

From: [Anne A](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] opposed to BLNR agenda item C1
Date: Monday, July 10, 2023 8:26:15 PM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

This is an insane agenda that is probably to justify a bioweapons lab in Hawaii with gain of function research to the benefit of Big Tech/Gates/Alphabet Corp. that are also interested in vaccines. Think about it!!! Mosquitos to deliver vaccines directly. And there is no liability for a vaccine. Then Big Pharma will have "emergency use" products that are even more toxic. Lots of money to be made at expense of the land and the people!!!! There is no data that these mosquitoes could even "save" the birds. And there will be active females that can reproduce and be a vector to carry human diseases. Please do not rush to roll out a half-baked dangerous plan.

Anne Allison, Maui Resident

From: [Barbara Bogorad](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Illegal Mosquito release.
Date: Wednesday, July 12, 2023 9:50:29 AM

Aloha.

My name is Barbara Bogorad. I have lived on Maui for 48 years. My children and grandchildren were born here. Presently I live on six acres in Hana that my son, J. Mitchnick, owns.

I strongly object to releasing anymore modified mosquitoes on Maui.

The clandestine way this has happened is very upsetting. Had I not seen a notice on the bulletin board at Hasagawas I would never have known. Since then I have spoken to many people in the community where it seems nobody is aware of this experiment.

I will be doing my best to inform and educate the community.

I have spoken to no one who agrees with the sneaky way this has been done.

Once you release the females, who slip through the sifting process, they will be exponentially a part of our ecology.

Please respect the will of the people.

Sincerely, Barbara Bogorad

From: [Sarabeth Rings](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Testimony stop mosquito
Date: Thursday, July 13, 2023 7:19:22 AM

Aloha,

I live in Kipahulu and just heard today about the deadline for testimony. I am very strongly opposed to releasing this new mosquito on Maui. There is not enough evidence to prove it will not create more problems. The track record for dealing biological co-trips in Hawaii is horrible. And doing this with a mosquito- makes me very sad. Stop experimenting on us! I am a human and I deserve to be treated with consent and respect. I do not feel honored at all and am sick by the decision to release this mosquito!
Do NOT release the mosquito!!!!!!!!!!!!!!

Stop now!!!

Mahalo!

Sarabeth Bozo land & business owner from Kipahulu.

From: [Doris Buckley](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] No new mosquitoes in Hawaii
Date: Wednesday, July 12, 2023 8:10:41 AM

To whom it concerns,

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Doris Buckley
hanadobuckle@gmail.com

**Testimony of The Nature Conservancy
In Support of Agenda Item C-1, "Request for Approval of a Management Plan for the
Kīpahulu State Forest Reserve"**

**Hawai'i Board of Land and Natural Resources
July 14, 2023, 9:15 AM
Kalanimoku Building, 1151 Punchbowl St., Room 132 and via Teleconference**

Aloha Chair Chang and Board Members:

The Nature Conservancy (TNC) of Hawai'i and Palmyra **supports** the Hawai'i Department of Land and Natural Resources' (DLNR) proposed management plan for the Kīpahulu State Forest Reserve. **We ask the Board to approve the management plan.**

The Nature Conservancy (TNC) is a global non-profit organization dedicated to the preservation of the lands and waters upon which all life depends. TNC has helped protect more than 200,000 acres of natural lands in Hawai'i, including the Waikamoi Preserve on the slopes of Haleakalā.

TNC supports the Management Plan for the Kīpahulu State Forest Reserve submitted by the State of Hawai'i Department of Land and Natural Resources Division of Forestry and Wildlife. Management plans are an important tool that act as guiding documents for important management work and help agencies prioritize strategies and actions, obtain funding and require accountability. Because Kīpahulu Forest Reserve contains important watershed resources, and endangered plants and animals alongside multi-use mandates a management plan will act as a guiding document for conservation of these vital natural resources.

Forest management plays a key role in providing fresh water for communities, providing habitat for endangered and native species, and sequestering carbon that contributes to climate change, among many other benefits. The proposed plan will help DLNR and partners, such as the Leeward Haleakalā Watershed Restoration Partnership, to make progress on these and other goals to ensure the region is resilient for generations to come.

Mahalo for your support and stewardship of Hawai'i's natural resources.

The Nature Conservancy of Hawai'i and Palmyra is a non-profit organization dedicated to the preservation of the lands and waters upon which all life depends. The Conservancy has helped protect more than 200,000 acres of natural lands in Hawai'i and Palmyra Atoll. We manage 40,000 acres in 13 nature preserves and work in over 50 coastal communities to help protect and restore the nearshore reefs and fisheries of the main Hawaiian Islands. We forge partnerships with government, private parties, and communities to protect forests and coral reefs for their ecological values and for the many benefits they provide to people.

BOARD OF TRUSTEES

Duke E. Ah Moo Paul D. Alston Kris Billeter Dr. C. Tana Burkert Anne S. Carter (Chair) Ka'iulani de Silva Dave Eadie
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Founders: Samuel A. Cooke Herbert C. Cornuelle

From: [George Chyz](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] BLNR's 7/14/23 agenda item C1
Date: Monday, July 10, 2023 10:26:15 PM

Aloha,

The following is my written testimony for the BLNR's 7/14/23 agenda item C1.DOF AW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve.

This so called plan seems like Dr. Evil cooked it up. Who in their right mind would release millions of mosquitos anywhere for anything other than to cause harm to animals. Mosquitos are literally blood suckers! Furthermore, they are world famous for transmitting deadly diseases. While there are numerous mosquitos already present on Maui, we definitely don't need more.

When it comes to the claim that these scientists know what they are doing, I would point out that scientists have been wrong countless times. I have a masters of science from MIT and I've seen the number of changes to fundamental theories in biology and physics increase during the last century. It actually seems that we are becoming less confident rather than more certain.

If these planners were real scientists they would have conducted sufficient experiments to prove their theories on uninhabited islands but they haven't conducted those sensible experiments. Please stop these mad scientists, don't allow them to experiment on Maui where we will become their test animals. What if this uncontrolled experiment brings malaria and dengue fever to Maui? What will happen to the tourist industry? What will happen to you, your family and your neighbors? Why aren't the people who are proposing this insanity being put in prison for terrorism? How can you even take them seriously?

Stop this unjustified adventure into the unknown now! Pull the plug!!!

George W Chyz MSME MIT 1985'
213 Hoolawa Rd.
Haiku, HI 96708

From: [Rebecca Corby](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] opposed to the BLNR's 7/14/23
Date: Monday, July 10, 2023 7:08:28 PM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Kīpahulu has a complicated history with at least one agency partner in the lab-infected mosquito release plan. In the 1970s, The Nature Conservancy (TNC) purchased lands in the area that were said to not have clear claim or titles. According to a 2016 article in [The Progressive](#) magazine, "The group then donated this land to the Haleakalā National Park. In one transaction, natives lost their historic lands because they lacked the proper paperwork. Not a good start for the conservancy in the Hawaiian community." With East Maui vocally opposing the use of these ancestral lands to conduct experimental mosquito releases that put the community at risk, it seems TNC is once again at odds with doing what is pono.

Thank you,
Rebecca Corby, 17 year Hawaii Resident

From: [Joyclynn Costa](#)
To: [DLNR.BLNR.Testimony](#)
Cc: jkalai.kauihou@gmail.com; faith@planetserver.com
Subject: [EXTERNAL] Lab Infected Mosquito in East Maui
Date: Wednesday, July 12, 2023 1:10:07 PM

My name is Joyclynn Costa. I live on Maui and my genealogy descends from the east end. My children and grandchildren currently reside in Nahiku. I am a representative of Hamakualoa Aha Moku. Today I am coming to represent my ohana and the interest vested in me to speak out and protect the integrity of our place. I am opposed to the release of artificial means to cure a natural issue. We have had our share of infestation of mosquitos and still do. The more devastating time that comes to mind is when the dengue fever hit the east end of Maui. The community spoke out to open all of the ditches and flush the stagnant ponds to rid the larva that contributed to the mosquito population. We were met with no response. I believe that would be a more organic and practical cure. The other is the irradiation of the prawns in our fresh water eco system. It is destroying the natural habitat that would create the balance of the population by feeding on the larva in our streams. As far as I know prawns do not feed on the larva but instead the population of native species that do. Again I would like to reiterate I am opposed to the release of the lab mosquito and caution as well as question who will be liable when harm comes to our community. Please be sure to provide the answer to this question during your deliberation. No one who promotes and/or approves this action to move forward, should be allowed an exemption of cause to injury. Mahalo
Joyclynn Costa

Sent from [Mail](#) for Windows

From: [Scott Crawford](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Support for C.1. approval of a Management Plan for the Kīpahulu State Forest Reserve
Date: Tuesday, July 11, 2023 7:33:43 AM

Aloha,

I am writing as an individual resident of Hana to express my support for the approval of a Management Plan for the Kīpahulu State Forest Reserve, to the extent that it relates to the release of incompatible mosquito populations to control avian malaria and help protect our native birds from extinction.

I believe that those who are opposed to this project have been spreading a lot of misinformation about it, and generating some community opposition. But there are many people in East Maui who do support this project. Anyone can file a lawsuit, and the courts will decide whether the lawsuit has any merit, but in the meantime the implementation of the plan that has received approval via an Environmental Assessment should not be delayed pending court action. Let the courts sort that out, and please proceed to approve the Management Plan.

Mahalo,
Scott Crawford
PO Box 645
Hana HI 96713

From: [Lisa darcy](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] jkalai.kauihou@gmail.com; faith@planetserver.com
Date: Wednesday, July 12, 2023 1:31:49 PM

Aloha All,

My name is Lisa Darcy. I live on Maui and recently learned of the intention to release mosquitos to counteract a condition in the Hana area. I respectfully oppose at this time the release of the lab mosquito. Without proper education, it is difficult to follow this process. Harm and protection to the Hana community is harm and protection to all the communities. It is required for every community who is affected to be included in the education and possible help and harm of such a process. Please be sure to provide the answer to this question during your deliberation. No one who promotes and/or approves this action to move forward, should be allowed an exemption of cause to injury. Moving forward with the support of community is necessary.

Mahalo,

Lisa Seikai Darcy
Maui County registered resident

From: [Jamie Ferge](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Opposition of BLNR July 14, 2023 Agenda C1. DOFAW Mosquito Release
Date: Thursday, July 13, 2023 8:57:29 AM

I OPPOSE the BLNR's July 14, 2023 Agenda Item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of Wolbachia lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina.

Wolbachia bacteria can be transmitted to parasites that could play a major in transmitting other viruses to humans. Thorough environmental/health studies need to be done before releasing any mosquitoes!!

In 2021 mosquitoes were released in Florida and Texas and now the CDC has issued an alert of cases of Malaria in both Texas and Florida. We don't want East Maui and all of Hawaii to have health alerts like the above to be issued here or native birds and wildlife be impacted by these mosquitoes..

This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement.

No further actions should be taken to release the Wolbachia infected mosquitoes until this case is settled and EIS is completed and risks have been exposed.

Please STOP the release and take into consideration the damage that these mosquitoes will do. Listen to the people of Maui!!

Jamie Ferge
Makawao, Hawaii

From: [Carol T. Friedman](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Opposed to mosquito experiment
Date: Tuesday, July 11, 2023 2:27:34 PM

Aloha,

My name is Carol Friedman and I am a Hana resident. I am opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that may be a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes as long as the need for further study of the risks is being litigated.

Please submit this statement as testimony.

Thank you.

Carol Friedman
P.O. Box 14
Hana, Hawaii
96713

From: [Susan](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Against Release of lab-infected mosquitos
Date: Monday, July 10, 2023 5:11:23 PM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Susan. Hansen

From: [Cheryl Hendrickson](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Agenda item C1 7/14/23 BLNR meeting
Date: Tuesday, July 11, 2023 9:09:44 AM

Aloha-

I am opposed to the BLNR agenda item C1 for the July 14, 2023 meeting. DOFAW's request for approval of a management plan for Kipahulu State Forest Reserve. The planned release of millions of lab-infected mosquitos will have unintended consequences to native birds, wildlife, public health and to the forest ecosystem.

To approve this without a Environmental Impact Statement is irresponsible. Litigation is underway and no further action should be taken to release bio-pesticide mosquitos without more research to confirm safety to our communities and the forest ecosystems.

Mahalo,
Cheryl Hendrickson
Haiku resident

From: [Rachel Hildebrandt](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Stop the release of mosquitoes on Maui
Date: Wednesday, July 12, 2023 6:44:48 AM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve.

From: [Robbin Hill](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Stop the Bioweapons. Video Testimony C1. DOFAW
Date: Wednesday, July 12, 2023 5:36:18 AM

As Co-Founder of Save Earth One Movement we are formally vehemently opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina.

In addition, we are very concerned that a PR campaign to release Weapons of Mass Destruction (See DARPA's own documents as well as Russian and Bulgarian militaries information on the WMDs in the form of genetically modified "mosquitos.") has approved and instituted on the Nation of Hawaii; including but not limited to, the "undue influence" indoctrination of young school children into the "birds not bugs" public untruth campaign and on taxpayers time and dollars.

In addition the language and patents obtained from the US government clearly state a guideline for purposeful human infection, and with the same patents and technology that was created for the sole purpose of warfare as a mass and multi-use weapon on the food supply and human populations.

I would like to formally testify and this time, DLNR, please make sure I am able to as the last meeting I was blocked from speaking truth on the record.

Mahalo,
Robbin Leigh Hill

From: [Pauahi Hookano](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Opposing release of mosquitos
Date: Wednesday, July 12, 2023 9:59:39 AM

blnr.testimony@hawaii.gov

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

From science online magazine, (Loreto, Wallau 2016):

The consequences of wolbachia host shift
To native species are for now
unpredictable. Arthropods present
complex and poorly understood
ecological relationships and alterations
in reproductive parameters of nontarget
species can generate ecological
disturbances.

<https://doi.org/10.1126/science.351.6279.1273-b>

Mahalo,
L. Pauahi Hookano

#AoleWolbachiaMosquito #NoWolbachiaMosquito #NoBioPesticides

From: [Shasi Love](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] DOWAW Request for approval of a Management plan for the Kipahulu State Forest Reserve
Date: Thursday, July 13, 2023 6:42:26 AM

Aloha,

I greatly oppose the BLNR's 07/14/23 agenda item C1.

There is ZERO evidence of what the impacts would be on our natural resources, land, people and wildlife once the lab injected mosquitoes are released into our environment.

This could have the most devastating effects. Therefore, I stand greatly opposed to the release of any lab injected mosquitoes.

We have yet to see an environmental impact statement.

Mahalo,

Natasha Inaba

July 12, 2023

Dawn N.S. Chang, Chairperson
Department of Land and Natural Resources
Board of Land and Natural Resources
POB 621
Honolulu, HI. 96809

**RE: Agenda Item C1 - Division of Forestry and Wildlife
Request for approval of a Management Plan for the Kīpahulu State Forest
Reserve, Tax Map Keys: (2) 1-7-004:006, (2) 1-6-001:005 portion, (2) 1-6-001-008,
and (2) 1-6-001:009, Kaupō, Hāna, Maui.**

Aloha Chair Chang and members of the Board of Land and Natural Resources,

I am a lifelong resident of Hāna, Maui. I am writing this because I am **opposed** to BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Aloha,



Mapuana Kalaniopio-Cook
Hāna, Maui, Hawai'i

From: [ALOHA Festival](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Opposing to the BLNR's 7/14/23 agenda item C1. DOFAW
Date: Monday, July 10, 2023 7:47:37 PM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Kīpahulu has a complicated history with at least one agency partner in the lab-infected mosquito release plan. In the 1970s, The Nature Conservancy (TNC) purchased lands in the area that were said to not have clear claim or titles. According to a 2016 article in [The Progressive](#) magazine, "The group then donated this land to the Haleakalā National Park. In one transaction, natives lost their historic lands because they lacked the proper paperwork. Not a good start for the conservancy in the Hawaiian community." With East Maui vocally opposing the use of these ancestral lands to conduct experimental mosquito releases that put the community at risk!

NO MORE mosquitoes !

--

BE THE PEACE YOU WANT TO SEE

[ALOHA Kauai Yoga & Peace Festival](#)

From: [Mary L Keller](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] opposition to mosquito release
Date: Wednesday, July 12, 2023 9:39:06 AM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. This idea is badly researched with possible very undesirable and unplanned outcomes. The mosquitos to be released are capable of spreading malaria and there seems to be more possilbe bad reulst than good. Please do not go through with this terrible idea until more research has been done and analyzed.

Sincerely,
Mary Keller
41 Meha Place
Paia, HI 96779

From: [Arnie Kotler](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Opposed to Mosquito Control Plan for Kīpahulu State Forest Reserve
Date: Tuesday, July 11, 2023 12:43:18 PM

To Whom It May Concern:

I am opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that may be a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes as long as the need for further study of the risks is being litigated.

Aloha,
Arnie Kotler
Maui Resident (former Hāna Resident)

From: [Luanne Lecker](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Aloha I'm a resident of Eastmaui and I oppose BLNR agenda item C1 7/14/23 for the release of lab infected wolbachia mosquito over Eastmaui. This project should not take place anywhere on our Hawaiian Islands without a full Environment impac...
Date: Wednesday, July 12, 2023 6:41:30 PM

Sent from my iPhone

From: [Lucille Lecker](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Testimony Letter OPPOSING Wolbachia mosquito
Date: Wednesday, July 12, 2023 2:08:14 PM

Aloha , BLNR

This is a very sensitive topic that is presented before you. As a born and raised resident of Eastmaui living in Kipahulu i am strongly OPPOSED to agenda item C1. The release of lab-infected mosquitoes.

As i took a moment to close my eyes to picture myself being surrounded by these MILLIONS of lab-infected mosquitoes flying around my ohana and community in Eastmaui. The loud sound of not just 1 but MILLIONS being released weekly as the winds shift and these mosquitoes move towards warmer climate near our homes buzzing around our ears. Can you hear it.. NOW picture these male mosquito's needle like mouths drinking the nectars of our sweet fruit and plant juice. The FACT is: that's what these male mosquitoes bite and feed off to survive . Now what happens if we eat that same sweet fruit or plant nectar? Can you see that image?.

Can we be sure that the cases of Malaria spread in Texas and Florida is NOT from the lab-infected mosquitoes? Or these will NOT harm the human race ?

This is why I strongly OPPOSED the approval of DOFAW agenda item C1.

Thank you Broad for hearing my testimony and taking another look to gather more information before making a decision that may impact the future of this and the next generations.

Mahalo
Noe Lecker
PO Box 113
Hana, Hi 96713
noelecker@yahoo.com

Sent from Noe's iPhone

From: [leslie.lexier](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] BLNR's 7/14/23 agenda item C1
Date: Tuesday, July 11, 2023 4:40:03 PM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Leslie Lexier RN

Sent from [Mail](#) for Windows

From: [Tina Lia](#)
To: [DLNR.BLNR.Testimony](#)
Cc: [Tim Vandevveer](#)
Subject: [EXTERNAL] BLNR Meeting 7/14/23 9:15am Testimony Agenda Item C1: Oppose
Date: Wednesday, July 12, 2023 6:19:26 PM
Attachments: [2023_0508_Hawaii_Unites_and_Lia_v_BLNR_and_DLNR.pdf](#)

RE: C. DIVISION OF FORESTRY AND WILDLIFE 1. Request for approval of a Management Plan for the Kīpahulu State Forest Reserve, Tax Map Keys: (2) 1-7-004:006, (2) 1-6-001:005 portion, (2) 1-6-001:008, and (2) 1-6-001:009, Kaupō, Hana, Maui.

Hawaii Unites is opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Aloha,
Tina Lia
Founder and President
Hawaii Unites
HawaiiUnites.org
(808) 298-6335
tinalia@live.com

MARGARET WILLE & ASSOCIATES LLLC
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MW: (808) 854-6931
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mw@mwlawhawaii.com
tim@mwlawhawaii.com

Attorneys for Plaintiffs
Hawaii Unites and Tina Lia

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FIRST CIRCUIT
1CCV-23-0000594
08-MAY-2023
03:54 PM
Dkt. 1 CMP

IN THE CIRCUIT COURT OF THE FIRST CIRCUIT

STATE OF HAWAII

HAWAII UNITES, a 501(c)(3) nonprofit
corporation; Tina Lia, an individual,

Plaintiffs,

v.

BOARD OF LAND AND NATURAL
RESOURCES, STATE OF HAWAII, and
DEPARTMENT OF LAND AND
NATURAL RESOURCES, STATE OF
HAWAII,

Defendants.

Civil No.
(Environmental Court)

**COMPLAINT FOR DECLARATORY
AND INJUNCTIVE RELIEF;
EXHIBITS "A" - "C"**

COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF

Plaintiffs Hawaii Unites, a 501(c)(3) corporation (“Hawaii Unites”), and Tina Lia, an individual (“Lia”) (collectively, “Plaintiffs”), by and through their attorneys, Margaret Wille & Associates LLC, complain and allege against Defendant Board of Land and Natural Resources, State of Hawai‘i (“Board” or “BLNR”) and Defendant Department of Land and Natural Resources, State of Hawai‘i (“DLNR”) (collectively, “Defendants”) as follows:

INTRODUCTION

1. This action seeks review and relief against Defendants’ violations of the Hawai‘i Environmental Policy Act (“HEPA”), Hawai‘i Revised Statutes (“HRS”) chapter 343, in failing to require an environmental impact statement (“EIS”) for the “Suppression of Invasive Mosquito Populations to Reduce Transmission of Avian Malaria to Threatened and Endangered Forest Birds on East Maui,” a multi-agency partnership project to release biopesticide mosquitoes on 64,666 acres of East Maui. The proposed action in this case is the release of up to 775,992,000 biopesticide lab-reared *Wolbachia*-bacteria-infected mosquitoes per week in the fragile ecosystems of East Maui’s Haleakalā National Park, Ko‘olau Forest Reserve, Hāna Forest Reserve, Hanawī Natural Area Reserve, Kīpahulu Forest Reserve, Makawao Forest Reserve, and Waikamoi Preserve (The Nature Conservancy); as well as in the privately managed lands of East Maui Irrigation Company, LLC; Mahi Pono; and Haleakalā Ranch over a period of “likely at least 20 years.” At the highest frequency, this could result in over 807 billion mosquitoes released in one of the most unique and fragile ecosystems in the world. *See attached Exhibit A* (map of project area for release of incompatible mosquitoes).

2. The stated purpose of the mosquito biopesticide project (“experiment”) is to save endangered native birds from avian malaria using the Incompatible Insect Technique (“IIT”) for

mosquito population control. The Final Environmental Assessment (“FEA”) states that the experiment will have no significant impact on the environment. However, documentation and studies from several sources (including government agencies) confirm that the experiment may not even work for its intended purpose and has the potential for significant environmental impacts. Further, the IIT method has never been implemented in the state of Hawai‘i, and the specific experimental technique planned for use in East Maui has never been tried before anywhere in the world. Contrary to the assertions in the FEA, the plan could actually pose serious risks to native birds, wildlife, the ‘āina, and public health.

3. Rather than follow the prescribed process and faithfully comply with HEPA’s mandate that an EIS must be prepared for any proposed action that “may” have a significant impact on the environment, the BLNR disregarded public testimony about the risks of the project, failed to adequately address conflicts of interest brought to their attention by Plaintiffs, improperly denied Plaintiffs a contested case hearing, and rushed approval of the FEA and finding of no significant impact (“FONSI”) for the proposed project, notwithstanding that the final EA dismissed public comments and concerns and disregarded and distorted its disclosure and analysis of impacts in an attempt to justify a FONSI.

