NOTICE OF PUBLIC HEARING CONCERNING THE
DRAFT UNDERGROUND INJECTION CONTROL (UIC) PERMIT
FOR THE LAHAINA WASTEWATER RECLAMATION FACILITY

PUBLIC HEARING
NOVEMBER 6, 2008
6:15 P.M.
LAHAINA CIVIC CENTER
SOCIAL HALL MEETING AREA
1840 HONOAPI'ILANI HIGHWAY
LAHAINA, MAUI, HAWAII

Reported by:
Tonya McDade
Hawaii Certified Shorthand Reporter #447
Registered Professional Reporter
Certified Realtime Reporter
Certified Broadcast Captioner
ATTENDANCE

David Albright, Hearing Officer, Environmental Protection Agency

Nancy A. Rumrill, U.S. Environmental Protection Agency

Brett P. Moffatt, U.S. Environmental Protection Agency

Chauncey Hew, Environmental Management Division, State Department of Health

Cheryl K. Okuma, Director, Department of Environmental Management

David Taylor, Division Chief Wastewater Reclamation, County of Maui

PRESS:

Akaku, Maui Community Television
MR. DAVID ALBRIGHT: Microphone working? If people could have a seat, we're going to try to get started here, going to try to get started as close as possible to the 6:15 time.

I guess, first, thank you for coming tonight. My name is David Albright. And I am with the Environmental Protection Agency, Region 9 office, in San Francisco.

And this is a public hearing on the proposed Underground Injection Control Permit for the Lahaina Wastewater Reclamations Facility.

And I would like to talk a little bit about what we're going to do tonight. And then we've asked people to sign up on these forms if they want to give oral testimony tonight. I know a number of you have done that. If you haven't done that yet, and would like to give oral comment, please fill out one of the green forms.

This is a public hearing. The intent here is to take comments from members of the public. You can submit written comments, if you would like to do that, or provide oral testimony as well.
We have quite a few people who have asked to speak tonight. So we're going to try to keep people to about five minutes, if that's okay. And, you know, we have a little bit of leeway on that, but we would like to give everyone an opportunity, who has filled out a form, to speak. So I would ask that you try to keep your remarks to five minutes.

I would like to introduce some people who are here with me. On the far right here is Nancy Rumrill, she is an environmental engineer in the Groundwater Office with U.S. EPA. And next to her is Brett Moffatt. He is an attorney with the Office of Regional Counsel. To my left here is Chauncey Hew, who is with the Department of Health, the Underground Injection program.

The hearing is being -- we have a court reporter. Her name is Tonya. And she is going to be taking a complete transcript of the hearing.

So what we're going to do first, before we get into the specific comments from members who -- of the public who have filled out these forms, is we're going to have a brief presentation by the County of Maui. And I would like to ask Cheryl Okuma, who is the Director of the Department of Environmental Management with the County, to come up. And she's going to say a few words to start it off.
MS. OKUMA: Thank you very much, Dave.

Good evening, everyone. As mentioned, I'm Cheryl Okuma, the Director of the Department of Environmental Management for the County of Maui.

The County appreciates the opportunity to be here this evening with a brief presentation by our Wastewater Reclamation Division Chief, Dave Taylor. We are aware of the concerns that have been raised by members of the community. And be assured that we have been and continue to be diligent in our efforts to meet the regulatory requirements and standards of the U.S. EPA as well as the State Department of Health.

I would like to turn this over to Dave Taylor, who will provide a background and some technical information with respect to the Lahaina wastewater facility and the injection wells.

Thank you.

MR. TAYLOR: Thank you, Cheryl.

And I really appreciate all of you coming.

What's really helpful to us, when people, who care so much about the environment, come to these meetings, so that we can, you know, explain what we do, how we do it and how we -- we serve the public in protecting the environment.

One of the big misnomers about wastewater
utility management all across the country is that people think we're polluters. And it's important to remember that we don't make pollution. The public makes pollution. The public makes waste. And we treat that waste. We work for you.

The treatment plants and the injection wells are part of the treatment process. They are not pollution. Human waste is pollution. And we try to protect the environment from that -- from that waste that we all generate. So, in general, the treatment plant speeds up the natural methodology of waste treatment that happens in nature every day.

In nature, waste from animals is eaten by microorganisms. They breathe air, they eat waste and they breathe. And those microorganisms are eaten by larger animals that eat -- and larger animals eat them.

So essentially what we do at the treatment plants is we breed microorganisms by giving lots of air. And we turn the human waste into microorganisms that eventually we separate from the water, we take the microorganisms to a composting facility where it's mixed with green waste. And that's all fully composted. 100 percent of the solid material generated on Maui from human waste is made into compost and sold as that eco compost material you guys see in the stores.
So in the Frequently Asked Questions that were handed out -- there's more copies at the -- at the -- at the front table -- we have a simplified process schematic of how the treatment plant works. And I'm not going to go through every box, but, in general, what happens, if you have this and follow along, the water comes into our treatment plant, we screen out things like -- like rags and other kinds of large things, like sticks, and then we give the wastewater a lot of air. We -- we, basically, breed the microorganisms. And while we're giving them air, we run them through different -- through different environments of air where we control their life cycle. And what we do is we -- that takes the nitrogen, which is the big concern for ocean environment, which is a solid material, and through their life cycle turns it into gas and it goes off into the environment. And the air, the atmosphere is mostly nitrogen, anyway. So, basically, 60, 70 percent of the nitrogen that's in wastewater is transmitted -- is transferred to gas and goes off into the atmosphere.

