET Committee  
**Cc:** Kelly King; Keani N. Rawlins; Tasha A. Kama; Riki Hokama; Alice L. Lee; Mike J. Molina; Tamara A. Paltin; Shane M. Sinenci; Yukilei Sugimura  
**Subject:** Testimony Regarding Lahaina Wastewater Reclamation Facility (GET-26)  
**Attachments:** TESTIMONY EJL AUGUST 29.pdf

Please find attached a copy of testimony that I respectfully request to be considered by the GETS committee.

E John List, Ph D, P.E.  
Principal Consultant  
Flow Science Incorporated  
202 South Lake Avenue, Suite 294  
Pasadena, CA 91101  
Tel : 626 233 6014  
[www.flowscience.com](http://www.flowscience.com)

**Flow Science Incorporated**

202 S. Lake Avenue, Suite 294, Pasadena, CA 91101

(626) 304-1134 • FAX (626) 304-9427



**MEMORANDUM**

**Date:** August 29, 2019

**Re:** Hawaii Wildlife Fund et al. v. County of Maui, GET-26

**To:** Committee Chair Mike Molina  
Members of the Governance, Ethics, and Transparency Committee

[GET.committee@mauicounty.us](mailto:GET.committee@mauicounty.us)  
[Kelly.King@mauicounty.us](mailto:Kelly.King@mauicounty.us), Council Chair  
[Keani.Rawlins@mauicounty.us](mailto:Keani.Rawlins@mauicounty.us), Council Vice-Chair  
[Tasha.Kama@mauicounty.us](mailto:Tasha.Kama@mauicounty.us), Presiding Officer Pro Tempore  
[Riki.Hokama@mauicounty.us](mailto:Riki.Hokama@mauicounty.us), Councilmember  
[Alice.Lee@mauicounty.us](mailto:Alice.Lee@mauicounty.us), Councilmember  
[Mike.Molina@mauicounty.us](mailto:Mike.Molina@mauicounty.us), Councilmember  
[Tamara.Paltin@mauicounty.us](mailto:Tamara.Paltin@mauicounty.us), Councilmember  
[Shane.Sinenci@mauicounty.us](mailto:Shane.Sinenci@mauicounty.us), Councilmember  
[Yukilei.Sugimura@mauicounty.us](mailto:Yukilei.Sugimura@mauicounty.us), Councilmember

**From:** John List, Ph.D., P.E.  
Principal Consultant

**Subject:** Testimony Regarding the Ramifications of NPDES Permitting of Groundwater Flows

I was retained by the County of Maui as an expert witness and to analyze and evaluate NPDES permit issues when the *Hawaii Wildlife Fund, et al. v. County of Maui* matter was pending in the district court. I am providing this testimony to explain the ramifications of NPDES permitting of groundwater containing treated effluent and other pollutants that flows to the ocean, which is the issue, now before the United States Supreme Court.

**CREDENTIALS**

I have 57 years of academic and professional experience analyzing the fate and transport of contaminants and tracers in the water environment, including rivers, lakes, groundwater and the coastal ocean. I have a Bachelor of Engineering degree with First Class Honors from the University of Auckland (1961), a Bachelor of Science degree in Mathematics from the University of Auckland (1962), a Master of Engineering degree in Civil Engineering from the University of Auckland (1962), and a Ph.D. in Applied Mechanics and Mathematics from the California Institute of Technology ("Caltech") (1965). Prior to joining the faculty at Caltech as an Assistant Professor in 1969, I spent three years as a lecturer and senior lecturer at the University of Auckland. From 1978 until 1997, I was a Professor of Environmental Engineering Science at Caltech. From



1980 until 1985, I was the Executive Officer for the Environmental Engineering Science Graduate Program at Caltech.

I am the co-author of the texts *Mixing in Inland and Coastal Waters* (Academic Press, 1979), *Turbulent Buoyant Jets and Plumes* (Pergamon Press, 1983), and the award-winning *Handbook of Groundwater Development* (Wiley, 1990). Additionally, I have authored or co-authored nearly 60 peer-reviewed publications, most of which relate to contaminant fate and transport in the environment. For six years (1984-1989) I was the chief editor of the American Society of Civil Engineers' *Journal of Hydraulic Engineering*, the Society's principal publication for matters relating to fate and transport of tracers and contaminants.

I founded the consulting engineering company Flow Science Incorporated in 1983 and have been its Principal Consultant since 1997. I have consulted on over 200 NPDES permits for industry and municipalities, more than 30 of which have involved discharges to coastal waters or the ocean.