4. Defendants’ failure to require an EIS for this proposed experiment violates the letter and purpose of HEPA and its implementing regulations. Moreover, the BLNR’s approval of the final EA and FONSI immediately following the Board’s improper addition to the March 24, 2023 agenda of Plaintiff Lia’s verbal request for a contested case hearing on behalf of Plaintiff Hawaii Unites and the Board’s subsequent vote to deny Plaintiffs’ request without having received or reviewed Plaintiffs’ petition for a contested case hearing, violates the letter and purpose of HEPA, as well as fundamental requirements of administrative procedure and due

process. Defendants' violations in this case nullify HEPA's fundamental purpose: to "ensure that environmental concerns are given appropriate consideration in decision making" so that "environmental consciousness is enhanced, cooperation and coordination are encouraged, and public participation during the review process benefits all parties involved and society as a whole." HRS § 343-1. Appropriate consideration and public participation have both been lacking or denied in the instant case, where the proposal involves a massive experiment with no meaningful mitigation plan in place if things don't go according to plan. It is therefore essential to have a high level of trust and confidence that the planned action has been thoroughly assessed and evaluated.

JURISDICTION AND VENUE

5. This Court has jurisdiction over this matter pursuant to HRS §§ 343-7 "Limitation of actions", 603-21.5 "General", 603-21.9 "Powers", 604A-2 "Jurisdiction", HRS chapter 632 "Declaratory Judgments", and article XI, § 9 of the Hawai'i Constitution.

6. Venue properly lies in this judicial circuit pursuant to HRS § 603-36 "Actions and proceedings, where to be brought" (5) because the claims for relief arose in this circuit and because it is the location where the Defendants are domiciled.

PARTIES

Plaintiffs

7. Plaintiff Hawaii Unites is a 501(c)(3) nonprofit organization dedicated to the conservation and protection of Hawaii's environment and natural resources. The mission of Hawaii Unites is honoring and protecting our sacred connection to the natural world. The organization has conducted extensive research into the science, data, and documentation of the biopesticide mosquito project. Hawaii Unites has raised public awareness about the project

through investigative journalism, direct outreach, public speaking, and media. The organization has become a trusted source for information about the biopesticide mosquito project and is the foremost voice of advocacy for protecting the ‘āina from potential significant impacts and for requiring an environmental impact statement.

8. The recreational, educational, aesthetic, spiritual and subsistence interests of Hawaii Unites’ officers and supporters are harmed by Defendants’ failure to ensure full and proper disclosure of the proposed project’s harmful environmental and cultural impacts and available mitigation and alternatives, because the proposed project would be allowed to move forward without candid and transparent consideration and analysis of these issues.

9. Hawaii Unites’ officers and supporters live, work, and recreate in and around East Maui. Hawaii Unites’ officers and supporters are concerned about how the proposed biopesticide mosquito project will affect their local environment and public health. A healthy environment is necessary for Hawaii Unites’ officers and supporters to live, work, and fully participate in recreational activities without harm or fear of harm to their health or the health of their children. Hawaii Unites advocates for Hawaii’s environmental laws to be faithfully followed and for local community concerns to be meaningfully included in lasting decisions directly affecting Maui’s community.

10. Hawaii Unites advocates for the rights of Native Hawaiians to practice their customary and traditional cultural practices, as they have done for generations, and to use the East Maui project area for subsistence to feed and support their families. A healthy East Maui environment is essential for Native Hawaiians to engage in subsistence activities, and to pass on cultural traditions to future generations. Clean ecosystems are critical for Native Hawaiian cultural practices. The cultural interests of Native Hawaiians are harmed by Defendants’ failure

to ensure full and proper disclosure of the proposed project's harmful environmental and cultural impacts and available mitigation and alternatives, because the proposed project would be allowed to move forward without candid and transparent consideration and analysis of these issues.

11. The rights of Hawaii Unites' officers and supporters relevant to the natural areas of the project area are protected by the Hawai'i State Constitution and state law. Hawaii Unites' officers and supporters have rights to a clean and healthful environment under article XI, section 9 of the Constitution, which mandates enforcement of these rights through appropriate legal proceedings whenever any party, public or private, makes binding decisions under "laws relating to environmental quality, including control of pollution and conservation, protection and enhancement of natural resources."

12. In 2023, Hawaii Unites launched a petition through Change.org to "Demand an Environmental Impact Statement for the Experimental Mosquito Release on Maui" which, as of March 24, 2023, had received more than 2,500 signatures. Hawaii Unites' officers and all petition signatories residing in Hawai'i, including those in East Maui, are directly affected by the actions of Defendant DLNR in proposing and determining the project of landscape-scale biopesticide mosquito releases in the project area covering 64,666 acres of East Maui, and by the actions of Defendant BLNR in approving the EA and issuing a FONSI for the project.

13. Hawaii Unites submitted written and oral testimony to the BLNR for the agenda item of the proposed biopesticide mosquito release project at both the March 10, 2023, and the March 24, 2023, BLNR meetings. This testimony documented numerous risks to Maui's environment, native birds, wildlife, and public health. Peer-reviewed studies and expert opinions were referenced, along with the multi-agency partnership's own documents. Hawaii Unites'

testimony for the March 24, 2023, BLNR meeting documented additional procedural errors, specific conflicts of interest, potential lack of permitting, failure to receive United States Environmental Protection Agency (“EPA”) approval for use of the mosquitoes, and EPA discreditation of the EA’s cited article on human health risks.

14. Plaintiff Tina Lia is the founder of Hawaii Unites and current Board President. She resides on Maui, the island where the proposed biopesticide mosquito experiment area is located, and has submitted testimony since June, 2022, to the State of Hawai‘i Department of Agriculture Board of Agriculture and the BLNR, along with providing comments on the State of Hawai‘i Department of Agriculture’s EPA Request for Exemption of Federal and State Agencies for Use of a Pesticide Under Emergency Conditions Section 18 of FIFRA Specific Exemption (“EPA Application for Emergency Exemption”), and on the draft environmental assessment (“DEA”) for the project. These testimonies and comments documented serious risks of the project and the potential for significant environmental impact. Plaintiff Lia has also attended public meetings held by project agency partners since January 2023 and has voiced questions and concerns regarding the details and the risks of the project at those meetings.

15. Plaintiff Lia, on behalf of Hawaii Unites, verbally requested a contested case hearing for agenda item C-2 “Request Approval of Final Environmental Assessment and Authorization for the Chairperson to Issue a Finding of No Significant Impact for the ‘Suppression of Invasive Mosquito populations to Reduce Transmission of Avian Malaria to Threatened and Endangered Forest Birds on East Maui’” at the BLNR March 24, 2023, meeting. The BLNR then improperly added Hawaii Unites’ request for a contested case hearing to the agenda at the March 24, 2023, meeting. Without having received or reviewed Hawaii Unites’ petition for a contested case hearing which was to be submitted to the BLNR within ten days of

the verbal request, the BLNR then voted unanimously at the March 24, 2023, meeting to deny Hawaii Unites' request for a contested case hearing, thereby denying Hawaii Unites the right to due process. The BLNR stated that there was "no basis" and that the remedy was to "sue under Chapter 343." The BLNR subsequently voted unanimously to approve the final EA and issue a FONSI for the biopesticide mosquito project at the March 24, 2023, meeting. On March 27, 2023, Hawaii Unites filed a Sunshine Law Appeal with the State of Hawai'i Office of Information Practices (OIP) requesting an investigation by the OIP into the BLNR for their violation of HRS §92-7 at their meeting on March 24, 2023.

16. On March 13, 2023, Plaintiff Lia filed a complaint on behalf of Hawaii Unites with the State of Hawai'i Office of the Ombudsman, requesting an investigation into the BLNR for interference with the public's ability to testify at the BLNR meeting on March 10, 2023. Per Tina Lia's complaint, the BLNR Secretary emailed incorrect and inoperative information for providing video testimony at the meeting. The BLNR then rearranged the agenda items at the March 10, 2023, meeting in random order with no explanation to the public waiting to testify. Testifiers for the biopesticide mosquito project agenda item were made to sit through the entire eight-hour meeting, reduce their testimony from three minutes to two minutes each, and listen to the BLNR members joking and laughing about the postponement of the biopesticide mosquito project agenda item.

17. Hawaii Unites has repeatedly presented documented, compelling evidence of the risks and impacts of the biopesticide mosquito project to the BLNR. Rather than acknowledge and address the organization's concerns, the BLNR has acted in a consistently dismissive and disruptive manner towards this testimony. The rights of Hawaii Unites, of the organization's

supporters, and of the public, to open governmental processes have been infringed upon by the BLNR in their effort to silence discussion about the risks and impacts of the project.

18. BLNR's acceptance of DLNR's final EA and FONSI unlawfully allows DLNR and its multi-agency partnership *Birds, Not Mosquitoes* ("BNM") to avoid preparing an EIS fully analyzing and disclosing the proposed project's environmental and cultural impacts as well as available mitigation and alternatives, as HEPA requires. The failure to require an EIS impairs the individual and organizational interests of Hawaii Unites' officers and supporters in using, enjoying, and protecting the ecological and cultural resources in the East Maui project area.

19. Defendants' failure to fully and properly assess the environmental impacts of the proposed biopesticide mosquito project in an EIS as HEPA requires deprives Hawaii Unites, its officers, its supporters, the broader East Maui community and general public, and approving agencies of the information and analysis that would be generated and provided through a valid HEPA process, and threatens the further actions of the proposed project without the information disclosure, community input and engagement, and analysis of environmental and cultural impacts and mitigation measures and alternatives that HEPA mandates.

Defendants

20. Defendant DLNR is responsible for managing, administering, and exercising control over the State's public lands, the water resources, ocean waters, navigable streams, coastal areas (excluding commercial harbor areas), and minerals and all other interests therein. HRS §§ 171-3.

21. Defendant BLNR is the executive board that heads DLNR. *Id.* §§ 26-15(a), 171-3(a). BLNR is charged with exercising and performing "every power and duty conferred by law

and required to be performed” by DLNR. *Id.* § 26-38; *see also id.* § 171-6 (“[T]he board of land and natural resources shall have the powers and functions granted to the heads of departments.”).

22. BLNR’s powers and duties broadly include the authority to “adopt rules”; “appoint hearing officers to conduct public hearings”; bring enforcement actions; and establish “restrictions, requirements, or conditions . . . relating to the use of particular land being disposed of, the terms of sale, lease, license, or permit, and the qualifications of any person to draw, bid, or negotiate for public land.” *Id.* § 171-6. Under HRS chapter 171, “land” is defined to include “all interests therein and natural resources including water.” *Id.* § 171-1.

23. Since 1964, the BLNR has adopted and administered land use regulations for the Conservation District pursuant to the State Land Use Law (Act 187) of 1961. Act 187 defined Conservation as meaning the protection of watersheds and water supplies; preserving scenic areas; providing park lands, wilderness and beach reserves; conserving endemic plants, fish, and wildlife; preventing floods and soil erosion; forestry; and other related activities. The Conservation District has five subzones: Protective, Limited, Resource, General and Special. The first four subzones are arranged in a hierarchy of environmental sensitivity, ranging from the most environmentally sensitive (Protective) to least sensitive (General). The Special subzones defines a unique land use on a specific site. The use of Conservation District lands is regulated by Title 13 Chapter 5 of the Hawai‘i Administrative Rules (“HAR”) and Chapter 183C of the Hawai‘i Revised Statutes. These rules and regulations identify land uses that may be allowed by discretionary permit as well as impose fines for violations. *See* HAR § 13-5; HRS § 183C.

24. The Chairperson of the DLNR has the authority to declare exempt from the preparation of an environmental assessment those department actions that are included in the DLNR exemption list when the BLNR has delegated authority to conduct those actions. In June

2022, DLNR filed an exemption notice regarding the preparation of an environmental assessment under the authority of Chapter 343, Hawai‘i Revised Statutes (HRS) and Section 11-200.1-17, HAR, to conduct limited import of male mosquitoes for preliminary transport trials and mark release recapture studies. *See* HRS § 343; HAR § 11-200.1-17.

25. BLNR is the “agency that issues an approval prior to implementation of an applicant action” for the use of state lands for the project including a Conservation District Use Permit and management plan. According to the final EA, the HRS §343-5(a) “trigger(s)” for the project include:

- (1) Propose the use of state or county lands or the use of state or county funds
- (2) Propose any use within any land classified as a conservation district

BLNR is thus the acknowledged and undisputed lead “approving agency” for this proposed biopesticide mosquito project under HEPA. Haw. Admin. R (“HAR”) § 11-200.1-2. As the “approving agency,” BLNR is responsible for determining “whether the anticipated effects constitute a significant effect” and “the need for an EIS.”¹

26. Under article XI, sections 1 and 7 of the Hawai‘i Constitution, Defendants have public trust duties to conserve and protect the state’s natural resources for present and future generations. *See Kaua‘i Springs, Inc. v. Planning Comm’n*, 133 Hawai‘i 141, 172, 324 P.3d 951, 982 (2014).

27. Under article XII, section 7 of the Hawai‘i Constitution, Defendants are “obligated to protect customary and traditional rights to the extent feasible.” *Public Access*

¹ Office of Environmental Quality Control, State of Hawai‘i, *Guide to the Implementation and Practice of the Hawaii Environmental Policy Act* 14, 16 (2004), available at https://files.hawaii.gov/dbedt/erp/OEQC_Guidance/2012-GUIDE-to-the-Implementation-and-Practice-of-the-HEPA.pdf (– last visited on May 7, 2023); *see also* HRS § 343-5(e)

Shoreline Haw. v. Haw. Planning Comm'n, 79 Hawai'i 425, 437, 903 P.2d 1246, 1258 (1995); see also *Ka Pa'akai o ka 'Āina v. Land Use Comm'n*, 94 Hawai'i 31, 35, 7 P.3d 1068, 1072 (2000).

LEGAL FRAMEWORK

28. HRS chapter 343, entitled “Environmental Impact Statements” and also known as the Hawai'i Environmental Policy Act or HEPA, is the cornerstone of Hawai'i's statutory environmental protections. The express purpose of HEPA is to “establish a system of environmental review which will ensure that environmental concerns are given appropriate consideration in decision making.” *Id.* § 343-1.

29. Process is the bedrock principle underlying HEPA. The legislature found that the environmental review process “will integrate the review of environmental concerns with existing planning processes of the State and counties and alert decision makers to significant environmental effects which may result from the implementation of certain actions.” *Id.* “[T]he process of reviewing environmental effects is desirable because environmental consciousness is enhanced, cooperation and coordination are encouraged, and public participation during the review process benefits all parties involved and society as a whole.” *Id.*

30. Timing is critical to the HEPA process. Environmental review shall occur “at the earliest practicable time,” before a proposed action may proceed to “assure an early, open forum for discussion of adverse effects and available alternatives, and that the decision-makers will be enlightened to any environmental consequences of the proposed action prior to decision-making.” HAR § 11-200.1-1(b). Environmental review documents “must be prepared early enough so that it can serve practically as an important contribution to the decision making process and will not be used to rationalize or justify decisions already made.” *Citizens for*

Protection of N. Kohala Coastline v. Cnty. of Hawai‘i, 91 Hawai‘i 94, 105, 979 P.2d 1120, 1131 (1999) (internal citation omitted).

31. HEPA applies to nine categories of actions, including those that propose the “use of state . . . lands,” or “any use within any land classified as a conservation district . . . under [HRS] chapter 205.” HRS § 343-5(a)(1), (2). Whenever any person (termed an “applicant”) proposes a covered action that requires agency approval, the approving agency “shall assess the significance of the potential impacts of the action to determine the level of environmental review necessary for the action.” HRS § 343-2; HAR § 11-200.1-14(b).

32. HEPA requires the preparation of an EIS for any action that “*may* have a significant effect on the environment.” HRS § 343-5(c) (emphasis added). The Hawai‘i Supreme Court has made clear that under the “may have a significant effect” standard, “plaintiffs need not show that significant effects will in fact occur but instead need only raise **substantial questions whether a project may have a significant effect.**” *Unite Here! Local 5 v. City & Cnty. of Honolulu*, 123 Hawai‘i 150, 178, 231 P.3d 423, 451 (2010) (internal citations omitted)(emphasis in original).

33. A “significant effect” is defined as “the sum of effects on the quality of the environment, including actions that irrevocably commit a natural resource, curtail the range of beneficial uses of the environment, are contrary to the State’s environmental policies or long-term environmental goals as established by law, or adversely affect the economic welfare, social welfare, or cultural practices of the community and State.” HRS § 343-2; *see also* HAR § 11-200.1-2.

34. In determining whether an action may have a significant impact on the environment, “the agency shall consider every phase of a proposed action, the expected impacts,

and the proposed mitigation measures.” HAR § 11-200.1-13(b). The agency must consider certain “significance criteria” outlined in HAR § 11-200.1-13. “[A]n action *shall be determined to have a significant effect on the environment if it may,*” among other factors:

- (1) Irrevocably commit a natural, cultural, or historic resource;
- (2) Curtail the range of beneficial uses of the environment;
- (3) Conflict with the State’s environmental policies or long-term environmental goals established by law;
- (4) Have a substantial adverse effect on the economic welfare, social welfare, or cultural practices of the community and State;
- (5) Have a substantial adverse effect on public health;
- (6) Involve adverse secondary impacts, such as population changes or effects on public facilities;
- (7) Involve a substantial degradation of environmental quality;
- (8) Be individually limited but cumulatively have substantial adverse effect upon the environment or involves a commitment for larger actions;
- (9) Have a substantial adverse effect on a rare, threatened, or endangered species, or its habitat;
- (10) Have a substantial adverse effect on air or water quality or ambient noise levels;
- (11) Have a substantial adverse effect on or be likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, sea level rise exposure area, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters.

(12) Have a substantial adverse effect on scenic vistas and viewplanes, during day or night, identified in county or state plans or studies; or

...

HAR § 11-200.1-13(b).

The criteria are expressly listed in the disjunctive. Thus, the existence of a single factor is sufficient to require preparation of an EIS. *See id.*

35. An EIS is “an informational document . . . which discloses the environmental effects of a proposed action, effects of a proposed action on the economic welfare, social welfare, and cultural practices of the community and State, effects of the economic activities arising out of the proposed action, measures proposed to minimize adverse effects, and alternatives to the action and their environmental effects.” HRS § 343-2. Content requirements inform the substance of an EIS and are set forth in HAR §§ 11-200.1-24, -27.

36. An EIS generally must “fully declare the environmental implications of the proposed action and shall discuss all reasonably foreseeable consequences of the action,” as well as “responsible opposing views, if any, on significant environmental issues raised by the proposal.” *Id.* § 11-200.1-24(a). An EIS must discuss “significant . . . adverse impacts,” including cumulative impacts and secondary impacts, as well as proposed mitigation measures and alternatives considered. *Id.* §§ 11-200.1-24(d)(2), (3), (4). “Impacts” may include “ecological effects (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic effects, historic effects, cultural effects, economic effects, social effects, or health effects, whether primary, secondary, or cumulative.” *Id.* § 11-200.1-2.

37. An EIS must also contain a “discussion of the alternative of no action as well as reasonable alternatives that could attain the objectives of the action,” including “a rigorous exploration and objective evaluation of the environmental impacts of all such alternative actions,” with particular attention to “alternatives that might enhance environmental quality or avoid, reduce, or minimize some or all of the adverse environmental effects, costs, and risks of the action.” *Id.* § 11-200.1-24(h).

38. An EIS shall also include analysis of the probable impact of the proposed action on the environment, including “consideration of all consequences on the environment, **including direct and indirect effects**” and “[t]he interrelationships and cumulative environmental impacts of the proposed action and other related actions.” *Id.* § 11-200.1-24(l) (**emphasis added**). The EIS shall address “all probable adverse environmental effects that cannot be avoided,” including any adverse effects such as threats to public health or “other consequences adverse to environmental goals or guidelines” and shall clearly set forth “the rationale for proceeding with a proposed action, notwithstanding unavoidable effects.” *Id.* § 11-200.1-24(o).

39. Acceptance of a required final EIS is “a condition precedent to approval of the request and commencement of the proposed action.” HRS § 343-5(e).

40. If an applicant or approving agency anticipates that a proposed action will not have a significant effect on the environment, a draft EA may be prepared and submitted for public review and comment. *See* HAR §§ 11-200.1-2 (defining draft environmental assessment); -14(d), -19. Such an EA must be prepared “at the earliest practicable time to determine whether an environmental impact statement shall be required.” HRS §§ 343-2, -5(e).

41. Alternatively, if the agency determines that an EIS is likely to be required, “the agency may authorize the applicant to choose not to prepare an environmental assessment and instead prepare an environmental impact statement.” *Id.* § 343-5(e).

42. The content requirements of an EA are far less comprehensive than that of an EIS. *Compare* HAR §§ 11-200.1-18, -21, *with id.* §§ 11-200.1-24, -27. HEPA defines an EA as “a written evaluation to determine whether an action may have a significant effect.” HRS § 343-2. Content requirements that inform the substance of an EA are set forth in HAR §§ 11-200.1-18, -21.

43. An EA generally must contain a “general description of the action’s technical, economic, social, cultural, historical, and environmental characteristics,” as well as a “summary description of the affected environment,” “identification and analysis of impacts and alternatives considered,” and “proposed mitigation measures.” *Id.* §§ 11-200.1-18(d), -21.

44. With regard to the preparation of EAs and EISs, HEPA’s implementing rules prioritize “substance of the information conveyed” rather than the particular form or length of the document. HAR § 11-200.1-1(c)(1). “EAs, and EISs are meaningless without the conscientious application of the environmental review process as a whole, and shall not be merely a self-serving recitation of benefits and a rationalization of the proposed action.” *Id.* § 11-200.1-1(c).

45. Whenever an applicant proposes an action, “the authority for requiring an EA or EIS, making a determination regarding any required EA, and accepting any required EIS shall rest with the approving agency that initially received and agreed to process the request for an approval.” *Id.* § 11-200.1-7(c); *see also* HRS § 343-5.

46. After preparing, or causing to be prepared, a final EA, reviewing any public and agency comments, and applying the significance criteria in HAR § 11-200.1-13, the approving

agency shall issue either a notice of a FONSI or an EIS preparation notice (“EISPN”). HAR § 11-200.1-22(a).

47. If the approving agency determines that a proposed action is not likely to have a significant effect, it shall issue a notice of a FONSI. *Id.* § 11-200.1-22(b). A “finding of no significant impact” is defined as “a determination based on an environmental assessment that the subject action will not have a significant effect and, therefore, will not require the preparation of an environmental impact statement.” HRS § 343-2. If, however, the approving agency determines that a proposed action “*may* have a significant effect, it *shall* issue an EISPN.” HAR § 11-200.1-22(c) (**emphasis added**); HRS § 343-5(e)(3). An EISPN is “a determination that an action may have a significant effect on the environment and, therefore, will require the preparation of an EIS.” HAR § 11-200.1-2.

48. The agency shall file notice of the agency’s determination with the office of planning and sustainable development, which, in turn, publishes the agency’s determination for the public’s information. HRS § 343-5(e). The notice “shall indicate,” among other information, the “[r]easons supporting the determination.” HAR § 11-200.1-22(e).

49. HEPA provides for judicial challenge of a determination that an EIS is not required for a proposed action within 30 days after the public has been informed of the determination. HRS § 343-7(b).