We keep -- we keep feeding the microorganisms air, they keep eating. And, eventually, they cling together and they separate from the water. So we end up with clean water that looks a lot like drinking water.
And these biosolids, which I already said go to composting. So the water is then chlorinated. We run it through another filtration process. And then it gets to the point where we have to get rid of it. So we get rid of our water in two ways.

Either we reuse it -- and reuse, from the Lahaina treatment plant, about a million gallons day, or about 20 percent of that water. And that's mostly used at Kaanapali, on the golf courses and for greenways and things like that. So that water that gets reused goes through ultraviolet disinfection, which are ultraviolet lamps that sterilize any pathogens that are in that water. And so about a million gallons of that water every day goes towards reuse.

The other water, about four million gallons, maybe a little less, goes down the injection wells. The injection well water is -- does not go through the ultraviolet treatment. It goes down these deep pipes into the ground, they go down a couple hundred feet. And that water moves outward through the ground, eventually it comes out into the ocean.

The -- one of the big questions is why don't we reuse more water. That's the big question everyone asks us.

It's important to know that although the water
is really clean, we clean it to very high standards, that water has to be distributed in a separate system from potable water. So to distribute reuse water, we need a whole separate water system, pumps, tanks, pipelines, et cetera. And that doesn't exist right now. So that's what's really limiting our ability to reuse water. And those systems are very expensive. And they also take a lot of energy. So that's what's holding us back from reusing more water.

And the question is, well, why don't we build more?

The public here owns this wastewater system; not us. You're the owners of this system. And the wastewater system on Maui is 100 percent funded from your sewer bills. So, basically, we can build whatever the people want as long as the people are willing to pay for it.

And when this has come up in Council again and again, everyone always wants more reclaimed water. And the difficulty is that nobody wants to pay a higher sorbent. So that's really the dilemma we're in as a community. We all want to reuse more.

When it comes down to it, we've been raising -- we've raised sorbent about 40 percent over the past three years, just to replace our aging infrastructure,
to keep existing levels of treatment. And probably for
the next 10 years, we're going to be fighting this
battle with aging infrastructure and replacements of
sewer systems. If -- you've seen it. You've seen, in
Lahaina, we've got projects everywhere, we've been
digging up the roads. South Kihei Road, right now we're
doing projects, Kahului Beach Road. All over the
island, we see these very expensive sewer projects going
on because the wastewater system is about 35 years old,
it's failing. And it's taken a lot of money and it's
going to continue to take a lot of money to replace
that.

So the question for us as the community, for
us as the owners of this sewer system, what do we want a
do? Do we want to raise rates and do more reuse, or do
we want to keep rates low and not do that?

At the end of the day, we're going to listen
to you. Through the elected officials, through
processes like this, the public's going to decide what
we do. And the public is going to pay for it.

So we're not a private company. You own the
sewer system. And that's just one thing that's, a lot
of times, lost when we -- when we have these
discussions, is somehow people think that -- that we'll
get money from somewhere else. But it's your money.
And if this is what you want to do with it, this is what the County will do. But that means higher rates. It means other things you may want, other sorts of environmental projects, roads, parks, whatever, this would be the priority. And that's something that -- that, if that's the priority of the community, of course we'll do.

How this permit fits in is EPA doesn't give us money. The Federal Government doesn't give us money. They basically set permit requirements that we're expected to follow. So how the permit fits in with our operation is anything that they say in our permit that we have to do, that kind of goes to the top of the list when it comes down to County budget. And that's not really a choice anymore that we locally have -- get to make. We don't get to decide, hmm, is it worth it. Once it's in a Federal permit, we're mandated to do it. And we will, basically, just define how much money we need and make -- raise rates accordingly.

So I hope, just in general, that kind of gives you some background of the system we operate, the financial system we operate, and how -- the two things we really need to remember is we generate the waste, we're going to have to decide how we want to get rid of it, and we're all going to have to pay for it.
So with that, whatever the public feels we're
gonna do -- we need to do, that's what we'll do. But we
just need to remember, we all own the sewer system,
we're all going to pay for whatever we want to do with
it.

So that concludes.

MR. DAVID ALBRIGHT: Okay. Thanks, Dave.

If anyone -- we are not really having a
question and answer session. If someone has any
clarification questions about what Dave just presented,
we could take a question or two. Otherwise, I am going
to -- yes. Why don't you -- if you have a question,
could you come up to the mike, just to clarify
something? If you could say --

MS. IRENE BOWIE: My name is Irene Bowie. I
am the Executive Director of Maui Tomorrow Foundation.

And I did just want to comment on what you
just spoke on as far as not only wastewater, but isn't
it true that -- that we have been taking leachate, a
quarter of the leachate from Central Maui Landfill to
Kahului treatment facility and Kihei treatment facility,
and that has been ending up on the reefs? So it's not
just our wastewater right now that's going out to the
reef?