### **TESTIMONY**

The *Hawaii Wildlife Fund, et al. v. County of Maui* lawsuit claims that the County of Maui is in violation of the Clean Water Act (CWA), because it does not have a National Pollution Discharge Elimination System (NPDES) permit for the operation of its underground injection control wells at the Lahaina Wastewater Reclamation Facility (LWRF). The County has never been required to have such an NPDES permit because these wells were permitted under the Underground Injection Control (UIC) regulations established under the federal and state Safe Drinking Water Acts.

The CWA requires an NPDES permit for discrete single point discharges to the waters of the United States (known as navigable waters), and such permits are in place for the ocean discharges that I have been associated with in Hawaii (Kauai Island Utility Cooperative, Barber's Point Refinery and East Honolulu Wastewater Treatment Plant). In these cases, there is a clear and identifiable single point of discharge to the ocean and application of the NPDES permitting requirements is appropriate. To obtain such a permit, the applicant must identify the GPS coordinates, the volume and the pollutant characteristics at the point of discharge to the ocean, and perform a dilution study around the point of discharge to show that water quality standards are not violated. I know of no circumstance in which groundwater flow containing a myriad of pollutants from various releases has previously been required to obtain an NPDES permit.

To understand the inappropriateness of the claim that an NPDES permit is required for releases to groundwater that flow to navigable water, it is necessary to realize the fact that all groundwater on an island that is not removed by production wells, or evaporates, must ultimately enter the ocean. If it did not, the island would become waterlogged. So every facility that adds water with pollutants to the groundwater flow, such as septic tanks, cesspools, storm water storage reservoirs, rain gardens, unlined canals, UIC wells and water bank wells will add flow to the groundwater that will ultimately be released to



the ocean, or an adjacent stream. Taken to the extreme, this logic could require NPDES permitting for any additions of potential pollutants to the groundwater flow. At a minimum, sources close to the coast that add pollutants to groundwater, such as cesspools, septic systems, storm water retention basins and golf courses using recycled water, would require identification of where groundwater enters the ocean or adjacent surface water stream, and a dilution study to determine that the discharge did not violate water quality standards in the receiving water, a clearly impossible burden. The only reasonable approach is to control the quality of the water that is added to the groundwater flow, which is what the UIC well permitting process accomplishes.

In most cases on an island it would be extremely difficult, if not nearly impossible, to determine the actual point of entry to navigable water of a specific groundwater flow. It should be noted that two EPA-funded tracer dye studies were completed for the LWRF. The first, in 1993, could not identify where the treated effluent entered the ocean. The second, undertaken in 2011, concluded that, although some of the treated effluent came out through transient seeps in the ocean floor nearshore, a vast majority of it entered as diffuse flow—possibly further offshore and not accounted for in the Study. So the Tracer Study did not identify the location of the total flow of treated effluent into the ocean from wells 3 and 4. Moreover, the point(s) where flow from wells 1 and 2 enter the ocean has never been identified. Modeling of well 2 with both wells 3 and 4 operating estimates that treated effluent from these three wells comes out along a two mile stretch of coastline. The entry points to the ocean will change depending upon what wells are operating.

Additionally, the treated effluent injected into the wells does not have the same chemical properties as the treated effluent entering the ocean. Chemical modifications, such as increasing phosphorous, magnesium, chloride and sulfate concentrations, and decreasing total nitrogen and nitrate concentrations, occur as the treated effluent travels with groundwater. Because the treated effluent mixes with other pollutant sources, such as from agricultural operations and cesspools, as it moves toward the ocean, it is extremely difficult to distinguish pollutants from different sources as the groundwater/effluent mixture enters the ocean. As shown by the UH shoreline groundwater pollution study on Hawaii, which concluded “.... data from different [pollution] indicators were not always in agreement with one another on the intensity and location of sewage pollution.” Thus, should the County be required to obtain an NPDES permit, it will end up being responsible for compliance with permit limits and conditions for pollutants outside of its control.

To summarize, if the Ninth Circuit ruling prevails, it is likely that operations along the coast that add pollutants to groundwater that enters navigable waters will be required to obtain an NPDES permit. There were almost 88,000 cesspools in operation in the Hawaiian Islands in 2009 and more than 12,000 on Maui alone, releasing untreated sewage as much as three times the volume of treated effluent from the LWRF. Each of these will, under the ruling, likely require a specific identification of the point of discharge to the navigable waters and the development of a dilution analysis to prove that the water quality standards in navigable waters are not being violated, a clearly



impossible burden. The appropriate approach is to control the quality of the water that enters the ground and not try and predict where it enters the ocean and what it will be when it arrives there, which is what NPDES permits require.