RELEVANT BACKGROUND FACTS

Natural and Cultural Significance of East Maui

50. The National Park Service (“NPS”) and DLNR identified the project area through a collaborative process, during which all public lands within much of the current and historic ranges of threatened and endangered forest birds on East Maui were evaluated for inclusion. The

project area includes areas downslope from many birds' current ranges that may serve as high-density mosquito breeding grounds from which mosquitoes may move upward in elevation into native forest bird habitat.

51. The upper elevation limit of the project area was defined by the boundary of the park along the north slope and Palikū Ridge between Pōhaku Pālaha and Kuiki, separating native forest from Haleakalā Crater. The lower limit of the project area, 1,969 feet above sea level, is the low elevation range of vulnerable native forest birds, such as the 'apapane and 'i'iwi, except within the boundaries of the park in the lower Kīpahulu Valley and Ka'apahu where the project area extends to sea level. *Judge et al.* (2019).

52. The project area includes approximately 64,666 acres, including NPS land (12,042 acres), DLNR lands in forest reserves and natural area reserves (37,989 acres), adjacent lands privately managed in a conservation easement by The Nature Conservancy (8,606 acres), East Maui Irrigation Company, LLC (4,409 acres), Haleakala Ranch (393 acres), and Mahi Pono (1,227 acres) lands managed for conservation. *See attached Exhibit B* (table of project area acreage and management).

53. NPS Management Policies 2006 and Director's Order 47 require the agency to manage, preserve, and restore park acoustical environments and soundscapes. These policies require the NPS to protect and restore the natural soundscapes of parks, including those that have been affected by unnatural and unacceptable noise. In addition to these policies, the park's Foundation Document ("NPS 2015b") identifies natural sounds as one of the fundamental resources and values of the park. As discussed in the Foundation Document, natural soundscapes are vital components of a healthy, intact, biological community, that play an important role in wildlife communication and behavior and are critical to effective wilderness

management. In addition, natural soundscapes are highly desired by park visitors. As a fundamental resource and value, natural soundscapes are “warranted primary consideration during planning and management processes” (NPS 2015b). The natural acoustic environment of the park is a key fundamental resource and value, and is important for wildlife, visitors, and Native Hawaiian ceremonies. Because of this importance, the park has invested in over three decades of extensive acoustic monitoring, scientifically documenting the acoustic environment and where human-caused noise may impact key resources. Overall, the findings of these studies revealed that across the park, the acoustic environment is generally in good condition, while aircraft are documented as the most prevalent noise source affecting the soundscape. *NPS Management Policies* (2006); *NPS Director’s Order 47*; *NPS Foundation Document 2015b*; *Wood* (2015); *Lee et al.* (2016).

54. The Wilderness Act of 1964 established the National Wilderness Preservation System, which is currently comprised of over 800 congressionally designated wilderness areas and over 111 million acres. Congress passed the Act in order to preserve and protect certain lands “in their natural condition” and “to secure for the present and future generations the benefits of wilderness.” The Wilderness Act and NPS policy mandate preservation of wilderness character, which includes five tangible qualities: untrammeled, natural, undeveloped, outstanding opportunities for solitude or primitive and unconfined recreation, and other features of value. The Haleakalā Wilderness is designated by federal statute, and there is no wilderness on state or private lands. *The Wilderness Act of 1964*.

55. An untrammeled wilderness is one that is unhindered and free from the intentional actions of modern human control or manipulation. A natural wilderness is one where ecological systems are substantially free from the effects of modern civilization. An undeveloped

wilderness retains its primeval character and influence and is essentially without permanent improvements or modern human occupation. Wilderness provides outstanding opportunities for recreation in an environment that is relatively free from the hindrance of modern society. The ability to experience solitude is an integral component of wilderness, while opportunities for primitive and unconfined recreation make the wilderness experience unique.

56. The Wilderness Act states that wilderness “may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value.” Haleakalā, a major geographical and cultural landmark of East Maui, remains intrinsically tied to contemporary Native Hawaiian culture by tangible and intangible cultural resources and values, place names, landscape features, and oral traditions and history. Additionally, the summit of Haleakalā, Kīpahulu Valley, and Kaupō Gap are eligible for the National Register of Historic Places as Traditional Cultural Properties for their association with the cultural landscape of Maui, primarily due to the known uses, oral history, mele (Hawaiian songs and chants), and legends associated with these areas. *The Wilderness Act of 1964.*

57. The fundamental purpose of Haleakalā National Park is to offer opportunities for public education and enjoyment. Residents and visitors come to the park to participate in a range of recreational activities, including viewing sunrise and sunset, hiking, swimming, bicycling, attending ranger programs, scenic flights or driving, stargazing and astronomy, birdwatching, and camping.

58. The DLNR Forest Reserve System was initially created to protect and restore watersheds in Hawai‘i. Today, the DLNR’s Division of Forestry and Wildlife (“DOFAW”) manages the forest reserves for conservation and public benefits in addition to the original watershed protections. Multiple management objectives include native ecosystem protection,

endangered species recovery, forest restoration, public recreation, forest products, opportunities for cultural practices, and archaeological preservation. The project area includes Ko‘olau Forest Reserve, Hāna Forest Reserve, Kīpahulu Forest Reserve, and Makawao Forest Reserve.

59. Hanawī Natural Area Reserve is located on the wet slopes on the north flank of Haleakalā. It contains a rare subalpine grassland as well as montane and lowland semi-wet and wet grasslands and forests. Rare plants and endangered birds are also protected by this reserve. The Natural Area Reserves System (“NARS”) was created to preserve and protect representative samples of Hawaiian biological ecosystems and geological formations. The Natural Area Reserves (“NARs”) are managed by the DLNR DOFAW Native Ecosystem and Protection Program. Areas that are designated as NARs are protected by rules and management activities designed to maintain and restore native ecosystems intact, so a sample of that natural community would be preserved. NARs are some of Hawai‘i’s most valued, pristine, and biologically diverse forests, coastal areas, and marine ecosystems. *DLNR (1997)*.

60. Public access to The Nature Conservancy’s Waikamoi Preserve is limited to guided hikes, educational and service trips, and scientific research. The Nature Conservancy (“TNC”) typically leads public hikes into Waikamoi Preserve one to two times per month throughout the year with a maximum of 15 participants. In addition, approximately one volunteer work trip is conducted once a month, and TNC typically provides trips into the preserve twice a month, once for local groups, and once a month for donors or other special guests.

61. Twenty-seven plant species listed as endangered under the federal Endangered Species Act (“ESA”) and HRS Chapter 195D occur within the project area. Fourteen of these species are found on park land within the project area, 11 on state land, and 11 are found on

TNC-managed lands. One of these 27 listed plant species, hāhā (*Cyanea kunthia*), is known to occur on lands managed by all three entities (i.e., park, state, and TNC) within the project area. The majority of the listed plant species occurring in the project area are found in lowland or montane, wet to mesic forests. The project area includes designated critical habitat for 37 federally listed plant species on park, state, and TNC-managed lands. Nineteen of the listed plant species with designated critical habitat that overlap the project area also have known occurrences within the project area. *Endangered Species Act*; HRS § 195D; U.S. Fish and Wildlife Service 2022b.

62. The ecosystems of East Maui and the project area include numerous intermittent and perennial streams, bogs, small montane lakes, and rainforest that provide habitat for native birds, bats, invertebrates, and aquatic organisms. The upper elevation habitats from approximately 3,900 feet to 6,400 feet are characterized as very wet, high-quality native-dominated rainforest. Nine species of federally listed threatened and endangered wildlife (one insect, eight bird species, and one mammal) are known to occur within the project area. Threatened and endangered wildlife species in the project area include the native damselfly, Hawaiian honeycreepers (kiwikiu, ‘ākohekohe, ‘i‘iwi), nēnē (Hawaiian goose), seabirds (albatross, petrel, shearwater, and storm-petrel), and ‘ōpe‘ape‘a (Hawaiian hoary bat). *Price et al.* (2007).

63. The East Maui project area is legendary in Hawaiian tradition and central to the community’s cultural identity. Healthy ecosystems are vital to the perpetuation of Native Hawaiian cultural and spiritual practices and values, such as ritual blessings and the preservation of culturally significant landmarks and sacred sites.

64. Hawaiians, like most indigenous and local communities, ascribe great cultural value to the natural resources in the environment around them. There are numerous plant resources used for cultural practices throughout the project area. There are also the native birds, which are highly valued and prized by practitioners. Their importance to mo‘olelo and mele (Hawaiian songs and chants) makes their preservation important to continuing cultural practices. Game in the project area is regularly gathered by hunters for subsistence purposes. Hunting is a cultural practice, including the hunting of non-native ungulates. This game is hunted by local practitioners and used to feed their families and communities.

65. There are several mo‘olelo (traditional accounts, stories, histories) that discuss the uplands and forested regions of the East Maui (Maui Hikina) project area.

DLNR’s Proposed Biopesticide Mosquito Project

66. DLNR, the proposing/determining agency for the biopesticide mosquito project, and its multi-agency partnership *Birds, Not Mosquitoes* plan to release up to 775,992,000 biopesticide lab-reared *Wolbachia*-bacteria-infected mosquitoes per week on Maui. The life of the plan, as stated in the final EA, is “likely at least 20 years.” This mosquito project is presented as an effort to save endangered native birds from avian malaria.

67. BNM is a collaboration of state, federal, and private non-profit partners evaluating the potential for control of mosquitoes on a landscape-scale in Hawai‘i. BNM includes representatives from DLNR, Hawai‘i Department of Health, U.S. Fish and Wildlife Service, University of Hawai‘i, U.S. Geological Survey, National Park Service, American Bird Conservancy, The Nature Conservancy of Hawai‘i, Coordinating Group on Alien Pest Species, and Island Conservation. The purpose of BNM is to coordinate and advance efforts to develop,

permit, test, and register for conservation for use as a biopesticide a strain of *Culex quinquefasciatus* (“southern house mosquito” or “*Culex q.*”) carrying *Wolbachia* bacteria.

68. The stated purpose of the biopesticide mosquito project is to substantially suppress or eliminate southern house mosquitoes and, thus, avian malaria in threatened and endangered forest bird populations on East Maui, thereby reducing extinction risks and contributing to the recovery of these species. The action consists of repeatedly releasing incompatible male mosquitoes using IIT with the intent of reducing the reproductive potential of wild mosquitoes. This method of IIT is known as population suppression.

69. The primary biopesticide mosquito release method would be by drones, with additional releases by helicopter and ground methods. Mosquitoes would be released throughout the 64,666-acre East Maui project area at up to 134 drone flights per week, causing viewscape impacts and noise disturbances to forest bird breeding and nesting. The project would have significant environmental consequences, including impacts to the untrammeled, natural qualities of the wilderness character and impacts to the outstanding opportunities for solitude or primitive and unconfined recreation. See attached **Exhibit C** (table of estimated number of drone flight hours and round-trip flight per treatment (releasing mosquitoes at each location) and per week (assuming 2 treatments per week) per land manager).

70. According to the FEA, treatments of up to 6,000 mosquitoes per acre would occur up to twice per week, amounting to potentially over 40 billion invasive biopesticide mosquitoes released per year on the island of Maui for likely at least 20 years. These mosquitoes would be released in biodegradable packages that would litter the canopy and forest floor for as long as they remain in the environment. Per the final EA, “many thousands of release packets would be dropped across the project area throughout the duration of the project.”

71. The State of Hawai'i Department of Agriculture (“HDOA”) regulates the importation of animals and microorganisms, and the use of pesticides in the state. The EPA oversees registration of new pesticides.

72. Microorganisms that control pests (microbial pesticides) are called biopesticides. Biopesticides are regulated by the EPA. *Wolbachia* bacteria is a microorganism. The mosquito species planned for *Wolbachia* bacteria microorganism infection, *Culex quinquefasciatus*, has never been used for stand-alone IIT field release. Before the EPA approves a biopesticide, an applicant must submit information about the mode of action along with scientific data on its efficacy and safety, including potential environmental impacts. These data are typically obtained through an Experimental Use Permit (“EUP”). The EPA has not issued an EUP for the biopesticide mosquitoes for this project. 7 U.S.C. §136 et seq. (1996).

73. After an EUP has been approved by the EPA, importing the biopesticide mosquitoes infected with the *Wolbachia* bacteria into the state requires a permit from the HDOA. The permit application requires the applicant to describe the reason for the introduction, persons responsible, locations where the microorganism will be kept, methods for disposal, and potential environmental impacts. HRS §150A-6.3.

74. An Emergency Exemption is a provision in the Federal Insecticide, Fungicide, and Rodenticide Act (“FIFRA”) under which the EPA can grant temporary exemption to a state or another federal agency to allow the use of a pesticide product not registered for that particular use. In October 2022, the HDOA submitted an EPA Request for Exemption of Federal and State Agencies for Use of a Pesticide Under Emergency Conditions Section 18 of FIFRA Specific Exemption (“EPA Application for Emergency Exemption”). The EPA Application for Emergency Exemption is to authorize the use of *Wolbachia pipientis*, strain wAlbB, contained in

live adult male *Culex q.* mosquitoes. The biopesticide is referred to as “DQB Males,” and it is noted that the “EPA Registration Number is pending.” The use of the biopesticide is to control *Culex q.* mosquitos, the vector of avian malaria, for conservation uses in Hawai‘i by the HDOA.

75. The EPA Application for Emergency Exemption states: “The DQB line of mosquitoes was developed through transfection of *Wolbachia pipientis* wAlbB isolated from *Ae. albopictus* KLP strain mosquitoes originating from Kuala Lumpur, Malaysia into *Culex quinquefasciatus* Palmyra strain mosquitoes originating from Palmyra Atoll. Prior to transfection, the naturally occurring wPip infection was removed from the Palmyra strain through antibiotic treatment using tetracycline and rifampicin...”

76. The HDOA’s EPA Application for Emergency Exemption was announced as approved by the EPA on April 27, 2023.

77. In October 2022, the HDOA Plant Quarantine Branch issued a permit to DLNR to allow for the import of southern house mosquitoes for mosquito control projects. The permit would need to be amended for broad-scale implementation of releases as part of this project.

78. The Advisory Committee on Plants and Animals’ recommendation to approve import and release of *Culex q.* mosquitoes should be null and void due to the conflicts of interest of committee members pursuant to HRS § 84-14. The *Hawai‘i State Ethics Commission Ethics Guide for State Board and Commission Members* states that members must not take official action affecting a business in which they have “financial interest.” “Financial interest” in a business includes “employment.” Whether a business can be a government agency is unstated. The following members of the Advisory Committee on Plants and Animals unanimously voted on June 9, 2022, to recommend approval of the import permit:

- (1) Darcy Oishi, Committee Chairperson, Hawai‘i Department of Agriculture (HDOA)
- (2) Dr. Maria Haws, Professor of Aquaculture, Pacific Aquaculture & Coastal Research Center, University of Hawai‘i at Hilo
- (3) Cynthia King, Entomologist, Division of Forestry & Wildlife, Department of Land & Natural Resources (DLNR), Ex Officio Member Designated Representative
- (4) Gracelda Simmons, Environmental Management Program Manager, Hawai‘i Department of Health, Ex Officio Member Designated Representative
- (5) Thomas Eisen, Planner, Environmental Review Program, Department of Business, Economic Development and Tourism, Ex Officio Member Designated Representative
- (6) Joshua Fisher, Wildlife Biologist, U. S. Fish and Wildlife Service (USFWS)
- (7) Dr. Samuel Ohu Gon III, Senior Scientist and Cultural Advisor, The Nature Conservancy - Hawai‘i (TNC)

Of the seven voting members’ agencies, only those of Thomas Eisen and Darcy Oishi are not partner agencies in *Birds, Not Mosquitoes*. As employees of partner agencies, Dr. Maria Haws (University of Hawai‘i), Cynthia King (DLNR), Gracelda Simmons (Hawai‘i Department of Health), Joshua Fisher (USFWS), and Dr. Samuel Ohu Gon III (TNC) all have potential conflicts of interest. Both Dr. Samuel Ohu Gon III and Cynthia King are also members of the *Birds, Not Mosquitoes* steering committee. The purpose of the steering committee, as stated in the National Fish and Wildlife Foundation Hawai‘i Conservation Business Plan, includes coordinating permits for this project. See HRS § 84-14; *Hawai‘i State Ethics Commission Ethics Guide for*

State Board and Commission Members (2023); National Fish and Wildlife Foundation Hawai'i Conservation Business Plan (2021).

79. An Environmental Risk Assessment for this biopesticide has not been conducted by the EPA to determine the environmental, ecological, and human health risks.

80. This project may have been improperly segmented. HAR § 11-200.1-10 – “Multiple or phased actions”, provides:

A group of actions shall be treated as a single action when:

- (1) The component actions are phases or increments of a larger total program;
- (2) An individual action is a necessary precedent to a larger action;
- (3) An individual action represents a commitment to a larger action; or
- (4) The actions in question are essentially identical and a single EA or EIS will adequately address the impacts of each individual action and those of the group of actions as a whole.

On June 17, 2022, BLNR Chairperson Suzanne D. Case signed an exemption notice for “Mosquito Control Research Using *Wolbachia*-based Incompatible Insect Technique.” The final EA states that the DLNR filed the exemption notice “to conduct limited import of male mosquitoes for preliminary transport trials and mark release recapture studies.” Per HEPA, “a proposed action must be described in its entirety and cannot be broken up into component parts, which if each is taken separately, may have minimal impact on the environment. Segmenting a project generally is forbidden.” Because the project has been improperly segmented in this way, there have been no details or analysis of the preliminary trials or the mark release recapture studies. There has been no disclosure as to what type of mosquito is being transported, where the mosquitoes are being transported from, and whether or not the mosquitoes are being tested

for pathogens prior to transport. All actions of the mosquito project - including trial imports, mark release recapture studies, and field releases – should be addressed in one EIS. HAR § 11-200.1-10; *Hawai‘i Environmental Policy Act Citizen’s Guide* (2014).

81. Federal documentation connected to this project states that “TNC committed to collecting and providing some of the initial costs to deploy *Wolbachia* IIT for the first site in Hawai‘i through a contract with Verily Life Sciences, a subsidiary of Google.” The DLNR’s June 9, 2022, field release import request for this proposed biopesticide mosquito project lists the shippers of the commodity “Various Shipments of the Southern House Mosquito, *Culex quinquefasciatus* (Diptera: Culicidae), inoculated with Strains of *Wolbachia* Bacteria” as Stephen Dobson, MosquitoMate, Inc., Lexington KY; and Verily Life Sciences, South San Francisco CA. Verily Life Sciences (“Verily Life Sciences, LLC” or “Verily”) is a subsidiary of Google’s parent company, Alphabet Inc. *U.S. Department of the Interior Strategy for Preventing the Extinction of Hawaiian Forest Birds* (2022).

82. Federal documentation connected to this project confirms that “although used world-wide for human health, *Wolbachia* IIT is a novel tool for conservation purposes and its degree of efficacy in remote forest landscapes is unknown.” *U.S. Department of the Interior Strategy for Preventing the Extinction of Hawaiian Forest Birds* (2022).

Documented Risks and Potential Significant Impacts of the Biopesticide Mosquito Project

83. This plan is an experiment on our island home. There are serious risks, and the outcome is admittedly unknown.

84. The species planned for use in this project, *Culex quinquefasciatus*, has never been used for a stand-alone Incompatible Insect Technique (IIT) biopesticide mosquito field release. The *Culex q.* mosquito has never been lab-bred and *Wolbachia*-bacteria-infected and

then released for mosquito suppression or population replacement. Although *Culex q.* was lab-bred and infected with *Wolbachia* in a 2020 study by Ant et al., the mosquitoes were not released for the purpose of mosquito suppression or population replacement. Ant et al. were studying the ability to make the mosquitoes incompatible, but they did not release any *Culex q.* mosquitoes. *Wolbachia* transinfections in *Culex quinquefasciatus* generate cytoplasmic incompatibility (2020).

85. Landscape level control of *Culex quinquefasciatus* mosquitoes using the Incompatible Insect Technique (IIT) has never been done before. Even with *Aedes* mosquitoes, the largest project area was 724 acres. The East Maui project area is 64,666 acres. This means that the East Maui project area would be the largest area ever to be used for any IIT - over 89 times larger than the current 724-acre maximum. The largest release area to date globally for a mosquito suppression project was the Fresno DeBug project which released in an area of 724 acres, and the release was of *Aedes aegypti* mosquitoes. The only known time that the southern house mosquito was released for mosquito suppression was a 1982 study in India by Curtis et al. that used *Wolbachia* with a translocation that induced sterility. Because of the translocation, this was not a "stand-alone" project. The closest study to using *Culex q.* with *Wolbachia* to suppress mosquitoes was the 1967 Laven study in Okpo ("Okpho"), Burma ("Myanmar"), which was done with *Culex pipiens fatigans*, a species closely related to *Culex quinquefasciatus*. Crawford et al. (2020); Curtis et al. (1982); *Eradication of Culex pipiens fatigans through Cytoplasmic Incompatibility* (Laven, 1967).

86. Tropical disease and vector expert Dr. Lorrin Pang, speaking as a private citizen, has expressed concerns about horizontal transmission ("horizontal spread" or "horizontal transfer") of the introduced *Wolbachia* bacteria strain to wild mosquitoes and other insects,

including other insect vectors of disease. Horizontal transmission is defined as the spread of an infectious agent from one group or individual to another, directly or indirectly. Dr. Lorrin Pang (“Pang” or “Dr. Pang”) has authored over 75 publications in peer-reviewed medical journals covering a broad range of studies such as malaria, dengue, rabies, rat lungworm, and COVID. He’s been an advisor and voting member of the U.S. Congress Medical Research Program for the past several years, serving on committees for infectious diseases - many of which are mosquito-borne. From 1985-2005, he worked with the WHO and Walter Reed Institute’s Malaria Program, focusing on global malaria control efforts through interventions combining diagnostics, chemotherapeutics, vector control, and vaccine development. As a public health leader on the islands, he has mitigated mosquito-borne illnesses - including dengue and Zika - for over two decades. Pang was honored for his life-saving intervention in Hawaii’s dengue fever outbreak. In regard to this project, Dr. Pang has stated “Hawai‘i has a bad history of invasive species entering and spreading unabated, including their spread of infectious diseases.”

Wolbachia Mosquitoes in Hawaii: Unsettled Science Part 2 (2022).

87. Peer-reviewed studies document horizontal transmission of *Wolbachia* bacteria. The evidence of horizontal spread of *Wolbachia* shows that the bacteria go not only to sexual cells, but also to somatic cells (non-sexual cells of the body). *Wolbachia* can also live outside of intra-cellular systems for several months. *Wolbachia infection in wild mosquitoes (Diptera: Culicidae): implications for transmission modes and host-endosymbiont associations in Singapore* (2020); *Wolbachia Horizontal Transmission Events in Ants: What Do We Know and What Can We Learn?* (2019); *The Intracellular Bacterium Wolbachia Uses Parasitoid Wasps as Phoretic Vectors for Efficient Horizontal Transmission* (2015).

88. Horizontal transmission of the *Wolbachia* bacteria can occur through mating, shared feeding sites, and serial predation of larva in standing water breeding sites.

89. Peer-reviewed studies have shown *Wolbachia* bacteria in mosquitoes to cause increased pathogen infection and to cause mosquitoes to become more capable of spreading diseases such as avian malaria and West Nile virus. West Nile virus can infect birds and humans. This project has the potential to cause the extinction of endangered native birds, and it could impact human health. *Wolbachia Can Enhance Plasmodium Infection in Mosquitoes: Implications for Malaria Control?* (2014); *Wolbachia Enhances West Nile Virus (WNV) Infection in the Mosquito Culex tarsalis* (2014).

90. *Wolbachia* bacteria is parasitic, manipulating the reproductive biology of the host to increase its own transmission. Parasitic organisms can also alter the behavior of the hosts they live inside, and it is unknown how this might affect our native bird habitats. *Parasites brainwash grasshoppers into death dive* (2005).

91. The final EA fails to adequately address the accidental release of lab-bred *Wolbachia*-infected females who bite, breed, and spread disease.

92. The final EA's assertion that released mosquitoes pose no risk to human health is based on unsound science. The 2010 article by Popovici et al. cited in the final EA has been discredited by the EPA. *Assessing key safety concerns of a Wolbachia-based strategy to control dengue transmission by Aedes mosquitoes* (2010); *April 24-26, 2018, Meeting of the Human Studies Review Board*; *April 24-26, 2018, EPA Human Studies Review Board Meeting Report*.

93. The final EA fails to adequately address the potential for the release of biopesticide mosquitoes to cause unexpected evolutionary events and population replacement. *Wolbachia infection in wild mosquitoes (Diptera: Culicidae): implications for transmission*

modes and host-endosymbiont associations in Singapore (2020); Wolbachia-mediated sterility suppresses Aedes aegypti populations in the urban tropics (2021).

94. The final EA fails to address biopesticide drift – the movement of biopesticide mosquitoes through wind to unintended areas.

95. The final EA fails to adequately address the potential for horizontal gene transfer between the *Wolbachia* endosymbiont and the host. Horizontal gene transfer in this context would be the movement of genetic material (“DNA”) from *Wolbachia* into the southern house mosquito, or other host, genome. Horizontal gene transfer is the movement of genetic information between organisms, a process that includes the spread of antibiotic resistance genes among bacteria (except for those from parent to offspring), fueling pathogen evolution.

Horizontal gene transfer between Wolbachia and the mosquito Aedes aegypti (2009); Horizontal Gene Transfer (2015).

96. There are no documented biosecurity protocols in the final EA for the biopesticide mosquitoes used in this project.

97. There are no documented pathogen screenings in the final EA for the biopesticide mosquitoes. No assurances have been made that the biopesticide mosquito labs contracted for this project will be testing the lab-bred mosquitoes for human diseases, avian diseases, or other animal diseases to ensure that they are pathogen-free prior to shipping to Hawai‘i for field release. Lab-bred mosquitoes are blood-fed from sources that are not identified in the final EA. These mosquitoes could be transporting pathogens into Hawai‘i.

98. Male mosquitoes transmit bacteria and pathogens to females. Infected females can spread disease to birds (including endangered native birds), other animals, and humans.

99. Male *Culex q.* mosquitoes are known to spread viruses to female mosquitoes through mating (e.g., St. Louis encephalitis virus), as has been shown for dengue virus in *Aedes albopictus* mosquitoes. *Venereal Transmission of St. Louis Encephalitis Virus by Culex quinquefasciatus Males (Diptera: Culicidae)* (1990); *Sexual transmission of dengue viruses by Aedes albopictus* (1987).

100. As this project involves the interstate transport of *Culex q.* mosquitoes, a known vector of poultry diseases, there are potential impacts to local poultry farms and egg production in Hawai‘i. There is no mention in the final EA of United States Department of Agriculture (“USDA”) inspection of the biopesticide mosquito lab insectary/insectaries. There is no mention in the final EA of a USDA permit (e.g., OV VS 16-6 permit from APHIS) for the interstate transport of poultry pathogen vectors. The USDA Animal and Plant Health Inspection Service (“APHIS”) states: “The Veterinary Services, Organisms and Vectors (OV) Permitting Unit regulates the importation into the United States, and interstate transportation, of organisms and vectors of pathogenic diseases of livestock and poultry. The Code of Federal Regulations, in 9 CFR, §122.2, mandates that ‘no organisms or vectors shall be imported into the United States or transported from one State or Territory or the District of Columbia to another State or Territory or the District of Columbia without a permit.’” Given that interstate transport of the vector (live *Culex q.*) is planned to occur, and those *Culex q.* may contain a highly contagious poultry pathogen, namely avian pox virus, this transport would require a federal permit. *USDA Animal and Plant Health Inspection Service (APHIS): Organisms and Vectors Guidance & Permitting* (2022); 9 CFR, § 122.2; *Detection and molecular characterization of Avipoxvirus in Culex spp. (Culicidae) captured in domestic areas in Rio de Janeiro, Brazil* (2022).

101. The final EA lists numerous potential impacts that require mitigation measures. These impacts are not adequately addressed. Concerns include, but are not limited to: wildland fire ignition by helicopters; helicopter rotor wash; spread of invasive weeds; transport and establishment of introduced invasive weeds and diseases/pathogens; disturbances to native and special status plants and acceleration of erosion; noise-producing activities adversely affecting native wildlife; noise disturbances and other impacts to special status wildlife species, including disturbances to nesting and roosting; adverse impacts within critical special status species habitats; disturbances of traditional cultural practices; threats to human health and safety; noise impacts on landowners, communities, wilderness, and sensitive environmental resources; noise and viewscape impacts on the visitor experience; and impacts to the wilderness character.

102. The final EA does not adequately address the potential impacts of up to 134 drone flights per week over the project area for the life of the plan - likely at least 20 years as stated in the final EA. These impacts include risks to threatened and endangered wildlife species in the project area, namely the native damselfly, Hawaiian honeycreepers (kiwikiu, ‘ākohekohe, ‘i‘iwi), nēnē (Hawaiian goose), seabirds (albatross, petrel, shearwater, and storm-petrel), and ‘ōpe‘ape‘a (Hawaiian hoary bat). Drone hovering; risks of breeding birds being flushed from active nests; disturbances of day roosting Hawaiian hoary bats; and risks of disturbing bat pup rearing are all noted impacts. The final EA notes that the sound produced by each drone “is similar to loud highway noise,” that “drone noise could possibly be loud enough to disrupt conversations,” and that aircraft wildlife collisions could happen. The document states that “it is possible that a drone could inadvertently fly into a flock of birds.”

103. The final EA states that “mosquitoes would likely be released in small biodegradable packages designed to open upon contact with the canopy or forest floor,” and that

“these mosquito packages (dropped via aerial means) would result in an impact to the undeveloped quality of wilderness for as long as they remain in the environment (until they biodegrade).” The environmental effects of dropping mosquito packaging in the project area are not adequately addressed in the final EA. The final EA states that the final design of the mosquito packaging “has not been decided upon” and that “until a final product is designed, specific decay rates or other relevant variables are not known.” The final EA further states that “many thousands of release packets would be dropped across the project area throughout the duration of the project.”

104. Dr. Pang has noted that there is a significant difference between the standard Sterile Insect Technique (“SIT” or “standard SIT”) strategies used in the past that were based on radiation or chemicals, and the relatively new Incompatible Insect Technique (IIT). The mathematical models may be similar for estimating threshold criteria to affect mosquito population dynamics, but standard methods of sterility are not bacterial life forms that might escape horizontally and amplify in other ecological niches. According to Pang, “While sterility models can predict the thresholds needed to exterminate a species (in this case insects), the radiation sterility factor (standard SIT) does not behave the same as a life form (i.e., *wpip4* *Wolbachia* bacteria). There is very different modeling for the target insect - but more importantly, for the unintended groups to which the bacteria horizontally spread. How is this supposed to be self-contained? Horizontal spread has the potential to be a disaster that cannot be recalled. The bacterium is a life form, and you might not be able to turn back the clock by simply shutting off the male mosquito ‘fountains.’” *Wolbachia Mosquitoes in Hawaii: Unsettled Science Part 2* (2022).

105. The potential negative impacts of introducing an invasive species to the islands have not been adequately addressed in the final EA.

106. The final EA fails to include the completion of a feasibility study to provide a detailed analysis that considers all of the critical aspects of the proposed project in order to determine the likelihood of it succeeding, and fails to establish, under the precautionary principle, that the proposed activity will not result in significant harm.

107. Once this biopesticide mosquito release plan starts, it is irreversible.

108. The scope, risks, and experimental nature of the project require detailed, comprehensive studies and documentation of the impacts to our native birds, wildlife, environment, and public health. The subject action will have a significant effect, and therefore, requires the preparation of an EIS.

HEPA Review Process

109. It is undisputed that HEPA applies to DLNR's proposed biopesticide mosquito project, which uses state lands and lands within the conservation district.

110. In November 2022, the DLNR transmitted a draft EA and anticipated finding of no significant impact ("DEA-AFONSI" or "DEA-AFNSI" or "AFNSI") for the biopesticide mosquito project, "Suppression of Non-native Wild Mosquito Populations to Reduce Transmission of Avian Malaria to Threatened and Endangered Forest Birds on East Maui," to the State of Hawai'i Office of Planning and Sustainable Development Environmental Review Program ("ERP") for publication in *The Environmental Notice*.

111. On December 8, 2022, the DEA-AFONSI ("AFNSI") was published by the ERP in *The Environmental Notice*. The statutory 30-day public review and comment period for the DEA-AFONSI started on the publication date, December 8, 2022. Pursuant to HRS Chapter

343, comments were due by January 9, 2023. The National Park Service, in collaboration with the DLNR, accepted comments through their website link and by mail through January 23, 2023, extending the public review and comment period.

112. Following the December 8, 2022, publication of the DEA-AFONSI, and prior to the January 23, 2023, deadline for comments, Hawaii Unites Founder and President Tina Lia submitted a comment on behalf of the organization. This comment was submitted online, as well as by United States Postal Service priority mail. Both the online comment and the mailed hard copy were received and accepted by the National Park Service. Hawaii Unites' comment on the DEA-AFONSI documented risks of the project, including but not limited to, the experimental nature of the plan, lack of EPA registration of the biopesticide mosquitoes; dangers of horizontal transmission of the introduced bacteria strain, increased pathogen infection in mosquitoes, irreversible evolutionary events, population replacement, accidental release of lab-reared ("lab-strain-infected") females, creation of lab-strain-infected females in the wild, horizontal gene transfer, biopesticide drift, and mosquitoes becoming more capable vectors of avian malaria and West Nile virus. Peer-reviewed studies were included for reference. Specific concerns voiced by tropical disease and vector expert Dr. Lorrin Pang, speaking as a private citizen, were described in detail, with a focus on the risks of horizontal transmission of the lab bacteria.

113. While the accidental release of misidentified lab-reared female mosquitoes was not addressed at all in the draft EA, Hawaii Unites' DEA-AFONSI comment provided documentation from the DLNR's "Permit Application for Restricted Commodities into Hawaii" for import of the mosquitoes, as well as figures published online by the EPA, stating the expected accidental release rate of one *Wolbachia*-bacteria-infected female for every 250,000 males. Hawaii Unites noted that with the potential release of up to 775,992,000 biopesticide

mosquitoes per week on Maui, this would calculate to up to 3,103 lab-strain-infected females released on the island per week, and each of those 3,103 females could produce a conservative estimate of 160,000 more females in her eight-week lifespan, amounting to potentially 496,480,000 lab-strain-infected females within each eight-week lifespan of the initial accidental release scourge. Female mosquitoes bite and spread disease. Lab-strain-infected females can breed with the lab-strain-infected males released, and population replacement can occur. Wild females can also become lab-strain-infected through horizontal transmission, further exacerbating population replacement risks. Hawaii Unites' DEA-AFONSI comment highlighted these concerns, along with the potential for the *Wolbachia* bacteria to cause increased pathogen infection in the mosquitoes, concluding, "What if the entire mosquito population becomes more capable of transmitting disease to birds, humans, and other wildlife?"

114. Hawaii Unites' DEA-AFONSI comment addressed concerns regarding potential impacts requiring mitigation measures per the draft EA, including but not limited to, noise disturbances and other impacts to special status wildlife species, spread of invasive weeds, disturbances to native and special status plants and acceleration of erosion, impacts to wilderness character; and threats to endangered species, including disturbances to nesting and roosting of Hawaiian forest birds and Hawaiian hoary bats, and the possibility that a drone could inadvertently fly into a flock of birds. Hawaii Unites' comment also noted that the effects of the release of mosquito packaging on the environment and wildlife are not addressed in the draft EA.

115. Concerns of Native Hawaiian lineal descendants and cultural experts, along with the issue of Environmental Justice, were addressed in Hawaii Unites' DEA-AFONSI comment. Hawaii Unites stated: "In the EA's 'Cultural Impact Assessment' section, seven Native Hawaiian lineal descendants and recognized cultural experts were interviewed. All expressed

concerns about the impacts of the project, focused on the effects it could have on cultural resources and traditions, native birds, public health, wildlife, and our fragile ecosystems. Additional concerns include the experimental aspect of the project; the state's history of creating new problems by bringing in invasive species such as the mongoose; the sensitivity of the project area, with people depending on native flora and fauna for their livelihoods; impacts on other animals like 'ōpae (shrimp) and 'o'opu (goby fish) that live in streams; whether or not adequate studies or research have been done; residual effects on other insects; impacts on native plants used for lei making, weaving, and other cultural practices; impacts on water sources; impacts on other islands from water sources connected through tides and currents; and the need to keep the public informed. The state's assessment concludes, 'If the project and concerns about the use of this biocontrol discourage practitioners from conducting their traditional or customary practices, it would be an adverse effect to these cultural activities.' As a result of their location, cultural practices, and other factors, Native Hawaiians may have atypical or disproportionately high and adverse human health impacts and environmental effects from exposure to the biopesticide.”

116. Hawaii Unites' DEA-AFONSI comment stated, “Adequate studies and research have not been conducted; and safer, less experimental alternatives have not been considered.”

117. On March 17, 2023, the DLNR posted the final EA for the biopesticide mosquito project on their website. The final EA included a recommendation that the Board approve the final EA, authorize the Chairperson to issue a FONSI, and authorize the Chairperson to publish a FONSI for the final EA in the ERP's *The Environmental Notice*. The final EA also included an Appendix H: “Responses to Substantive Public Comments on Environmental Assessment.” Appendix H addressed public comment concerns, including but not limited to, insufficient analysis and the lack of preparation of an EIS, potential impacts to public health and increased

risk of disease transmission, adverse impacts of introduced biological control mechanisms, insufficient study of the proposed action, introduction of foreign *Wolbachia* bacteria to an environment on Maui where it currently does not occur, the proposed project being an experiment that has not been implemented prior, the release of female mosquitoes, the risk of *Wolbachia*-infected mosquitoes increasing disease transmission to humans (e.g., malaria, dengue fever, yellow fever, Zika virus, West Nile virus), horizontal transfer of *Wolbachia* to other mosquitoes or insect species non-maternally, horizontal gene transfer, Native Hawaiian concerns and Environmental Justice, impacts to bats and dragonflies, the environmental effects of dropping mosquito packaging in the project area, and unanticipated outcomes and the need to implement a monitoring and response plan.

118. The potential significant impacts of the project to the environment, wildlife, and public health have not been adequately studied, and Appendix H of the final EA does not adequately address public comment and concerns. These comments and concerns include, but are not limited to:

- The creation of lab-strain-infected females in the wild through horizontal transmission
- Biopesticide drift, or the movement of the lab-bred mosquitoes through wind to unintended areas
- The specific concerns of tropical disease expert Dr. Lorrin Pang focused on horizontal transmission. Horizontal transmission is addressed and downplayed in Appendix H, there are no references to Dr. Pang's expert opinion, and specific significant peer-reviewed studies referenced by Dr. Pang are not addressed.
- The peer-reviewed study referenced by Dr. Pang regarding the ability of *Wolbachia* bacteria to live outside of intra-cellular systems for several months
- *Wolbachia* bacteria as parasitic, altering host behavior
- Failure to provide any information pertaining to responsible parties or decision makers if something goes wrong with the experiment
- Lack of biosecurity protocols

119. The final EA does not adequately address potential impacts to public health and increased risk of disease transmission documented in peer-reviewed studies, including the risk of

increased transmission of West Nile virus. The final EA's assertion that released mosquitoes pose no risk to human health is based on unsound science. The 2010 article by Popovici et al. cited in the final EA has been discredited by the EPA. The EPA Human Studies Review Board met in 2018 and concluded: "The Board concluded that the research described in the article by Popovici et al. was not scientifically sound and does not provide reliable data to contribute to a weight of evidence determination for assessment of human health risks due to release of *Wolbachia*-infected mosquitoes."

120. The final EA does not adequately address the peer-reviewed study documenting the potential for the *Wolbachia* bacteria to cause increased capability of mosquitoes to transmit avian malaria.

121. The *Wolbachia* is an introduced foreign bacterium. The final EA inaccurately states that, "The proposed action will not involve introducing any new or foreign organisms to Hawai'i." The EPA Application for Emergency Exemption states, "The DQB line of mosquitoes was developed through transfection of *Wolbachia pipientis* wAlbB isolated from *Ae. albopictus* KLP strain mosquitoes originating from Kuala Lumpur, Malaysia into *Culex quinquefasciatus* Palmyra strain mosquitoes originating from Palmyra Atoll." The DLNR's June 9, 2022, field release import request for this proposed biopesticide mosquito project lists a strain of bacteria that doesn't exist on the Hawaiian Islands, *Wolbachia* wPip4.

122. The proposed project is an experiment that has never been implemented before. The final EA inaccurately contradicts this fact. Landscape level control of *Culex quinquefasciatus* mosquitoes using the Incompatible Insect Technique (IIT) has never been done before. The largest documented project area to date globally is 724 acres, and the project used *Aedes* mosquitoes. The East Maui project area for this biopesticide mosquito project is 64,666

acres, which is over 89 times the size of the largest field release area ever documented globally. IIT has never been used for conservation purposes before. The *U.S. Department of the Interior Strategy for Preventing the Extinction of Hawaiian Forest Birds* confirms that “although used world-wide for human health, *Wolbachia* IIT is a novel tool for conservation purposes and its degree of efficacy in remote forest landscapes is unknown.” The species of mosquito planned for use in this project, *Culex quinquefasciatus*, has never been used for a stand-alone IIT field release. *Wolbachia* IIT is not widely used for mosquito suppression globally. The majority of countries using *Wolbachia* mosquitoes through the World Mosquito Program are using the method of population replacement, not suppression. These are two entirely different techniques. The replacement method more widely used requires release of male and female mosquitoes. Only a small number of mosquitoes need to be released, and usually only one release is required (once per week for 12-30 weeks). With the suppression approach planned for use in East Maui, a very large number of male mosquitoes need to be released continually and indefinitely, otherwise the population will rebound.

123. Peer-reviewed studies documenting the risks of horizontal transmission (“horizontal transfer”) of the *Wolbachia* bacteria to other mosquitoes and insect species are not adequately addressed in the final EA.

124. The peer-reviewed study documenting the risk of horizontal gene transfer is not adequately addressed in the final EA.

125. The history of adverse impacts of introduced biological control mechanisms in Hawai‘i is not adequately addressed in the final EA.

126. The impacts to endangered native Hawaiian hoary bats, native dragonflies, and endangered native damselflies are not adequately addressed in the final EA.

127. The release of female mosquitoes is not adequately addressed in the final EA. The EPA website and the DLNR's "Permit Application for Restricted Commodities into Hawaii" for import of the mosquitoes both state the expected accidental release rate of one *Wolbachia*-bacteria-infected female for every 250,000 males. The final EA contradicts this figure, describing the use of artificial intelligence ("AI") as "methods likely to be employed." The final EA does not state the specific method planned for use in the biopesticide mosquito project. The final EA does not address the June 17, 2021, preprint study in Singapore stating that, "even with high-fidelity sorting, inadvertent release of a few fertile females can lead to stable establishment of *Wolbachia* in the field, given the lack of competition from the nearly eliminated wildtype population." The study states: "Our data further show that when the wildtype mosquito population is suppressed to very low levels - possibly close to elimination, as in the Tampines core - release of even a few fertile *wAlbB*-SG females could result in establishment of *wAlbB* in the field population. This threshold may be as low as three individuals, the minimum number of *wAlbB*-SG females we believe were released in the Tampines core during Phase 2." *Wolbachia*-mediated sterility suppresses *Aedes aegypti* populations in the urban tropics (2021).

128. The environmental effects of dropping mosquito packaging in the project area are not adequately addressed in the final EA. The final EA states that the final design of the mosquito packaging "has not been decided upon" and that "until a final product is designed, specific decay rates or other relevant variables are not known." The final EA further states that "many thousands of release packets would be dropped across the project area throughout the duration of the project."

129. The final EA does not adequately address concerns around unanticipated outcomes and the need to implement a monitoring and response plan. The full extent of the text

added to the final EA to address these concerns reads: “DLNR will work with State and Federal partners to prepare a detailed monitoring plan.” No further information is provided.

130. Native Hawaiian concerns, including concerns regarding environmental justice, are not adequately addressed in the final EA. Native Hawaiians will be disproportionately affected by the project because they live near the project area, frequent the project area for cultural practices, and rely on the resources of the project area. Also, per the EA “According to EJScreen, EPA’s Environmental Justice Screening and Mapping Tool, census block groups within and around the project area on East Maui are comprised of populations where at least 50 percent of the population is considered a minority. Therefore, environmental justice communities exist in the study area.” Risks and impacts to ethnographic resources and cultural practices have not been adequately studied or addressed. Native Hawaiians rely on the resources of the project area for their livelihoods and cultural practices. Cultural practices may be disrupted by noise disturbances and viewscape impacts. Native plants, native birds, native dragonflies, native endangered damselflies, and native endangered Hawaiian hoary bats could be impacted by the project. Native Hawaiian food sources could be impacted by the project. Human health impacts of this project have not been adequately studied, and the EA’s assertion of released mosquitoes posing no risk to human health is based on unsound science. Native Hawaiians, including cultural practitioners, hunters, and nearby residents, could be impacted by the potential for increased capability of mosquitoes to transmit disease.

131. Additional concerns documented in Hawaii Unites’ public comment on the draft EA that were not addressed in the final EA include, but are not limited to: lack of EPA registration for the biopesticide mosquitoes (prior to the BLNR’s vote to accept the final EA and issue a FONSI), the potential for the project to cause the extinction of endangered native birds,

biopesticide drift, the specific concerns of tropical disease and vector expert Dr. Lorrin Pang, the effects of *Wolbachia* bacteria as a parasitic organism, lack of identification of agencies responsible for negative outcomes of the project, and conflicts of interest.

132. The final EA suffers from the same fundamental flaws as the draft EA in failing to adequately address potential significant impacts of the project and in failing to address specific potential significant impacts of the project entirely.

133. The final EA suffers from the same fundamental flaws as the draft EA in lack of adequate detail as required by HEPA.

134. The final EA fails to analyze a full range of alternatives and mitigation measures to address potential impacts. The final EA analyzes only the impacts of the proposed action versus a no-action alternative.

135. In contrast, an EIS would not only ensure a full analysis of alternatives and mitigation but would also require “a rigorous exploration and objective evaluation of the environmental impacts of all such alternative actions” and discussion of “mitigation measures proposed to avoid, minimize, rectify, or reduce impacts.” HAR § 11-200.1-24.

136. The final EA/FONSI was published in *The Environmental Notice* on April 8, 2023.²

FIRST CLAIM FOR RELIEF

(Failure to Require an EIS)

137. Plaintiffs reallege and incorporate herein by reference each and every allegation contained in the preceding paragraphs of this complaint.

² Available at the State of Hawaii, Office of Planning and Sustainable Development website: <https://planning.hawaii.gov/erp/environmental-notice/> - last visited on May 7, 2023.

138. Defendants' failure to require an EIS and issue an EISPN for the proposed biopesticide mosquito project violates HEPA's requirement to prepare an EIS if the proposed action "may" have a significant impact on the environment. Based on the significance factors under the HEPA rules, the proposed project certainly "may" have a significant impact on the environment and, thus, requires an EIS.

139. To avoid the requirement to prepare an EIS, the final EA improperly and unlawfully disregarded and distorted the full range of direct, secondary, and cumulative impacts of the proposed project and failed to consider and analyze reasonable alternatives and mitigation measures, in violation of the letter and purpose of HEPA and its implementing rules.

140. An actual controversy exists between Plaintiffs and Defendants concerning Defendants' violation of HEPA in failing to require an EIS and instead accepting only an EA and FONSI.

SECOND CLAIM FOR RELIEF

(Invalid Acceptance of EA/FONSI)

141. Plaintiffs reallege and incorporate herein by reference each and every allegation contained in the preceding paragraphs of this complaint.

142. The BLNR's acceptance of the final EA and FONSI for the proposed biopesticide mosquito project violated the letter and purpose of HEPA.

143. The BLNR failed to follow proper procedure in their addition of Hawaii Unites' petition for a contested case hearing on agenda item C-2 at the March 24, 2023, BLNR meeting to the agenda at the meeting, their subsequent vote to deny the petition, and their subsequent vote to approve the final EA and issue a FONSI at the March 24, 2023, meeting.

144. The action of the BLNR's improper approval of the final EA and issuance of a FONSI, on its face and as applied in this case, violates HEPA. It also violates fundamental requirements of administrative procedure under the Hawai'i Administrative Procedures Act, HRS chapter 91, and due process under article I, section 5 and article XI, sections 1 and 9 of the Hawai'i Constitution.

145. An actual controversy exists between Plaintiffs and Defendants concerning Defendants' violation of HEPA in failing to ensure that environmental concerns are given appropriate consideration by BLNR, the agency tasked with issuing the underlying approval for the project.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request that the Court:

1. Enter a declaratory judgment that:
 - (A) The proposed biopesticide mosquito experiment may have a significant impact on the environment;
 - (B) Defendants have violated and are violating HRS Chapter 343 by failing to require an EIS;
 - (C) The BLNR's acceptance of the final EA and FONSI fails to comply with HEPA and its implementing rules and is otherwise legally improper and invalid;
 - (D) Defendants and Applicant be required to prepare an EIS for the proposed biopesticide mosquito experiment and issue an EISPN.
2. Enter appropriate injunctive relief to ensure that Defendants comply with HEPA and to prevent Defendants from issuing approvals for the proposed project or otherwise allowing it to proceed until that compliance occurs;

3. Retain continuing jurisdiction to review Defendants' compliance with all judgments and orders entered herein;
4. Issue such additional judicial determinations and orders as may be necessary to effectuate the foregoing;
5. Award Plaintiffs the cost of the suit herein, including reasonable expert witness and attorneys' fees; and
6. Provide such other and further relief as the Court may deem just and proper to effectuate a complete resolution of the legal disputes between Plaintiffs and Defendants.

DATED: Honolulu, Hawai'i, May 8, 2023.

/s/ Timothy Vandever
MARGARET WILLE
TIMOTHY VANDEVEER

Attorneys for Plaintiffs
Hawaii Unites and Tina Lia

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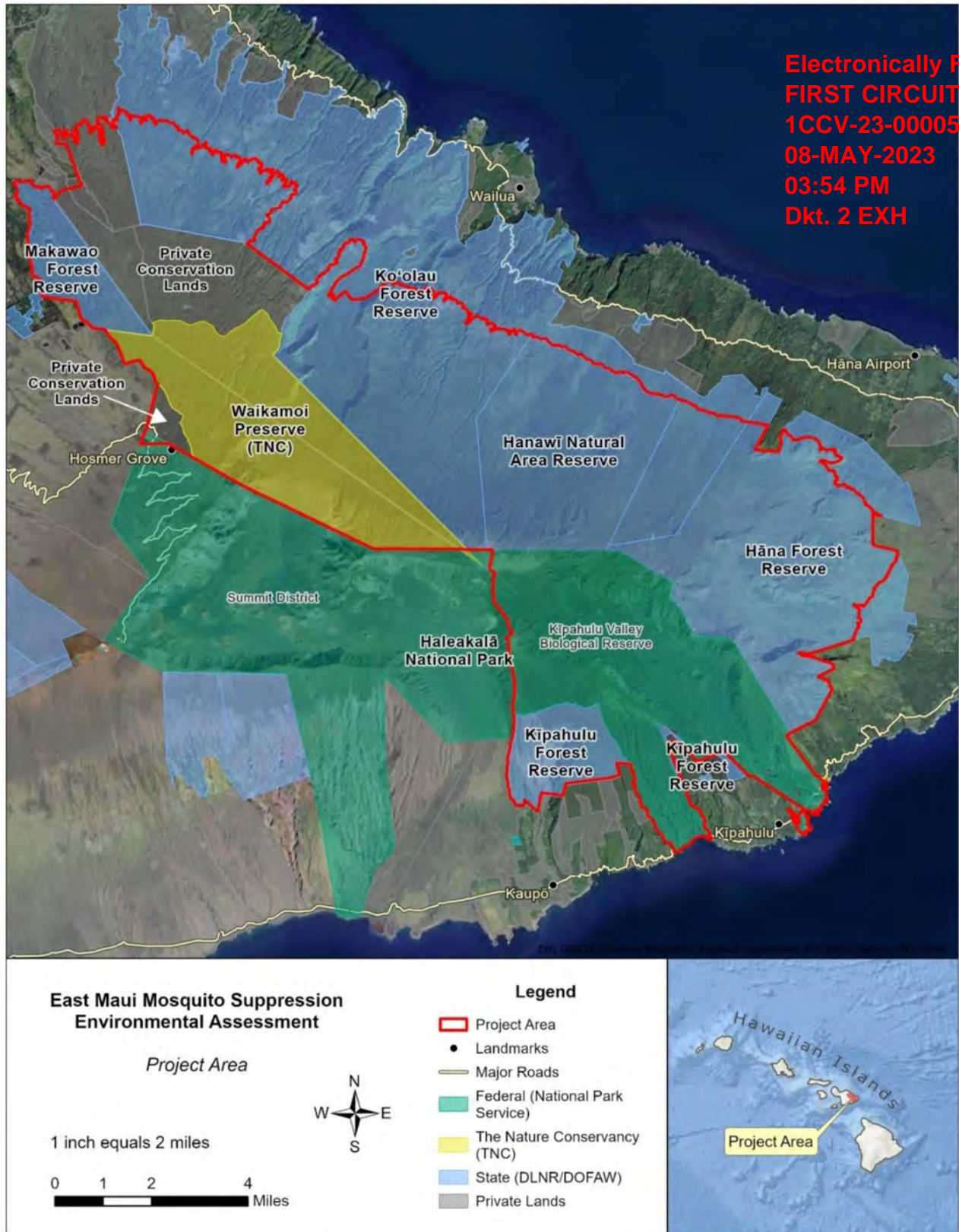


FIGURE 1: PROJECT AREA FOR RELEASE OF INCOMPATIBLE MOSQUITOES

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TABLE 1: PROJECT AREA ACREAGE AND MANAGEMENT

Name	Management	Acres
Haleakalā National Park	NPS	12,042
Ko‘olau Forest Reserve	DLNR/DOFAW	15,179
Hāna Forest Reserve	DLNR/DOFAW	10,679
Hanawī Natural Area Reserve	DLNR/DOFAW	7,713
Kīpahulu Forest Reserve	DLNR/DOFAW	2,318
Makawao Forest Reserve	DLNR/DOFAW	2,100
Waikamoi Preserve (TNC)	TNC	8,606
East Maui Irrigation Company, LLC	Private	4,409
Mahi Pono	Private	1,227
Haleakala Ranch	Private	393
TOTAL		64,666

Table 1 from page 20/284 of “Suppression of Invasive Mosquito Populations to Reduce Transmission of Avian Malaria to Threatened and Endangered Forest Birds on East Maui” (Final Environmental Assessment, Hawai‘i Department of Land and Natural Resources, March 24, 2023)

EXHIBIT B

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TABLE 3. ESTIMATED NUMBER OF DRONE FLIGHT HOURS AND ROUND-TRIP FLIGHTS PER TREATMENT (RELEASING MOSQUITOES AT EACH LOCATION) AND PER WEEK (ASSUMING 2 TREATMENTS PER WEEK) PER LAND MANAGER.

<i>Land Manager</i>	Per Treatment				Per Week			
	warm months		cold months		warm months		cold months	
	hrs	flights	hrs	flights	hrs	flights	hrs	flights
Hawai'i Dept. of Land and Natural Resources	23.2	43	18.2	35	46.5	87	36.4	70
National Park Service	5.5	10	2.9	6	11.0	21	5.9	11
Private	3.4	7	3.0	6	6.7	14	6.1	12
The Nature Conservancy	3.6	7	0.3	1	7.3	14	0.6	1
TOTAL	36	67	24	48	72	134	49	94

Note: Presented in this table are estimated flight information for lower elevations only (2000–4300 ft) during colder months (December–April) when releases at higher elevations are not expected to be needed (“cold months”) and all elevations (2000–5600 ft) within the core area where releases are expected to be needed during warmer months. These elevations are based on thermal limits of the malaria parasite (>55° F) below which transmission from mosquitoes is limited (Ahumada et al. 2004).

Table 3 from page 27/284 of “Suppression of Invasive Mosquito Populations to Reduce Transmission of Avian Malaria to Threatened and Endangered Forest Birds on East Maui” (Final Environmental Assessment, Hawai‘i Department of Land and Natural Resources, March 24, 2023)

EXHIBIT C

<p align="center">STATE OF HAWAII CIRCUIT COURT OF THE FIRST CIRCUIT</p>	<p align="center">SUMMONS TO ANSWER CIVIL COMPLAINT</p>	<p align="center">Electronically Filed FIRST CIRCUIT 1CCV-23-0000594 08-MAY-2023 04:22 PM Dkt. 9 PDOC</p>
<p>CASE NUMBER</p> <p align="center">1CCV-23-0000594</p>		
<p>PLAINTIFF'S NAME & ADDRESS, TEL NO. c/o Timothy Vandev eer, Esq. Margaret Wille & Associates P.O. Box 6398 Kamuela, HI 96743 (808) 388-0660</p>		
<p>PLAINTIFFS</p> <p>HAWAII UNITES, a 501(c)(3) nonprofit corporation; Tina Lia, an individual</p>	<p align="center">vs.</p> <p>DEFENDANT(S)</p> <p>BOARD OF LAND AND NATURAL RESOURCES, STATE OF HAWAII, and DEPARTMENT OF LAND AND NATURAL RESOURCES, STATE OF HAWAII</p>	
<p>TO THE ABOVE NAMED DEFENDANT(S)</p> <p>You are hereby summoned and required to file with the court and serve upon:</p> <p><u>Timothy Vandev eer, MARGARET WILLE & ASSOCIATES LLLC</u>, plaintiff's attorney, whose address is stated above an answer to the complaint which is herewith served upon you, within 20 days after service of this summons upon you, exclusive of the date of service. If you fail to do so, judgment by default will be taken against you for the relief demanded in the complaint.</p> <p>THIS SUMMONS SHALL NOT BE PERSONALLY DELIVERED BETWEEN 10:00 P.M. AND 6:00 A.M. ON PREMISES NOT OPEN TO THE GENERAL PUBLIC, UNLESS A JUDGE OF THE ABOVE-ENTITLED COURT PERMITS, IN WRITING ON THIS SUMMONS, PERSONAL DELIVERY DURING THOSE HOURS.</p> <p>A FAILURE TO OBEY THIS SUMMONS MAY RESULT IN AN ENTRY OF DEFAULT AND DEFAULT JUDGMENT AGAINST THE DISOBEYING PERSON OR PARTY.</p>		
<p>DATE ISSUED:</p>	<p>CLERK</p>	<p>CIRCUIT COURT CLERK</p>

The original document is filed in the Judiciary's electronic case management system which is accessible via eCourt Kōkua at: <http://www.courts.state.hi.us>

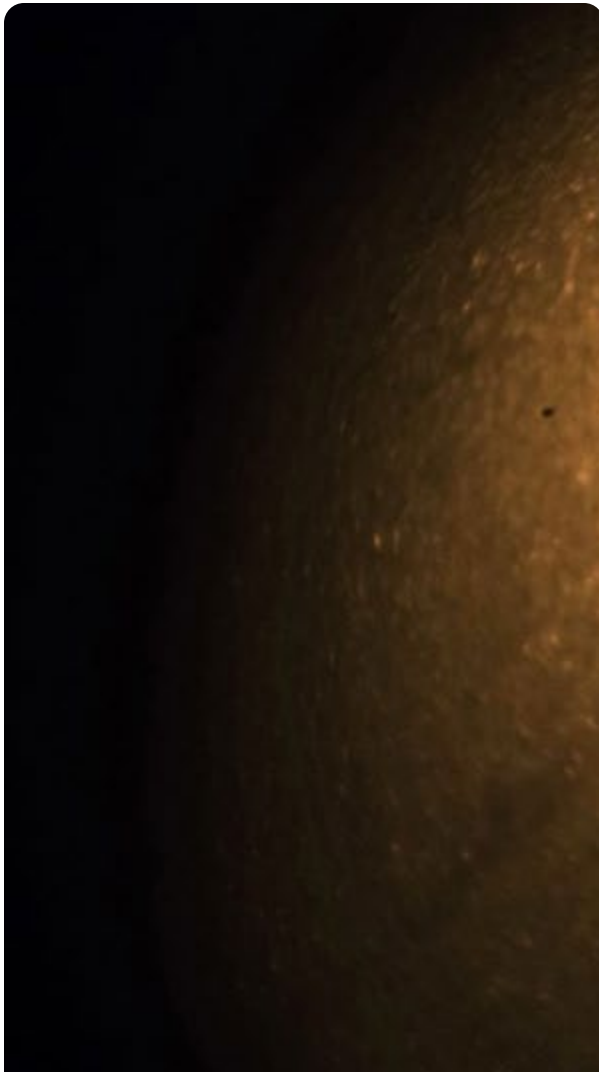
In accordance with the Americans with Disabilities Act and other applicable state and federal laws, if you require a reasonable accommodation for a disability, please contact the ADA Coordinator at the Circuit Court Administration Office at: PHONE NO. 808-539-4400, FAX (808) 539-4402, or TTY (808) 539-4853 at least ten (10) working days prior to your hearing or appointment date.

From: [Mary Livingston](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Oppose the Request for Approval of Management Plan for Kipahulu State Forest Reserve - Testimony
Date: Monday, July 10, 2023 6:44:22 PM

Aloha,

This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

NBC News has identified the fact that a similar project of mosquito release occurred two to three years ago in Texas and Florida. And both states have now reported their first malaria cases in twenty years, according to WTRF News. Could it really be a coincidence?



Genetically modified mosquitoes to be released in

Florida

nbcnews.com



CDC issues alert after cases of malaria were acquired locally in Texas and Florida

nbcnews.com

<https://www.wtrf.com/health-2/are-genetically-modified-mosquitoes-from-a-bill-gates-backed-program-causing-a-u-s-malaria-outbreak/>

There is no evidence that the release of mosquitos in Hawaii will be harmless, either. The Bill and Melinda Gates Foundation funded the company Oxitec “to rid the world of malaria”. It would seem their science was faulty.

<https://www.gatesfoundation.org/about/committed-grants/2020/09/inv019029>

While the mosquitos being released in Hawaii are not genetically modified, they are infected with a Wolbachia virus. And the release is moving forward without proper studies.

Wolbachia bacteria can be transmitted horizontally to parasites in our system that can then play a major role in giving people elephantitis, heartworm, and River Blindness.

Approving these actions puts Hawaii people at risk for serious diseases. Those responsible will be held accountable.

Please, cease and desist.

From: [Arion Love](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Opposition To Kipahulu Mosquito Control Plan
Date: Monday, July 10, 2023 10:00:09 PM

Aloha

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina.

This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Sincerely

Mr. Arion Love
Kihei, Maui

From: [Claire Mckenzie](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] C1 DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve
Date: Thursday, July 13, 2023 7:53:39 AM

Aloha, my name is Claire McKenzie and I am a resident of Kīpahulu.

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Mahalo

From: [Michelle Melendez](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] opposed to the BLNR's 7/14/23 agenda item C1
Date: Tuesday, July 11, 2023 11:51:43 AM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Please STOP THIS!

Mahalo,
Michelle Melendez
Fitness and Wellness Expert Since 1996
Author Of The Best Selling and 4x Award Winning Book,
End Dieting Hell: How to find peace in your body and release the weight
<https://blossominnerwellness.com/>
Order your copy of [End Dieting Hell Click Here](#)

From: [Yvette Moore aka Eyyette-Leilani](#)
To: [DLNR, BLNR, Testimony](#)
Subject: [EXTERNAL] TESTIMONY ; SUBMITTED
Date: Monday, July 10, 2023 5:37:06 PM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

--
Respectfully Yours,

***All Rights Reserved
Yvette-Leilani; House of Moore, Sui Juris, HGJA Rec Sec
c/o Paradise PMA & Trading Company
(808) 306-5393***

*****Revelations 6:2- I looked, and there before me was a white horse! Its rider held a bow, and he was given a crown, and he rode out as a conqueror bent on conquest.***

From: [Arianna Noruzi](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] 7/14/23 agenda item C1
Date: Thursday, July 13, 2023 6:21:30 AM

I'm opposed to the BLNRs 7/14/23 agenda item c1. DOFAW request for approval of a management plan for the Kipahulu state forest reserve. Mosquito control plans for Kipahulu include the release of millions of lab infected mosquitoes that are a danger to the native birds, wildlife, public health, and the aina. This project is being challenged in environmental court to seek to require an EIS. No further actions should be taken to release bio pesticide mosquitoes while the need for further study of the risks is actively being litigated. This is an extremely fragile ecosystem, and the other areas where this "experiment" was previously conducted (ie. Texas) are experiencing negative impacts such as the first Malaria cases in decades. Please push to find a less risky option as well as actually including and LISTENING to community members.

Mahalo,
Arianna Noruzi

From: [Kimberly Pecana](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] DOFAW Request for approval for a management plan for the Kipahulu state Forest Reserve
Date: Thursday, July 13, 2023 5:36:21 AM

Aloha,

I am a resident of Maui County and I strongly oppose the use of biopesticide mosquitoes to be released to save the native Hawaiian bird. Please listen to all the residents of Hawaii and stop the release of these mosquitoes into Hawaii. We are not experiments. Vote NO to stop this!

Mahalo for your time.

Sincerely,
Kimberly Pecana

Sent from my iPhone

From: [Tammy Ash Perkins](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Mosquito Release for Kīpahulu State Forest Reserve
Date: Tuesday, July 11, 2023 10:11:50 AM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

These mosquitoes are placing the community at risk! If you love Hawaii, please stop this!

I can provide video testimony if allowed to do so.

Me Ke Aloha
Tammy

Tammy Ash Perkins
Maui District 12-02
Precinct President
VP Events
Rules Committee Rep
IPPRC Rep

Sent with [Proton Mail](#) secure email.

From: [Georgia P](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] opposed to 7/14/23 agenda item C1
Date: Tuesday, July 11, 2023 1:54:18 PM

Aloha

Mahalo for your dedication to the good work that you do for Hawaii.

I am writing today in OPPOSITION of agenda item C1.

I DO NOT SUPPORT the release of millions of infected mosquitoes into our ecosystem. This project is currently being challenged in court, and we urge this board to DENY THIS MANAGEMENT PLAN.

No further action should be taken using this lab-bred mosquito while the risks are currently being reviewed in court.

The residents of this rural area are historically underheard, not heard, and opposition not respected.

I urge you to show some respect for the maka'ainana of this 'aina, and DENY agenda item C1, the management plan that calls for the release of millions of mosquitos who were bred in a lab to carry a bio-disease that crosses species, while the environmental safety of this is being litigated in court.

Please do the right thing.

mahalo
Georgia A Pinsky
Kaupo

From: [Kelly Roske](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Kīpahulu Mosquito release opposition.
Date: Thursday, July 13, 2023 4:22:20 AM

Aloha,

I am writing to state my opposition to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. The Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to our native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Kelly Roske

Aloha au iā 'oe ~ Mālama pono

From: [B. Nalani Shamblin](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Against Release of Wabachi Mosquitos - Testimony
Date: Tuesday, July 11, 2023 8:31:32 PM

Aloha,

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Mahalo,
B Nalani Shamblin
Hana, HI

From: [Bart Smith](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Oppose Mosquito Release
Date: Monday, July 10, 2023 5:09:37 PM

Dear Sir and Madam

Every time I see a mongoose, Buffo frog, or Peacock Grouper, etc. I think of BLNR and their Mismanagement.

Fascinating that the Bureau tasked with care of Aina, puts their trust in "science" over nature. I suspect you feel weak in the face of the God Science. You should trust in nature.

It is only fitting that should something goes wrong as it always does, that those who make this decision be libel for anything that will go wrong as it always does when you mess with Mother Nature.

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve.

Sincerely,
Dr. Robert Smith

From: [Tama Starr](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Wolbachia Mosquitos BLNR's 7/14/23 agenda item C1
Date: Wednesday, July 12, 2023 1:48:48 PM

I am a resident of Kaupo, and I am OPPOSED to the release of infected mosquitos in our area without adequate study—at the very least, a comprehensive EIS.

Sincerely,
Tama Starr

From: [Chrystal Summers](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] OPPOSING Testimony C1. DOFAW
Date: Thursday, July 13, 2023 1:30:25 AM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Respectfully,

Chrystal Summers

From: [Nicki Tedesco](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Opposition statement to the BLNR's 7/14 agenda item C1
Date: Monday, July 10, 2023 5:05:47 PM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

There is not enough evidence that this will do the intended effect as well as there is no understanding of ancillary issues that this will cause.

--

Nicki Tedesco

[YouTube](#)

[Twitch Channel](#)

[Bandcamp](#)

[Patreon](#)

[Stream Nickis Music](#)

[All Links \(Venmo/PayPay/Tour\)](#)

From: [Leihulu Thomas](#)
To: [DLNR.BLNR.Testimony](#)
Cc: leihulut@gmail.com
Subject: [EXTERNAL] A'ole to Mosquito release
Date: Thursday, July 13, 2023 6:11:18 AM

HEWA enough is enough before it's too late. You still have time to make it right with GOD before his hands strike down on all land space and time.

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Subject: BLNR Meeting 7/14/23 Agenda Item C-1: **Oppose**

Aloha,

This testimony is in regards to item C-1 DOFAW Request for Approval of a Management Plan for Kīpahulu State Forest Reserve.

I am **strongly opposed** to the request for approval of a Management Plan that involves planned biopesticide mosquito releases anywhere in Hawaii, including Kīpahulu State Forest Reserve on Maui. Although the Management Plan involves numerous critical actions on the forest reserve, such as ungulate control and fencing; there is only brief mention to control mosquitoes on the reserve on page 52. <https://dlnr.hawaii.gov/wp-content/uploads/2023/07/C-1.pdf>

This is insufficient detail for the public to evaluate the proposed management plan which we can assume involves the Incompatible Insect Technique (IIT) as a mosquito control method. The public has voiced numerous concerns about the release of lab bred mosquitoes. The Environmental Assessment for Maui is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes at Kīpahulu State Forest Reserve while the need for further study of the risks is actively being litigated.

Since spring 2022, as a veteran in National Security and Investigations for over 30 years, I have been investigating the science in depth behind the use of Wolbachia infected lab bred mosquitoes. The size, scope and species proposed (Culex q - southern house mosquito) has NEVER been done anywhere in the world with the stand-alone Incompatible Insect Technique (IIT) to suppress the mosquito population as a conservation effort to save native birds from avian malaria.

After studying thousands of pages of scientific papers, environmental assessments, government documents, funding, and grants related to Wolbachia as well as consulting with experts; what stands out from all this research is that Wolbachia bacterium strains are still being discovered and its impacts are yet to be fully understood. Its influence on other life forms; including humans, native birds, arthropods and filarial worms' reproductive cycle and pathogen infection (either to block or promote) is **still in process** of being vetted.

We are awaiting results of grants researched out of Penn State University thru NIH including WOLBACHIA-INDUCED ENHANCEMENT OF HUMAN ARBOVIRAL PATHOGENS. "A SOBERING REMINDER THAT THE PATHOGEN INHIBITORY EFFECTS RESULTING FROM WOLBACHIA INFECTION IN SOME INSECTS CANNOT AND SHOULD NOT BE GENERALIZED ACROSS VECTOR-PATHOGEN SYSTEMS. UNDERSTANDING THE GENERAL ARE CRITICAL FOR ESTIMATING HOW LIKELY WOLBACHIA-BASED CONTROL STRATEGIES ARE TO FAIL OR **MAKE THINGS WORSE**, FOR IDENTIFYING POTENTIAL POINTS WHERE WOLBACHIA-BASED CONTROL IS LIKELY TO BREAK DOWN IN THE FIELD, AND

FOR PLANNING RISK MITIGATION STRATEGIES IN THE CASE OF UNFORESEEN HARMFUL OUTCOMES. IN THIS RESEARCH, WE WILL INVESTIGATE THE HYPOTHESIS THAT WOLBACHIA-INDUCED MODULATION OF THE MOSQUITO HOLOGENOME CAN LEAD TO INCREASED ARBOVIRUS INFECTION/TRANSMISSION IN SOME VECTOR-PATHOGEN SYSTEMS OF HUMAN IMPORTANCE."

<https://govtribe.com/award/federal-grant-award/project-grant-r01ai116636>

Wolbachia has the potential to increase pathogen infection

"Mosquitoes infected with the bacteria Wolbachia are more likely to become infected with West Nile virus and more likely to transmit the virus to humans, according to a team of researchers."

"The results suggest that caution should be used when releasing Wolbachia-infected mosquitoes into nature to control vector-borne diseases of humans."

<https://www.sciencedaily.com/releases/2014/07/140710141628.htm>

Wolbachia Enhances West Nile Virus (WNV) Infection in the Mosquito *Culex tarsalis*
<https://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0002965>

Wolbachia Can Enhance Plasmodium Infection in Mosquitoes: Implications for Malaria Control? <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4154766/>

Antibiotic Resistance

As protocol, lab bred mosquitoes are treated with antibiotics prior to being injected with Wolbachia. Use of this method over time can lead to antibiotic resistance with unknown effects on the environment and can cancel out effectiveness of treatment for diseases in which Wolbachia is implicated. The endosymbiont Wolbachia rebounds following antibiotic treatment <https://pubmed.ncbi.nlm.nih.gov/32639986/>

Previous mosquito control projects in California and Cayman Islands using Genetically Modified (GM) mosquitoes (which have some parallels to IIT method with Wolbachia to include the use of antibiotics) have not renewed contracts. "Cayman Island officials were set to renew their contract. But data from the trials indicated serious problems, leading the territory's environmental health minister to tell the Edmonton Journal, the scheme wasn't getting the results we were looking for. There was further concern that the released mosquitoes could be spreading antibiotic resistance or make mosquito-borne diseases worse by lowering individual immunity.

Modified Mosquitoes Fail to Beat Malaria

<https://www.pressreader.com/canada/edmonton-journal/20181126/281951723871847>

"British biotechnology company Oxitec is withdrawing its application to release billions of genetically engineered mosquitoes in California, according to a recent update from the California Department of Pesticide Regulation."

<https://beyondpesticides.org/dailynewsblog/2023/05/efficacy-and-health-issues-stop-release-of-genetically-engineered-mosquitoes-in-california-florida-continues/>

There are parallels between GM and Wolbachia techniques. Biologically Wolbachia lab infected mosquitoes are not GM mosquitoes, but the study designs, math, and adherence to protocol apply to both situations. The main biological difference is there is slower horizontal transfer of mutations of the GM mosquito than with horizontal transfer of Wolbachia. This means Wolbachia has the potential to have greater adverse impact on the environment, which necessitates the need for a full scope Environmental Impact Statement (EIS). Horizontal gene transfer between Wolbachia and the mosquito *Aedes aegypti* <https://bmcgenomics.biomedcentral.com/articles/10.1186/1471-2164-10-33>

Lack of Bio-Security

There has been no documentation offered to the public outlining risk analysis conducted on the security vulnerabilities for lab bred mosquitoes that can be utilized as bio-weapons against a population (intended) nor details of quality control mechanisms for accidental transmission of pathogens (unintended). This includes failure to discuss how they will deal with accidental female escape, wind drift, or how male lab bred culex q. mosquitoes released into the wild can pass pathogen to biting females thru mating and shared feeding/water sources. We have no idea how these lab mosquitoes will be quality controlled and tested.

Intended entomological warfare involves infecting insects with a pathogen and then dispersing the vectors over target areas. Invasive insects can also be deployed into a country en masse to take out crops and cripple a food supply. In New York the Plum Island lab was involved in the development of offensive bioweapons that led to Lyme's disease outbreaks. Japan's biological warfare unit (Unit 731) was deployed against China during World War II. The unit deployed plague-infected fleas and cholera-infected flies to take out the Chinese. <https://citizens.news/694097.html>

“We recommend careful invigilation of the international borders, airports, and seaports by the trained scientists to identify any accidental and/or deliberate import of alien arthropod vectors. Therefore, it is well advised to take seriously the possibility that arthropod could be used to attack people. Moreover, future research priorities should also includes high-throughput molecular diagnostics of diseases, identification of vectors, phylogenetic studies to understand the origin and distribution of the pathogen and vector strains. A rapid action team of trained scientist and health workers equipped with modern sophisticated diagnostic tools and suitable vector extinguishers should be appointed by the state and/or central health authorities to counter act any such emergency”. Bioterrorism on Six Legs by Dr. Manas Sarkar.

There are patents developed in 2014 involving drones that transport and release mosquitoes. It mentions in the patent these drones can be co-opted for bio-weapons military programs. <https://patents.google.com/patent/US8967029B1/en>

Although proponents of IIT mosquito control emphasize male mosquitoes are harmless since they don't bite, we come to find male lab bred mosquitoes can pass pathogens to wild biting females thru mating and shared feeding/water sources.

Venereal Transmission of St. Louis Encephalitis Virus by *Culex quinquefasciatus* Males (Diptera: Culicidae) – Donald A. Shroyer (Journal of Medical Entomology, 5/1990)
<https://academic.oup.com/jme/article-abstract/27/3/334/2220754?login=false>

There is no mention in the Final Maui Environmental Assessment on how lab batches will be quality controlled or tested for unintended pathogens upon arrival to Hawaii or if lab employees in contact with these mosquitoes will go thru security clearance screening and training. No documented assurances have been made to the public that lab suppliers will be testing mosquitoes for human or avian diseases to ensure that they are pathogen-free prior to shipping to Hawaii.

The science and tech industry in the United States, to include Silicon Valley and Academia, has been heavily infiltrated by the Chinese Communist Party (CCP). Due to the deterioration of relations between the US and China, among other adversaries, mosquito releases should not move forward until sound security protocols are adequately implemented. <https://www.justice.gov/opa/pr/harvard-university-professor-and-two-chinese-nationals-charged-three-separate-china-related>

The Bill and Melinda Gates Foundation, also connected to the CCP, have openly discussed support of human depopulation. This is the same foundation that has been funding ongoing research of Wolbachia (World Mosquito Program and numerous grants) and GM mosquitoes (Oxitec) since 2002. Gates Foundation has also funded research developing anti-malaria vaccines.

<https://www.npr.org/sections/goatsandsoda/2022/09/21/1112727841/a-box-of-200-mosquitoes-did-the-vaccinating-in-this-malaria-trial-thats-not-a-jo>

Wolbachia Has Been Implicated in Human Disease

Wolbachia is NOT harmless to humans. It effects filarial worms that cause human disease such as river blindness and is implicated in Elephantiasis. These diseases effect tens of millions of people each year. According to the CDC website, "There is a promising treatment using doxycycline that kills the adult worms by killing the Wolbachia bacteria on which the adult worms depend in order to survive".

<https://www.cdc.gov/parasites/onchocerciasis/treatment.html>

“For decades, people have blamed a parasitic nematode worm for a disease that has blinded at least 250,000 people now living in Africa and South America. But the real culprit may be the ubiquitous Wolbachia, bacteria that colonize many hundreds of species, including the worm indicted in river blindness. Researchers now report that **Wolbachia stimulate the severe immune system response that slowly robs people of their vision**”. <https://www.science.org/content/article/worms-may-not-act-alone-river-blindness>

Anti-Wolbachia therapy for onchocerciasis & lymphatic filariasis: Current perspectives

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6755775/>

Efficacy of 2- and 4-week rifampicin treatment on the Wolbachia of *Onchocerca volvulus*
<https://pubmed.ncbi.nlm.nih.gov/18679718/>

Science is recently discovering **detection of Wolbachia genes in humans**:

Detection of Wolbachia genes in a patient with non-Hodgkin's lymphoma
[https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X\(14\)00040-8/fulltext](https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X(14)00040-8/fulltext)

Wolbachia 16S rRNA and fbpA genes were twice detected over 5 days in the blood of a patient with high fever. The patient was given fluoroquinolones and the fever resolved. Four weeks later, he was diagnosed with non-Hodgkin's lymphoma and received R-CHOP (Rituximab, Cyclophosphamide, Doxorubicin, Vincristine, Prednisolone) treatment resulting in complete remission. This is the first report of detection of Wolbachia genes from the blood of human patients with non-Hodgkin's lymphoma.

The Maui EA's assertion that released mosquitoes pose no risk to human health is based on unsound science. The 2010 article by Popovici et al. cited in the EA has been discredited by the EPA. The EPA Human Studies Review Board met in 2018, and the following question was posed:

“Is the research described in the published article ‘Assessing key safety concerns of a Wolbachia-based strategy to control dengue transmission by *Aedes* mosquitoes’ scientifically sound, providing reliable data for the purpose of contributing to a weight of evidence determination in EPA’s assessment of the risks to human health associated with releasing Wolbachia-infected mosquitoes?”

The Board’s response states: “The Board concluded that the research described in the article by Popovici et al. was not scientifically sound and does not provide reliable data to contribute to a weight of evidence determination for assessment of human health risks due to release of Wolbachia-infected mosquitoes.”

Verily Life Sciences

Verily’s registrant representatives listed in the Department of Agriculture Import Application https://hdoa.hawaii.gov/wp-content/uploads/2018/05/HDOA-Mosquito-Request-PA_Final-6.8.21.pdf are co-authors of Mark Release Recapture of Male *Aedes aegypti* use of **Rhodamine B** to Estimate Movement, Mating and Population Parameters for an Incompatible Male Program
https://www.researchgate.net/publication/345648051_Title_Mark-release-recapture_of_male_Aedes_aegypti_Diptera_Culicidae_use_of_rhodamine_B_to_estimate_movement_mating_and_population_parameters_in_preparation_for_an_incompatible_male_program

Rhodamine B has implications on land and aquatic lifeforms.
<https://www.sciencedirect.com/science/article/abs/pii/S0045653521025522>

Rhodamine B (RhB) is among the toxic dyes due to the carcinogenic, neurotoxic effects and ability to cause several diseases for humans. Has Rhodamine B been used in Hawaii's MMR studies? <https://pubmed.ncbi.nlm.nih.gov/33857893/>

As a potential supplier of lab bred mosquitoes it should be noted Verily had a colony collapse with mosquitoes in 2017, the titer levels of Wolbachia were a key cause for this reproductive collapse. <https://www.nature.com/articles/s41587-020-0471-x#Sec19>

It is undetermined whether Verily has perfected a sound method of sex sorting for *Culex quinquefasciatus* so that females do not escape. The company has dozens of patents for sieving apparatuses for pupae separation that are as recent as 2023 and going back NO further than 2018.

Additional concerns not adequately addressed

The Maui Final Environmental Assessment failed to provide adequate detail as required by HEPA; failure to identify the Wolbachia strain planned for use in this project and describe the mark release recapture study as a proposed action; failure to adequately identify the mosquito packages planned for release into the environment; failure to adequately address the effects on the environment from the release of biodegradable packages with an unknown decay rate; failure to identify biosecurity protocols; failure to adequately address viewscape impacts, noise disturbances to forest bird breeding and nesting, and significant environmental consequences, including impacts to the untrammled, natural qualities of the wilderness character; failure to adequately address the potential negative impacts of introducing an invasive species to the islands; failure to identify the strain of Wolbachia bacteria planned for import in connection with this project that does not exist on these islands; failure to address the concerns of tropical disease and vector expert Dr. Lorrin Pang (private citizen) regarding the serious risks of this project; failure to adequately study or address the impacts to endangered native Hawaiian hoary bats, native dragonflies, and endangered native damselflies; failure to study and address biopesticide wind drift; failure to adequately address Environmental Justice (human health impacts of this project have not been adequately studied, and the proposed action would impact ethnographic resources and traditional cultural practices); failure to conduct a feasibility study to provide a detailed analysis that considers all of the critical aspects of the proposed project in order to determine the likelihood of it succeeding; and failure to establish, under the precautionary principle, that the proposed activity will not result in significant harm.

I am opposed to request for approval of a Management Plan that involves planned biopesticide mosquito releases anywhere in Hawaii, including Kīpahulu State Forest Reserve on Maui until a full scope Environmental Impact Study is completed.

Respectfully,

Donna Thompson
Kamuela, HI
sharkgss@protonmail.com

From: [wandalea9](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] No Franken-Mosquitoes!
Date: Monday, July 10, 2023 5:57:28 PM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Sent with [Proton Mail](#) secure email.

From: [aerie waters](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] opposition to release of mosquitos
Date: Tuesday, July 11, 2023 1:47:26 PM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve.

Dont you think we have enough problems yet?

STOP THIS deeply misguided experiment NOW! PLEASE.

Aerie Waters.... this is elemental

From: [Sherilyn Wells](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] #2 - Prior Testimony to be appended to Initial Comments re Opposed to 7/14/23 Agenda Item C1 - DOFAW request for approval of a management plan for the Kipahulu State Forest Reserve etc.
Date: Wednesday, July 12, 2023 5:45:58 AM
Attachments: [D Thompson BLNR C2 Testimony 24 March 2023.pdf](#)

----- Forwarded Message -----

From: Sherilyn Wells <votetrees@protonmail.com>
Date: On Thursday, March 23rd, 2023 at 8:12 AM
Subject: Full support for ("joining in") Donna Thompson testimony. Fw: BLNR Meeting 3/24/23 9:15am Testimony Agenda Item C-2: Oppose
To: blnr.testimony@hawaii.gov <blnr.testimony@hawaii.gov>

I stand in full support of all statements made in the excellent submission by Donna Thompson of Kamuela.
Sherilyn Wells
Big Island - Waikoloa
Sent with [Proton Mail](#) secure email.

----- Forwarded Message -----

From: sharkgss <sharkgss@protonmail.com>
Date: On Thursday, March 23rd, 2023 at 7:15 AM
Subject: BLNR Meeting 3/24/23 9:15am Testimony Agenda Item C-2: Oppose
To: blnr.testimony@hawaii.gov <blnr.testimony@hawaii.gov>, dlnr@hawaii.gov <dlnr@hawaii.gov>

Aloha,

RE: C-2 Request Approval of Final Environmental Assessment and Authorization for the Chairperson to Issue a Finding of No Significant Impact for the "Suppression of Invasive Mosquito populations to Reduce Transmission of Avian Malaria to Threatened and Endangered Forest Birds on East Maui".

Please find my written testimony in opposition attached regarding item C-2

Mahalo,
Donna Thompson
Kamuela, HI

Sent with [Proton Mail](#) secure email.

Subject: BLNR Meeting 3/24/23 9:15am Agenda Item C-2: **Oppose**

Aloha,

This testimony is in regards to item C-2 Request Approval of Final Environmental Assessment (EA) and Authorization for the Chairperson to Issue a Finding of No Significant Impact for the “Suppression of Invasive Mosquito populations to Reduce Transmission of Avian Malaria to Threatened and Endangered Forest Birds on East Maui”

I am **strongly opposed** to the request for approval of the Final Environmental Assessment for the planned biopesticide mosquito releases anywhere in Hawaii. I have been involved with submitting testimonies since spring of 2022 and it is clear this project is being fast tracked with no regard for numerous legitimate concerns. There are issues with security, conflict of interest, lack of proper study, permitting, and this project is undoubtedly an experiment which can have serious consequences that are **irreversible**.

My background spans over 30 years in National Security and Investigations as a Subject Matter Expert. According to the Final EA there has been no risk analysis conducted on the security vulnerabilities for lab bred mosquitoes that can be utilized as bio-weapons against a population (intended) nor any mention of quality control for accidental transmission of pathogens (unintended).

Intended entomological warfare involves infecting insects with a pathogen and then dispersing the vectors over target areas. Invasive insects can also be deployed into a country en masse to take out crops and cripple a food supply. In New York the Plum Island lab was involved in the development of offensive bioweapons that led to Lyme's disease outbreaks. Japan's biological warfare unit (Unit 731) was deployed against China during World War II. The unit deployed plague-infected fleas and cholera-infected flies to take out the Chinese. <https://citizens.news/694097.html>

“We recommend careful invigilation of the international borders, airports, and seaports by the trained scientists to identify any accidental and/or deliberate import of alien arthropod vectors. Therefore, it is well advised to take seriously the possibility that arthropod could be used to attack people. Moreover, future research priorities should also includes high-throughput molecular diagnostics of diseases, identification of vectors, phylogenetic studies to understand the origin and distribution of the pathogen and vector strains. A rapid action team of trained scientist and health workers equipped with modern sophisticated diagnostic tools and suitable vector extinguishers should be appointed by the state and/or central health authorities to counter act any such emergency”. Bioterrorism on Six Legs by Dr. Manas Sarkar.

There is no mention in the Final EA on how lab batches will be quality controlled or tested for unintended pathogens upon arrival to Hawaii or if lab employees in contact with these mosquitoes will go thru security clearance screening and training. Our

science and tech industry in the United States has been heavily infiltrated by the Chinese Communist Part (CCP). Due to the deterioration of relations between the US and China, among other adversaries, this project should not move forward until sound security protocols are adequately implemented. <https://www.justice.gov/opa/pr/harvard-university-professor-and-two-chinese-nationals-charged-three-separate-china-related>

The U.S. Department of the Interior Strategy for Preventing the Extinction of Hawaiian Forest Birds confirms that The Nature Conservancy has contracted with mosquito lab Verily Life Sciences. There is no mention of this contract in the EA. No documented assurances have been made that Verily Life Sciences will be testing mosquitoes for human or avian diseases to ensure that they are pathogen-free prior to shipping to Hawaii. As this project involves the interstate transport of Culex mosquitoes, a known vector of poultry diseases, there is concern about impacts to local poultry farms and egg production in Hawaii. Has the USDA inspected the Verily insectary? There is no mention in the Final EA of a USDA permit (e.g. OV VS16-6 permit from APHIS) for the interstate transport of poultry pathogen vectors by a California shipper.

According to APHIS: The Veterinary Services, Organisms and Vectors (OV) Permitting Unit regulates the importation into the United States, and interstate transportation, of organisms and vectors of pathogenic diseases of livestock and poultry.

The Code of Federal Regulations, in 9 CFR, §122.2, mandates that “no organisms or vectors shall be imported into the United States or transported from one State or Territory or the District of Columbia to another State or Territory or the District of Columbia without a permit”.

Given that interstate transport of the vector (live Culex) is occurring from Maui to Verily's lab in South San Francisco, CA and those Culex may contain a highly contagious poultry pathogen, such as avianpox virus, movement between states needs a federal permit. Lab mosquitoes are blood fed, the EA makes no mention of what type of blood or how they would mitigate risk transporting avian pathogens back to Hawaii.

The Bill and Melinda Gates Foundation have openly discussed support of human depopulation; this is the same foundation that funded original research of Wolbachia mosquitoes in 2003. There are too many coincidences and not enough objective analysis of the big picture ecology by the BNM steering partners whom have been myopically focused on saving the birds at all costs. This lack of careful study and observation could instigate increased rates of extinction due to multiple potential secondary impacts.

Wolbachia is NOT harmless to humans. It effects filarial worms that cause human disease such as river blindness which effects tens of millions of people each year. According to the CDC website, “There is a promising treatment using doxycycline that kills the adult worms by killing the Wolbachia bacteria on which the adult worms depend in order to survive”. <https://www.cdc.gov/parasites/onchocerciasis/treatment.html>

.

“For decades, people have blamed a parasitic nematode worm for a disease that has blinded at least 250,000 people now living in Africa and South America. But the real culprit may be the ubiquitous Wolbachia, bacteria that colonize many hundreds of species, including the worm indicted in river blindness. Researchers now report that **Wolbachia stimulate the severe immune system response that slowly robs people of their vision**”. <https://www.science.org/content/article/worms-may-not-act-alone-river-blindness>

Even though male mosquitoes do not bite, **male Culex mosquitoes are known to spread viruses to female mosquitoes through mating**. Venereal Transmission of St. Louis Encephalitis Virus by Culex quinquefasciatus Males (Diptera: Culicidae) – Donald A. Shroyer (Journal of Medical Entomology, 5/1990)
<https://academic.oup.com/jme/article-abstract/27/3/334/2220754?login=false>

Anti-Wolbachia therapy for onchocerciasis & lymphatic filariasis: Current perspectives
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6755775/>

Efficacy of 2- and 4-week rifampicin treatment on the Wolbachia of Onchocerca volvulus
<https://pubmed.ncbi.nlm.nih.gov/18679718/>

Wolbachia Enhances West Nile Virus (WNV) Infection in the Mosquito Culex tarsalis
<https://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0002965>

Wolbachia Can Enhance Plasmodium Infection in Mosquitoes: Implications for Malaria Control? <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4154766/>

Horizontal gene transfer between Wolbachia and the mosquito Aedes aegypti
<https://bmcbgenomics.biomedcentral.com/articles/10.1186/1471-2164-10-33>

Science is recently discovering **detection of Wolbachia genes in humans**:
Detection of Wolbachia genes in a patient with non-Hodgkin's lymphoma
[https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X\(14\)00040-8/fulltext](https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X(14)00040-8/fulltext)

Wolbachia 16S rRNA and fbpA genes were twice detected over 5 days in the blood of a patient with high fever. The patient was given fluoroquinolones and the fever resolved. Four weeks later, he was diagnosed with non-Hodgkin's lymphoma and received R-CHOP (Rituximab, Cyclophosphamide, Doxorubicin, Vincristine, Prednisolone) treatment resulting in complete remission. This is the first report of detection of Wolbachia genes from the blood of human patients with non-Hodgkin's lymphoma.

The EA's assertion that released mosquitoes pose no risk to human health is based on unsound science. The 2010 article by Popovici et al. cited in the EA has been discredited by the EPA. The EPA Human Studies Review Board met in 2018, and the following question was posed:

“Is the research described in the published article ‘Assessing key safety concerns of a Wolbachia-based strategy to control dengue transmission by Aedes mosquitoes’ scientifically sound, providing reliable data for the purpose of contributing to a weight of evidence determination in EPA’s assessment of the risks to human health associated with releasing Wolbachia-infected mosquitoes?”

The Board’s response states: “The Board concluded that the research described in the article by Popovici et al. was not scientifically sound and does not provide reliable data to contribute to a weight of evidence determination for assessment of human health risks due to release of Wolbachia-infected mosquitoes.”

Since Verily Life Sciences is the most likely sole source candidate to provide lab bred mosquitoes, there are several issues that should be considered by voting members of this committee in committing tax payer funds to a vendor on a project of this size and scope.

Verily Life Sciences is a relatively new corporation (incorporated in 2015). A sole source provider producing up to 40 billion mosquitoes per year on Maui alone should have much more established past performance in the Incompatible Insect Technique IIT methodologies intended for use in Hawaii.

Verily had recent leadership shake up and layoffs of 15% of staff in January 2023. Verily's owners are: Larry Page and Brin Sergey, the Soros Foundation, Silver Lake and Temasek. Verily raised 3.5 billion dollars of private equity money between 2017 and 2022 and could have direct exposure to the collapse of Silicon Valley Bank, the "go to" bank for the life science startups.

Verily had a colony collapse with mosquitoes in 2017, the titer levels of Wolbachia were a key cause for this reproductive collapse. <https://www.nature.com/articles/s41587-020-0471-x#Sec19>

It is undetermined whether Verily has perfected a sound method of sex sorting for *Culex quinquefasciatus* so that females do not escape. The company has dozens of patents for sieving apparatuses for pupae separation that are as recent as 2023 and going back NO further than 2018.

Landscape level control of *Culex* mosquitoes using this Incompatible Insect Technique (IIT) **has never been done before**. Even with *Aedes* mosquitoes, the largest project area was 724 acres. Federal documentation connected to this project confirms that “although used world-wide for human health, Wolbachia IIT is a novel tool for conservation purposes and its degree of efficacy in remote forest landscapes is unknown.” Additionally, the species planned for use in this project, *Culex quinquefasciatus*, **has never been used for IIT**.

The Advisory Committee on Plants and Animals’ recommendation to approve import and release of *Culex quinquefasciatus* mosquitoes should be null and void due to the

conflicts of interest of committee members pursuant to HRS 84-14. The Ethics Guide for State Board and Commission Members states that members must not take official action affecting a business in which they have "financial interest." "Financial interest" in a business includes "employment." Whether a business can be a government agency is unstated. The following members of the Advisory Committee on Plants and Animals unanimously voted (7/0) on June 9, 2022 to recommend approval of the import permit:

- Darcy Oishi, Committee Chairperson, Hawaii Department of Agriculture (HDOA)
- Dr. Maria Haws, Professor of Aquaculture, Pacific Aquaculture & Coastal Research Center, University of Hawaii at Hilo
- Cynthia King, Entomologist, Division of Forestry & Wildlife, Department of Land & Natural Resources (DLNR), Ex Officio Member Designated Representative
- Gracelda Simmons, Environmental Management Program Manager, Hawaii Department of Health, Ex Officio Member Designated Representative
- Thomas Eisen, Planner, Environmental Review Program, Department of Business, Economic Development and Tourism, Ex Officio Member Designated Representative
- Joshua Fisher, Wildlife Biologist, U. S. Fish and Wildlife Service (USFWS)
- Dr. Samuel Ohu Gon III, Senior Scientist and Cultural Advisor, The Nature Conservancy – Hawaii (TNC)

Of the seven voting members' agencies above, only Thomas Eisen and Darcy Oishi are not partner agencies in Birds, Not Mosquitoes. As employees of partner agencies, Dr. Maria Haws (University of Hawaii), Cynthia King (DLNR), Gracelda Simmons (Hawaii Department of Health), Joshua Fisher (USFWS), and Dr. Samuel Ohu Gon III (TNC) all have conflicts of interest.

Both Dr. Samuel Ohu Gon III and Cynthia King are also members of the Birds, Not Mosquitoes steering committee. The purpose of the steering committee, as stated in the National Fish and Wildlife Foundation Hawaii Conservation Business Plan, includes coordinating permits for this project.

The Hawaii Department of Agriculture has applied for an EPA Emergency Exemption for use of the mosquitoes without going through regulatory safety processes. The EPA application is still under review, and the biopesticide mosquitoes have not been approved for emergency release. The Board of Land and Natural Resources cannot approve this Final Environmental Assessment and declare before the public that there is a Finding of No Significant Impact (FONSI) when there is still a possibility that the EPA will deny the Emergency Exemption due to safety concerns. This biopesticide cannot be approved for release when its safety is still under review by the EPA.

Additional concerns not adequately addressed in the Final Environmental Assessment: lack of adequate detail as required by HEPA; failure to identify the Wolbachia strain planned for use in this project; failure to identify and describe the mark release recapture study as a proposed action; failure to adequately identify the mosquito packages planned for release into the environment; failure to adequately address the effects on the environment from the release of biodegradable packages with an unknown decay rate; failure to identify biosecurity protocols; failure to adequately address viewscape impacts, noise disturbances to forest bird breeding and nesting, and significant environmental consequences, including impacts to the untrammled, natural qualities of the wilderness character; failure to adequately address the potential negative impacts of introducing an invasive species to the islands; failure to identify the origin of biopesticide mosquitoes for this project as Palmyra Atoll; failure to identify the origin of Wolbachia bacteria for the project as Kuala Lumpur in Malaysia; failure to identify the strain of Wolbachia bacteria planned for import in connection with this project that does not exist on these islands; failure to address the concerns of tropical disease and vector expert Dr. Lorrin Pang (private citizen) regarding the serious risks of this project; failure to adequately study or address the impacts to endangered native Hawaiian hoary bats, native dragonflies, and endangered native damselflies; failure to study and address biopesticide wind drift; failure to adequately address Environmental Justice (human health impacts of this project have not been adequately studied, and the proposed action would impact ethnographic resources and traditional cultural practices); failure to conduct a feasibility study to provide a detailed analysis that considers all of the critical aspects of the proposed project in order to determine the likelihood of it succeeding; and failure to establish, under the precautionary principle, that the proposed activity will not result in significant harm.

Further, per HRS §171-4 (d), BLNR Chair Dawn N.S. Chang and Board Member Vernon Char **must recuse themselves** from participating in any discussion or voting in this matter, given that they have clear conflicts of interest. Chang is employed by the DLNR, a lead agency in the mosquito project. Char is employed by a law firm whose clients include The Nature Conservancy, another lead partner in the project.

I am opposed to the authorization for the Chairperson to issue a Finding of No Significant Impact (FONSI). The scope, security risks, and experimental nature of the plan require detailed, comprehensive studies, and documentation of the impacts to our native birds, wildlife, environment, and public health. **I demand an Environmental Impact Statement (EIS).**

Mahalo for your service,

Donna Thompson
Kamuela, HI
sharkgss@protonmail.com

From: [Sherilyn Wells](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] #3 - Prior Testimony to be appended to Initial Comments re Opposed to 7/14/23 Agenda Item C1 - DOFAW request for approval of a management plan for the Kipahulu State Forest Reserve etc.
Date: Wednesday, July 12, 2023 5:50:24 AM
Attachments: [image.png](#)
[image.png](#)
[DLNR Wolbachia Mosquito EIS Required Testimony 3.doc](#)

----- Forwarded Message -----

From: Sherilyn Wells <votetrees@protonmail.com>
Date: On Thursday, March 23rd, 2023 at 6:39 AM
Subject: New testimony AND resubmitting prior re calling FOR FULL EIS. AGAINST FONSI for Agenda Item C2 - proposed release of Wolbachia mosquitoes (biopesticide mosquito experiment). Co-Opted Insects as per NASA's presentation???
To: blnr.testimony@hawaii.gov <blnr.testimony@hawaii.gov>

Please see attached for current submission.

Please see below for prior submission.

IN FAVOR of FULL EIS.

AGAINST FONSI for Agenda Item C2 re Mosquito/Wolbachia project.

Sent with [Proton Mail](#) secure email.

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

On Tuesday, March 7th, 2023 at 11:35 PM, Sherilyn Wells <votetrees@protonmail.com> wrote:



The image above is from a **NASA slideshow on warfare. Notice "Co-opted Insects."** The **NASA slide that preceded this slide can be seen further down in this email.**

It describes the reactions people are likely to have to the above information..AND the title of the presentation is "welcoming" us to 2025. Not too far off.. interesting coincidence/confluence?

As to the proposed Mosquito Release/Experiment: I strongly **OPPOSE** this action. **An Environmental Impact Statement is a necessity** for such a dramatic meddling with the balance of our island ecosystem(s), with so much potential for unintended (because it's insufficiently studied!!) negative consequences to avian, human,

animal, insect, and ??? populations. As the NASA slide shows, innovative deployment of insects as a tool of war is already under investigation and since Bill Gates and his Foundation have a link to both the Covid-19 situation and to the Wolbachia studies, we have additional reasons to suspect that all is not as it might seem (is made to seem?).

I have a background that lends support to my position on this issue:

I am a former co-president of the Washington (State) Environmental Council, a statewide organization coordinating/representing dozens of local groups, including on issues and testimony before our state government. I have contributed language that was added to legislation in Washington State when we were adopting, then amending, the Growth Management Act, a comprehensive plan for our future that looked at ALL elements of development, resource preservation, environmental health, etc.

As part of that GMA process, I had the opportunity to read and contribute data and suggestions to many EISs. I could tell the difference between an EIS that was a genuine investigation into impacts and an EIS that was prepared for a foregone conclusion promoted by vested interests colluding with corrupted agencies/institutions. But, bad as some of those EISs were (and they were forced to improve before being accepted), at least there **WAS** an EIS.

Why is this even an issue of debate, when it's so clearly needed?

We need to stand meaningfully behind all the times we Hawai'ians speak reverently of "the aina," to breathe life into those words with actions that actually DO protect this land, DO honor the sacred responsibility of caring for it with the best of our minds/knowledge and the best of our hearts/integrity.

I am also a former Board Member of the Washington Toxics Coalition, which spearheaded successful efforts to raise public (and legislative) awareness about the insidious effects of substances, many in common use. It was surprising how many times products snuck onto the market, only to have multiple toxic/negative effects due to so many unforeseen interactions/mechanisms. For instance, controlled-environment-lab results didn't translate into uncontrollable-real-world-environments with their vastly more complex set of influences; additive, cumulative, and/or synergistic effects when encountering other chemicals were not considered; safe exposure data was often much too liberal, as effects were subsequently observed at much lower thresholds than were originally devised, etc., etc. All of these points could just as easily be applied to this Mosquito Plan/Experiment.

So, between these two organizations I gained extensive experience in evaluating whether a proposal merited additional study before any further decisions were made. Rarely have I seen a proposal for which a full-scale EIS was not only appropriate, but a CRITICAL next step, as this Mosquito Release proposal before you.

Now to return to the point made by the first image in this email - Let me suggest one avenue you have obviously not considered in the far too cavalier conclusion that this doesn't merit an EIS. **The use of "co-opted" insects as part of a new human warfare strategy** - this concept was part of a Future Strategic Issues, Future Warfare presentation by NASA scientist Dennis M. Bushnell, at the NASA Langley facility (Langley being CIA, of course).



(Usual) Reactions to this Presentation

- Is in the "Too Hard Box"
- Not being done yet by anyone, therefore, will not be done
- They would not do that
- We have to Hope they would not do that
- Why go there, cannot defend against it
- Some Disbelief, but agreement there is too much there to disregard

Photo: Strategic Issues, 7/11

The following images were taken from a presentation and publication by NASA scientist and lecturer Dennis M. Bushnell. Bushnell was a chief scientist and researcher at NASA Langley Research Center. The presentation is called "Future Strategic Issues/Future Warfare [circa 2025]" and the Bots, Borgs, and Humans Welcome You to 2025 A.D.

We have all witnessed, in these last few years, what happens when there is suppression/censorship of alternative professional viewpoints, when no critical debate is allowed (analogous to in-depth study of an issue from all sides). Thanks to dogged efforts by people and professionals who simply would not be silenced, who stood up for humanity at great cost to themselves.. and who are now being proved right, over and over again as the truth emerges, we have an analogous lesson to THIS issue. We need to see this issue from every possible angle before we proceed or before we call a halt. If we have learned only one lesson from the Covid-19 situation, it is that vigorous analysis and questioning and study benefit everyone and might just avert another (mosquito-based) monumental act of stupidity, of destruction, as SOME humans imagine we are clever enough to anticipate how a complex ecosystem will adapt to elements that ultimately will themselves evolve.

We are increasingly made aware that the gain-of-function, lab origins of Covid-19 give it the status of a bioweapon. As the attached image taken from a slideshow given by NASA scientist Dennis M. Bushnell reveals - insects are part of the new warfare strategy. Who's to say that this Mosquito Plan is not being deployed in similar fashion, given the evidence that people completely without conscience will set about decimating populations while smiling into the camera and assuring all of us that nothing is amiss. A failure to do an appropriate analysis makes such an uncomfortable viewpoint more, rather than less, likely.

Mahalo for what I hope is your decision to reconsider your apparent fast-tracking of this proposal and to insist upon excellence in the analysis contained within the EIS you mandate.

Sherilyn Wells
68-1921 Lina Poepoe St
Waikoloa, Hawaii 96738

Adding my previous comments to this current testimony:

On Friday, July 15th, 2022 at 1:59 PM, Sherilyn Wells
<votetrees@protonmail.com> wrote:

To: Suzanne D. Case, Chairperson Board of
Land and Natural Resources
From: Sherilyn Wells, resident, Big Island
of Hawaii, 360-441-7098,
votetrees@protonmail.com

The Hawaii Department of Agriculture is fast-tracking a release of **Wolbachia**-laden mosquitoes with virtually no significant environmental review. This is a shocking failure of responsibility to safeguard our island environment, including plants, animals, humans, soil microorganisms, etc.

I urge the BLNR to require a full EIS, including the topics mentioned below.

(1) First of all, what/who is the source for these mosquitoes? See information below on Gates Foundation, Oxitec, and Wellcome.

(2) There are medical research articles, some dating back decades, pointing to the potential for the **Wolbachia** bacterium to affect human health.

Didier Raoult, in [Goldman's Cecil Medicine \(Twenty Fourth Edition\)](#), 2012

Wolbachia Species

Wolbachia bacteria are endosymbionts of arthropods and nematodes. They were known to be present in filarial worms, but it was later shown that they may play a role in human disease.

These bacteria manipulate the fertility of their host.

<https://embryo.asu.edu/pages/wolbachia>

Wolbachia evolved ways to jump across host species and establish relatively stable associations maintained through vertical transmission. **Wolbachia** are capable of manipulating the reproduction of infected hosts in a remarkable way.

<https://www.frontiersin.org/articles/10.3389/fevo.2015.00153/full>

(3a) As stated above, this bacterium is particularly implicated re the reproductive capacity of its hosts, including (although not limited to) the testes and ovaries, which it often targets in the species it infects.

Curiously, these are also among the particular tissues which SARS-CoV-2's spike protein is partial to inhabiting/infecting, according to Japanese research which confirmed the spike protein was not confined to the injection site.

(3b) Is there any possibility of cross-function amplification or symbiotic interaction of **Wolbachia** and spike proteins (or SARS-CoV-2), found in the same tissues?

(4) We must also consider the possibility that GAIN OF FUNCTION research could have been carried out, adding to the list of potential impacts from the modified mosquitoes and **Wolbachia**. Have either of these organisms (mosquito OR **Wolbachia** bacterium) undergone any gain-of-function alteration that could render them more pathogenic? An in-depth review of potentially relevant research articles is warranted, to the degree that content of such "secretive" research can be ascertained.

Since the Gates Foundation has been involved in funding mosquito, **Wolbachia**, and vaccine experimentation, it is worth taking the time for Hawai'i to study whether there has been any cross-application of findings.

Specifically, Gates has already linked the use of **Wolbachia** to coincide with provision of vaccines. Could there be undisclosed connections/symbiotic performance anticipated between the two actions?

Here it suggests that the bacterium be used in infected mosquitoes as an adjunct to Yellow Fever vaccines:

"Although the YFV vaccine is safe and effective, it does not always reach populations at greatest risk of infection and there is an acknowledged global shortage of vaccine supply.

The introgression of **Wolbachia** bacteria into *Ae. aegypti* mosquito populations is being trialed in several countries (www.worldmosquito.org) as a biocontrol method against dengue, Zika and chikungunya.

Here, we studied the ability of **Wolbachia** to reduce the transmission potential of *Ae. aegypti* mosquitoes for Yellow fever virus (YFV).

<https://gatesopenresearch.org/articles/3-161>

"Genetically modified mosquitoes are showing promise in controlling other vector-borne diseases, so we look forward to exploring their use alongside complementary interventions for malaria."

(5) Obviously, there has already been some alteration of mosquitoes and **Wolbachia** already, as Bill Gates reveals:

Unfortunately, the type of mosquito that carries dengue, Aedes aegypti, doesn't naturally get Wolbachia, but one group of scientists discovered a way to infect them with it. Now, in partnership with other researchers around the world, they're raising a colony of Wolbachia mosquitoes to be released in hopes that they will breed with wild mosquitoes.

<https://www.gatesnotes.com/Health/Why-I-Gave-Blood-to-Defeat-Dengue-Mosquito-Week>

The Gates Foundation has donated to (1) Oxitec, which does mosquito research, and to (2) research involving the **Wolbachia** bacterium. And, through GAVI and other organizations, it has played a major role in the vaccination of certain populations (some of whom sued the Foundation after extensive disability, damage, and death occurred).

Proof of Gates Foundation involvement with **Wolbachia**, alteration of mosquitoes, etc.:

<https://www.gatesfoundation.org/about/committed-grants/2020/09/INV019029>

<https://www.worldmosquitoprogram.org/en/about-us/our-story>

AND Wellcome Trust partnered with Gates multiple times, including for “exploring synergies between human and animal infections.”

<https://www.gatesfoundation.org/about/committed-grants/2014/05/opp1109338>

<http://www.eliminatedengue.com/progress/index/view/news/1088>

***Bill Gates-Funded Biotech Firm Claims
GMO Mosquito Project a ‘Success,’ But
Critics Cite Lack of Proof***

Oxitec this week said its first study of genetically engineered mosquitoes in the U.S. produced “positive” results, but critics said the experiment so far hasn’t stemmed the spread of mosquito-borne illness.

<https://childrenshealthdefense.org/defender/bill-gates-biotech-gmo-mosquito/>

Wellcome Trust and the Bill & Melinda Gates Foundation stand to profit handsomely from their investments in drug companies researching solutions for the pandemic.

Some say that raises critical questions around conflicts of interest, transparency and accountability.

<https://childrenshealthdefense.org/defender/foundations-investments-influence-covid-research/>

(6) Since the executive branch of our federal government has close connections to the Ukraine, where 46 biolabs have now been confirmed (many, if not all, established with U.S. help), it is incumbent upon us to discover whether using mosquitoes as a vector for transmitting the organism(s) responsible for future pandemics is being researched here in the U.S. and/or abroad. Since Covid-19 revealed that this very type of research has already taken place, it is critical to explore this issue.

(7) Since Rickettsia and **Wolbachia** are considered sufficiently similar that they have been co-studied in a variety of research AND since some of the organisms that are on the List of Select Human Pathogens are Rickettsia (Section 4-71A-23), it is also worth examining **Wolbachia** in much greater depth.

"We also focus on the emergence of Rickettsia as a diverse reproductive manipulator of arthropods, similar to the closely related Wolbachia, including strains associated with male-killing, parthenogenesis, and effects on fertility."

.....

Phylogenetic analysis suggests multiple transitions between symbionts that are transmitted strictly vertically and those that exhibit mixed (horizontal and vertical) transmission. *Rickettsia* may thus be an excellent model system in which to study the evolution of transmission pathways. ***We also focus on the emergence of Rickettsia as a diverse reproductive manipulator of arthropods, similar to the closely related Wolbachia, including strains associated with male-killing, parthenogenesis, and effects on fertility.***

<https://royalsocietypublishing.org/doi/10.1098/rspb.2006.3541>

Sherilyn Wells
Waikoloa, Big Island
votetrees@protonmail.com
July 12, 2023

Regarding *BLNR 7/14/23 agenda item C1: DOFAW*
Request for approval of a Management Plan for the
Kīpahulu State Forest Reserve.

OPPOSE for reasons stated below.

Aloha BLNR,
First I wish to join in all the arguments and information
presented by Hawai'i Unites and, if they also submit
individually, by Tina Lia and Donna Thompson.

I am also appending, by reference and due to its
relevance within many areas of the proposed Plan, the
previous testimony I have provided to the BLNR
regarding the experimental Wolbachia mosquito release
program and the failure to perform an EIS before
permitting the project to proceed.

As everyone is aware, that premature-permitting issue
is now involved in litigation and any action connected
to that issue should wisely be suspended pending legal
decision(s), followed by more adequate and more
accurate study of potential effects.

(1) What is missing in all this? Why is the obvious – as repeatedly presented by Hawai'i Unites - so hard for Hawai'i's government and its partners to grasp?

Answer: What's Missing is the ability to engage in Critical Thinking.

(There are, of course, other answers more along the lines of "captured agencies," but we will leave that revelation for the legal process of Discovery, the process of FOIA in its state version of UIPA, during upcoming legal activity.)

John Taylor Gatto was recognized more than once as a Teacher Of The Year. Following his awards, he wrote the book DUMBING US DOWN.¹

In it, he documented what he felt was a systemic, deliberate plan within our public education system to reduce, if not remove completely, the ability to THINK CRITICALLY.²

He traced the origins of this inability to the Prussian education system implemented by that country following its defeat(s) in the Napoleonic War. Apparently, the rank-and-file soldiers displayed far too much self-preservation impulse in the face of dangerous, illogical orders from officers, by refusing to sacrifice themselves.

¹ **https://www.amazon.com/Dumbing-Down-Curriculum-Compulsory-Schooling/dp/0865718547/ref=sr_1_1?crid=CNPAXZC61QBM&keywords=dumbing+us+down+by+john+taylor+gatto&qid=1689166558&srefix=dumbing+us+down%2Caps%2C549&sr=8-1**

² **<https://www.youtube.com/watch?v=OUkeXs2cSJI>**

So the government of that time decided to revise education to prioritize OBEDIENCE TO AUTHORITY and to virtually eliminate CRITICAL THINKING. Horace Mann brought the Prussian system to the United States over 200 years ago and it rapidly became the dominant system of education, training the non-elite to be obedient to orders “from above.”

Given the quality of the evidence presented to the BLNR, evidence ignored or answered with obviously insufficient or inaccurate reasoning, it is clear that critical thinking has been successfully suppressed within Hawai'i's government as well, with the present example being only one morsel from a virtual historical banquet of (dare I use the words?) stupidity/short-sightedness.

(2) There is an inescapably applicable current analogy (admission) from the FDA's website regarding decisions to SWIFTLY proceed and then do the “oops, maybe we need more study after all” tap dance.

“Vaccines approved for marketing may also be required to undergo additional studies to further evaluate the vaccine and often to address specific questions about the vaccine's safety, effectiveness or possible side effects.”

<https://www.fda.gov/vaccines-blood-biologics/vaccines>

Accordingly, here is a recently reported result/outcome of this “PROCEED HASTILY, THEN DO THE IN-DEPTH STUDY(IES) LATER” approach, an outcome given to us

courtesy of multiple federal agencies' failure to do their job to protect the public:

A SYSTEMATIC REVIEW OF AUTOPSY FINDINGS IN DEATHS AFTER COVID-19 VACCINATION reveal that 74% of the deaths were due to the “warp speed” mRNA/Covid-19 injections.^{3,4}

(3) Why might it be relevant to use a medical analogy in the present hearing?

Because, as documented in previous testimony, the mosquitoes that will be released in areas covered by this plan may have a profound (and we charitably assume UNintended) negative effect on human, avian, animal, invertebrate, and even microbial health.

As we've seen with recent, massive genetic manipulation of the human population (injections that have created a new illness – the CoVax disease⁵), who knows what lies ahead for the jabbed population when

³ <https://vigilantfox.substack.com/p/autopsy-review-blows-government-narrative>

⁴ [https://www.theepochtimes.com/what-post-vaccination-autopsies-show-dr-peter-mccullough-on-new-analysis-removed-by-lancet-](https://www.theepochtimes.com/what-post-vaccination-autopsies-show-dr-peter-mccullough-on-new-analysis-removed-by-lancet-atlnow_5382545.html?src_src=prtnrhard&src_cmp=vigilantf)

[atlnow_5382545.html?src_src=prtnrhard&src_cmp=vigilantf](https://www.theepochtimes.com/what-post-vaccination-autopsies-show-dr-peter-mccullough-on-new-analysis-removed-by-lancet-atlnow_5382545.html?src_src=prtnrhard&src_cmp=vigilantf)

⁵ **“mRNA COVID “Vaccines” Have Created a New Class of Multi-Organ/System Disease: “CoVax Disease.” Children from Conception on Suffer Its Devastating Effects. – Histopathology Series” <https://dailyclout.io/covax-disease-age-and-sex-patterns-with-special-attention-to-the-under-18/>**

exposed to Wolbachia whose genes HAVE been detected in humans?⁶

(4) Bill Gates could be considered the forefather (godfather?) of the Wolbachia mosquito research/scheme, so let's continue by once again "impeaching the witness" (Gates has "testified" in the media to the wonderful outcome of using his Wolbachia researched mosquitoes, so addressing his character and history is relevant).

Donna Thompson has previously provided substantial, well-documented, well-founded concern for "partnering" in any way with this "philanthro-pathologist" – so let me simply add a few reminders:

Bill Gates, a major funder of Wolbachia/mosquito research, was involved with Jeffrey Epstein, a factor later cited by Melinda re their divorce. Not only did Bill & Jeff meet repeatedly, including at the Epstein homes in New York⁷, but "(b)efore Epstein died, he named biotech venture capitalist Boris Nikolic the backup executor of his will. Nikolic had also worked as a science advisor to Bill Gates."⁸

⁶ [https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X\(14\)00040-8/fulltext](https://www.clinicalmicrobiologyandinfection.com/article/S1198-743X(14)00040-8/fulltext)

⁷ "The indictment stated that Jeffrey Epstein sexually exploited and abused dozens of minor girls at his residences in Manhattan, New York and Palm Beach in Florida." Article cited below.

⁸ <https://www.businesstoday.in/latest/world/story/bill-gates-divorce-with-melinda-gates-what-is-the-jeffrey-epsteinlink-295512-2021-05-11>

Here's Sarah Ransome, one of the Epstein sex-trafficked victims, describing some of what was done to her (and she was 10 years old at the time):

<https://twitter.com/i/status/1677721150405726210>

In a recent Wall Street Journal article, “Women Interviewing for Bill Gates’s Private Office Were Asked Sexually Explicit Questions”

<https://www.wsj.com/articles/bill-gates-office-sexually-explicit-questions-7dc240f5>

Examining this willingness by BLNR to potentially sacrifice so much of what is precious about Hawai'i in this “rush to release” without sufficient study (and to codify the plan for many of the areas where this will happen), I am reminded of the powerful IZ masterpiece – Hawai'i 78 - whose words are even more relevant in this moment: “..our people are/our land is in great, great danger now.”

<https://www.youtube.com/watch?v=aBUzPSeNCxU>

I am speaking not only of the physical impacts of these decisions, but of this loss of aloha by the BLNR. The very soul of Hawai'i lives in its commitment to Aloha⁹.. so it is as though the BLNR sees this land and the people as inconsequential, undeserving of the kind of study it would take to truly understand what might happen in this uncharted scientific territory.

⁹ **Aloha “is the Hawaiian word for love, affection, peace, compassion and mercy, that is commonly used as a simple greeting but has a deeper cultural and spiritual significance to native Hawaiians, for whom the term is used to define a force that holds together existence. <https://en.wikipedia.org/wiki/Aloha>**

DLNR Wolbachia Mosquito Proposal

EIS MUST BE REQUIRED

OPPOSE AGENDA ITEM C2

NO TO FONSI

**You only get one chance to NOT make an irreversible mistake
(insufficient study).**

Far too much could be at stake to bypass sufficient investigation:

**Has research/biowarfare weaponization of these specific microorganisms
and insects taken place?**

**Testimony 3/23/23
Sherilyn Wells
Big Island**

This is the prologue any citizen regrets having to write, BUT.. let's get real. Covid-19 revelations, still underway as I write, have become the visible tip of a much larger government/science corruption iceberg, giving the public cause to question intent and data (about ANY major project) far more broadly.

The public's once naïve regard for our government agencies and respect for the "science" that they use to justify their actions will never be the same, thanks to Fauci (Collins, Birx et al), sociopathic Gain of Function research (biowarfare), censorship of medical/scientific dissent, prostitution of science under the influence of those funding the research, fraud, malfeasance, collusion, conflict of interest due to financial gain, etc... and the shocking toll that those failures and the venal malice underlying them took/continue to take on the public those government agencies were tasked to protect and prioritize.

March 22, 2023

Horowitz: They knew: FOIA document shows government anticipated mass vaccine injuries, then observed them from day one

Daniel Horowitz

The U.S. Food & Drug Administration (FDA) questionably authorised emergency use of both the Pfizer and Moderna mRNA Covid-19 injections for use among children aged 6 months and above despite quietly published documents published by the UK Government confirming the Covid-19 Vaccine was and is killing children.

The data provided by the Office for National Statistics proved children were 82 to 303x more likely to die following Covid-19 vaccination than children who have not had the Covid-19 vaccine at the time.

8.1. Vaccine safety surveillance results

A summary of the number of vaccines administered in 2021, the number of adverse events reported, and the rates of adverse events is provided in Table 14.

Table 14: Numbers of vaccines administered, and adverse events reported, with rate of adverse events, for non COVID-19 vaccines and COVID-19 vaccines, 2021.

Vaccine type	Number of vaccines administered in 2021	Number of adverse events reported to WAVSS	Rate of adverse events per 100,000 doses
Non COVID-19	1,808,050	200	11.1
COVID-19	3,948,673	10,428	264.1

SALIENT/PERTINENT ISSUE:

ARE INSECTS and MICROORGANISMS THE SUBJECT OF WEAPONIZATION/BIOWARFARE RESEARCH? Yes.

<https://www.youtube.com/watch?v=llounGf1zK8>

DARPA's Wegrzyn on Gene-Altered Mosquitoes to Counter Infectious Diseases, Future Enemies



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Renee Wegrzyn, PhD, a program manager at the Defense Advanced Research Projects Agency, discusses her work on gene editing to combat

infectious diseases or counter future enemies that may employ genetically modified insects as weapons with Defense & Aerospace Report Editor Vago Muradian at the DARPA-D60 Symposium in September 2018 to commemorate the agency's 60th anniversary.

Also see “CoOpted Insects” slide in the NASA scientist Dennis Bushnell’s Future Warfare presentation –



Some Sensor “Swarms”

- **SMART DUST**
 - Cubic mm or less
 - Combined sensors, comms and power supply
 - Floats in air currents
- **NANOTAGS**
 - Placed on everything/everywhere
 - Identification and Status Info
- **Co-opted INSECTS**

Future Strategic Issues, 2001

- **Survival requires dispersion/size reduction and concealment**



Often “Fingerprintless” Bio Archipelago

- Bacteriological
- Viruses
- Prions
- Parasites
- Fungi
- Carcinogens
- Toxins
- Hormones/Regulators
- Fatal-to-disabling
- Short-to-long time scales
- Anti-flora/fauna/functional
- Direct and (undetectable) Binary
- Natural, Genomic
- Bio-Hacking



“Natural Warfare”

- **Sensors:**
 - Utilize insitu plants/animals/insects as sensor platforms/instruments to indicate presence/movement/characteristics
- **Weapons/Munitions:**
 - Utilize animals (e.g. urban rats)/insects as “delivery systems”/munitions (“feeding,” swarming, biting, poisoning)



(Usual) Reactions to this Presentation

- **Is in the “Too Hard Box”**
- **Not being done yet by anyone, therefore, will not be done**
- **They would not do that**
- **We have to Hope they would not do that**
- **Why go there, cannot defend against it**
- **Some Disbelief, but agreement there is too much there to disregard**

<https://archive.org/details/FutureStrategicIssuesFutureWarfareCirca2025/mode/2up>

The authors argue that the insects used to deliver the viral agents might be perceived as means of delivery in terms of the (Biological Weapons) Convention.

"Because of the broad ban of the Biological Weapons Convention, any biological research of concern must be plausibly justified as serving peaceful purposes. The Insect Allies Program could be seen to violate the Biological Weapons Convention, if the motivations presented by DARPA are not plausible. This is particularly true considering that this kind of technology could easily be used for biological warfare," explains Silja Vöneky, a law professor from Freiburg University.

<https://www.sciencedaily.com/releases/2018/10/181009102511.htm>

A step towards biological warfare with insects?

Date: October 9, 2018

Source: Max-Planck-Gesellschaft

Summary: A project by a research agency of the US Department of Defense could easily be mis-used for developing biological weapons, according to researchers.

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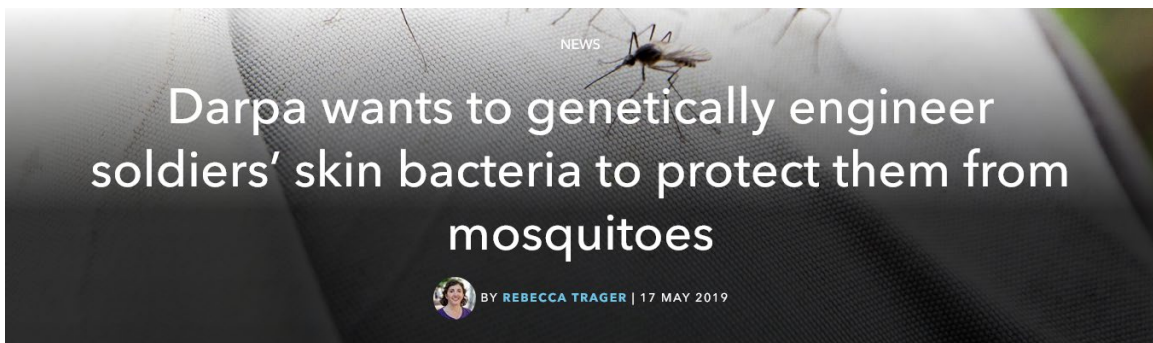
Plants & Animals

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Owing to present-day armed conflicts, the general public is well aware of the terrifying effects of chemical weapons. Meanwhile, the effects of biological weapons have largely disappeared from public awareness.

DARPA Revector Program to Alter Human Skin Biomes to Reduce Mosquito Attraction to Humans Reaches Second Phase

Finabel - 15 March 2022 - News



SOURCE: © GETTY IMAGES



A new project to provide long-term protection from mosquito-borne illnesses by genetically engineering people's skin bacteria has been launched by the US Department of Defense (DOD). The goal of the programme is to give US

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<https://www.chemistryworld.com/news/darpa-wants-to-genetically-engineer-soldiers-skin-bacteria-to-protect-them-from-mosquitoes/3010506.article>

Genetically engineer/alter the human skin biome... what could possibly go wrong (evolve, mutate) once time and environmental factors affect the system?

Therefore, TWO CRITICAL questions MUST be answered (investigated by an EIS) before proceeding any further with the Wolbachia/Mosquito proposal is:

**Is there evidence that research/biowarfare
weaponization of these specific microorganisms and
insects taken place?**

AND

**How might additive, cumulative, synergistic effects take
place with existing programs involving insects,
microorganisms, and humans?**

Accordingly –

Please prove to us that the DLNR has not become a "captured agency," that its initials don't stand for Department of Let's Not Review..

<https://definitions.uslegal.com/c/captured-agency/>

Captured agency refers to a government agency unduly influenced by economic interest groups directly affected by its decisions. It shapes its regulations and policies primarily to benefit its favored client groups at the expense of less organized and often less influential groups rather than design them in accordance with some broader or more inclusive conception of the public interest.

Impeaching the “witness” – take a hard look at who’s doing the funding (besides DARPA).

Just as in the Covid situation, in which “charitable” foundations donated to research organizations and then profitted handsomely (rather like the early missionaries, who “came to Hawai’i to do good and did very well indeed”), a couple of more notorious “charitable grant” players reappear in the Wolbachia Mosquito research playbook:

Gates Foundation

Wellcome Trust

???

FORBES > INNOVATION > HEALTHCARE

Bill Gates: Some People Think Eradicating Mosquitoes With Genetics Is Scary, But I Don't Think It Will Be

Matthew Herper Former Staff

I cover science and medicine, and believe this is biology's century.

Initially, Gates was talking about a less radical technology: infecting mosquitoes with Wolbachia, a bacteria, to keep them from becoming infected with dengue or the Zika virus. He gave this as an example of research and development that seemed high-risk, but which seems to have worked. But Jay Walker, a founder of Priceline.com and curator of TedMed, asked Gates about the much more controversial gene drive, which some have fretted could be “the next weapon of mass destruction.” Gates acknowledged the fears, but said that he does not share them..The new technology, called a gene drive, uses advances in molecular biology to mimic something that has existed in nature for some time. Recently, scientists have turbocharged this process. Using CRISPR-Cas9, a gene from bacteria that can be used

to easily edit DNA, they have created genes that aggressively push themselves into a subject's genome

An article in the BMJ (British Medical Journal) calls out Gates and Wellcome for covering their ultimate agendas (and financial interests) under the cloak of charity and public-spirited research, failing to reveal large conflicts of interest.

Feature » Investigation

Covid-19, trust, and Wellcome: how charity's pharma investments overlap with its research efforts

BMJ 2021 ; 372 doi: <https://doi.org/10.1136/bmj.n556> (Published 03 March 2021)

Cite this as: BMJ 2021;372:n556

How likely is it that a research organization/foundation (e.g., doing Wolbachia/mosquito research) being generously supported by these two entities will find that no harm or unintended consequences are taking place re the object of research?

Could this be ethically comparable to the virologists who suddenly altered their testimony on SARS-CoV-2 origins and then received large grants from Fauci?

CORONAVIRUS

Top virologists who changed tune on COVID-19 lab leak theory received millions in NIH grants

by Gabe Kaminsky, Investigative Reporter |  | March 02, 2023 10:58 AM

Thanks to such precedents being publicly exposed, “Science” MUST now be questioned, even peer-reviewed and published “science,” unfortunately, based on a careful examination of the potential for conflicts of interest. After all, **an EIS is designed to look into the social elements/background, too** – anything of consequence re the project.

Mohga Kamal-Yanni, a policy adviser to UNAIDS and other organisations who recently co-wrote a paper citing problems with the Gates Foundation's influence in the pandemic, says that Wellcome's investments raise critical questions around transparency and accountability.[5](#)

Yet charities such as Gates and Wellcome—and even drug companies—have generally been praised in the news media during the pandemic for their efforts to solve the public health crisis, with relatively little attention paid to their financial interests and with few checks and balances put on their work.

<https://www.bmj.com/content/372/bmj.n556>

09/07/21 • COVID • BIG PHARMA › VIEWS

New Documentary on WHO Exposes Widespread Corruption, Massive Funding by Bill Gates

“TrustWHO,” a documentary film produced by Lilian Franck, reveals the clandestine influences — including Bill Gates’s role as No. 1 funder — controlling the World Health Organization, to the peril of public health.

We are reassured by certain experts that this Wolbachia/mosquito experiment is harmless.. however, many of these researchers and organizations are generously funded by the Gates Foundation and Wellcome Trust in particular.

A tiny bit of historical/moral/ethical background on the Wellcome Trust (formerly Burroughs Wellcome), uncovered by Tom Fitton of Judicial Watch:

“The omitted evidence by Oxford of Rhodes’ 1895 Privy Council appointment directly implicates ... in the 2nd Boer War concentration camp atrocities where over 60,000 whites and blacks (incl. over 14,000 mostly white children of French, German and Dutch descent) were murdered in the camps.

The omission also implicates the Crown, Privy Council, Henry de Worms (a Rothschild cousin) and the Rothschilds banking fortune in

the human vaccine experimentation carried out by Burroughs Wellcome (Wellcome Trust today) in those 2nd Boer War concentration camps..”

The same Wellcome organization which conducted vaccine experiments in the 2nd Boer War concentration camps researched – in 2018 – vaccine confidence - how to encourage uptake of vaccination. SO timely, given the subsequent emergence of Covid-19, yes?

“..120,000 respondents in 126 countries to assess how societal-level trust in science is related to vaccine confidence. In countries with a high aggregate level of trust in science, people are more likely to be confident about vaccination..”

<https://pubmed.ncbi.nlm.nih.gov/34002053/>

And what was Fauci’s mantra, even as the harm magnified? “Trust the science.”

Former CDC Director Redfield testified before Congress that they found **evidence of Covid-19 as early as September 2019. In October 2019, Gates Foundation et al run a respiratory virus pandemic simulation – Event 201.**

<https://www.centerforhealthsecurity.org/our-work/exercises/event201/>

SO - WE the Public are being asked to Trust The Science in this Assessment re Wolbachia-laden mosquitoes, but .. no. FAR TOO MUCH IS POTENTIALLY AT STAKE. There needs to be a MUCH broader, deeper examination of this issue.

Since Wolbachia **affects the reproductive system of its hosts,** could there be **potential additive, cumulative, synergistic effects in combination with the Covid-19 injection’s spike protein and lipid nanoparticles** that now broadly “infect” the body, especially the ovaries, according to a Japanese biodistribution study of Pfizer’s product (a finding in contradiction to the original “scientific” assertion that those elements would remain in the injection site)?

[\(https://childrenshealthdefense.org/defender/mrna-technology-covid-vaccine-lipid-nanoparticles-accumulate-ovaries/](https://childrenshealthdefense.org/defender/mrna-technology-covid-vaccine-lipid-nanoparticles-accumulate-ovaries/) .

Re the nanoparticles/spike protein, it appears that significant reproductive effects are occurring post-injection, according to the analysis by 3000+ professionals assessing the Pfizer court-ordered document release, so could exposure to an additional microorganism – Wolbachia - that specifically favors host-females reproductive system, result in an unanticipated interaction? -

<https://dailyclout.io/miscarriages-in-covid-19-vaccinated-mothers-as-reported-in-vaers/>) -

The secret to the over-achieving bacterium's success is its ability to hijack its hosts' reproduction. Biologists have known that Wolbachia have had this power for more than 40 years but only now have teams of biologists from Vanderbilt and Yale Universities identified the specific genes that confer this remarkable capability.

The two universities have applied for a patent on the potential use of these genes to genetically engineer either the bacterial parasite or the insects themselves to produce more effective methods for controlling the spread of insect-borne diseases like dengue and Zika and for reducing the ravages of agricultural pests.

This achievement is described in the journal Nature in a paper titled "Prophage WO Genes Recapitulate and Enhance Wolbachia-induced Cytoplasmic Incompatibility" and in a companion article titled "A Wolbachia deubiquitylating enzyme induces cytoplasmic incompatibility" in Nature Microbiology published online on Feb. 27.

"We've known for decades that one of the secrets to Wolbachia's success is that it interferes with host reproduction in order to spread itself through females

<https://www.sciencedaily.com/releases/2017/02/170227120400.htm>

I am appending my previous testimony on this issue as well, which I will resend in a separate email – votetrees@protonmail.com

You only get one chance not to make an irreversible mistake (insufficient study). Please don't screw this up (sorry for the blunt language)...

From: [Jennifer Wick](#)
To: [DLNR.BLNR.Testimony](#)
Date: Monday, July 10, 2023 5:30:01 PM

I'm opposed to the BLNR's 7/14/23 agenda item C1. DOFAW Request for approval of a Management Plan for the Kīpahulu State Forest Reserve. Mosquito control plans for Kīpahulu include the release of millions of lab-infected mosquitoes that are a danger to native birds, wildlife, public health, and the 'āina. This project is being challenged in environmental court to seek a ruling to require an Environmental Impact Statement. No further actions should be taken to release biopesticide mosquitoes while the need for further study of the risks is actively being litigated.

Sent from my iPhone



Bringing back the birds

RE: Support for C.1. Approval of a Management Plan for the Kīpahulu State Forest Reserve

Aloha mai Chair Chang and Members of the Hawai'i Board of Land and Natural Resources,

American Bird Conservancy (ABC) support the passage of the Management Plan for the Kīpahulu State Forest Reserve. ABC is a 501(c)(3) national non-profit organization dedicated to conserving wild native birds and their habitats throughout the Americas. We have been actively engaged in Hawai'i for over a decade, collaborating with state, federal, and private partners to safeguard, manage, and restore critical habitats for some of the most endangered birds in the state across various islands.

Although the Kīpahulu management plan does not explicitly outline mosquito control as a management goal, objective, or action item (Table 17), it recognizes the need for mosquito control due to their role in spreading avian diseases to endangered and threatened native honeycreeper species like the 'ākohekohe and kiwikiu (Table 14; Appendix C). The Management Plan acknowledges that Kīpahulu is home to six honeycreepers that are near the brink of extinction, primarily due to avian diseases transmitted by the invasive southern house mosquito (*Culex quinquefasciatus*). We strongly encourage the Board to support this essential management action, as it is vital for safeguarding these birds. By preventing extinction caused by mosquito-borne avian diseases and facilitating habitat restoration, we can uplift these species.

Recently, the National Park Service and the Division of Land and Natural Resources -Department of Forestry and Wildlife (DLNR-DOFAW) conducted an Environmental Assessment (EA) for East Maui, focusing on mosquito suppression through implementation of the Incompatible Insect Technique (IIT). It is noteworthy that Kīpahulu is listed as a potential release site for mosquito control in the EA because of the important populations of these native birds in the region (Table 1; East Maui EA). The Final Environmental Assessment (EA) concluded that implementing mosquito control through the Incompatible Insect Technique **would not cause significant negative consequences for native ecosystems and the inhabitants within the release areas**. The Final EA received approval from this Board and the National Park Service in June 2023, with a Finding of No Significant Impact. Additionally, extensive evidence supports the safety and effectiveness of the Incompatible Insect Technique, demonstrating its lack of adverse effects on humans or the environment wherever it has been implemented (East Maui EA; Draft Kaua'i EA)

We extend our heartfelt gratitude for your consideration and support in safeguarding our cherished Hawaiian birds.

Mahalo nui loa,

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