MR. TAYLOR: It is correct that we have -- we
do process the leachate from the landfills in the wastewater treatment plants. So our -- our belief is that most of the material from that probably ends up in the biosolids and not in the water.

MS. IRENE BOWIE: Although, we haven't done any testing of --

MR. TAYLOR: That is correct. That is correct.

MS. IRENE BOWIE: Thank you.

MR. DAVID ALBRIGHT: Okay. Why don't we take one more? And then I would like to move to the next speaker.

MR. JOHN SEEWARD: Hi. My name is John Seebart. I just have two quick questions for Mr. Taylor. One is, how long at the Honokowai injection plant does it take for the water to get from the plant into the water?

MR. TAYLOR: No one is exactly sure. There -- there has been a recent study in Kihei that the USGS did that showed that it took about two to five years for the water from the injection wells to reach the ocean. And our guess is because the -- the geometry is kind of about the same. They're about the same depth. The water has about the same specific gravity. It floats upward. We would guess it would be similar. But that
was a -- that was a mathematical model.

Anytime anyone has tried to actually do an empirical test, to dump like a trace element in the injection well and find it in the ocean, no one has been successful actually tracing it. So one knows for sure. But they do have these hydrogeologic models, computer models, that have estimated, you know, two to five years, depending on the conditions.

MR. JOHN SEEBART: All right. Thank you.

The other question was, I understand the dollar issue, you know, of what you have to spend, but I'm just curious about the water being treated with ultraviolet for the golf course, which makes sense, but what about the water -- I mean, why -- what's the thinking that we don't need to do that for the water that's going into the ocean?

MR. TAYLOR: That's a great question.

How we disinfect the water is driven by the Department of Health rules and regulations in State law for wastewater treatment. And, basically, the water that's reused on -- on golf courses and greenways and things is considered R-1 quality, which is used for reuse. And by Department of Health rules, that has to go through a certain level of disinfection, which includes either long periods of chlorination or
ultraviolet disinfection. Water that goes down the injection wells, by State law, does not need that same level because it doesn't have direct human contact in the short-term. And my guess is that the Department of Health feels that from the time it takes for that water to make it to anywhere where there's human contact, there's a long period of time where pathogens are naturally, you know, destroyed during that time period. I don't know that -- the exact reasons why Department of Health sets their laws that way, but we are -- we comply with those Department of Health rules.

MR. JOHN SEEBART: Thank you.

MR. DAVID ALBRIGHT: Okay. Thank you, Dave.

Next, I would like to have Nancy Rumrill give a very brief presentation about the permit, which is, of course, the reason that we're here tonight, and a little bit about the EPA's authority under the Safe Drinking Water Act. So let me turn it over to Nancy Rumrill.

MS. NANCY RUMRILL: Okay. I am just going to cover the Underground Injection Control program and, briefly, a little bit about the Draft Permit.

Under our Underground Injection Control program, we -- it's a Federal program under the Safe Drinking Water Act. And we are charged with protecting underground sources of drinking water.
Underground sources of drinking water or underground aquifers, they have less than 10,000 parts per million of total dissolved solids. And if you think of total dissolved solids as it's all inorganic and organic substances in water. For reference, this secondary drinking water standard is 500 parts per million total dissolved solids. And this is what your drinking water may have in it.

In comparison, seawater is 35,000 parts per million total dissolved solids.

Under the Underground Injection Control program, the most important requirement that we regulate is that no owner or operator shall construct or operate an injection well in a manner that allows the movement of fluid containing any contaminant into an underground source of drinking water if the presence of that contaminant may cause a violation of the primary drinking water standards or may adversely affect public health. So under the Safe Drinking Water Act and the Underground Injection Control regulations, EPA has the authority to issue permits for underground injection control activities in order to ensure protection of underground sources of drinking water.

EPA and the State of Hawaii both have responsibility to protect underground sources of
drinking water. But the Underground Injection Control program does not regulate surface water bodies, discharges to surface water bodies.

Maui County has applied for renewal for their Underground Injection Control Permit, to operate their four Class V injection wells to dispose of treated -- secondary treated wastewater at the Lahaina Wastewater Reclamation Facility. And the renewed permit would be issued for a period of 10 years, and it would be reviewed every five years to determine if any modification or any other action would be required to protect underground sources of drinking water.

The permit conditions are being updated to reflect a permit modification that was done in 1999. But, otherwise, the permit conditions aren't changing in this Draft Permit.

The most important part of the -- the Draft Permit, there are conditions for well construction. And the well construction has a surface casing and it goes down to the full extent of protecting the shallow groundwater that has less than 10,000 parts per million total dissolved solids.

The total well depth is 180 to 255 feet below ground surface. The treated wastewater flows by gravity into the wells, and into the injection zone where the
water quality is up to 35,000 parts per million total dissolved solids. So similar to seawater.

The Draft Permit also has in it conditions for the injected wastewater. Its limited biological oxygen demand is at 60 parts per million, and total suspended solids is at 60 parts per million. And then the biological oxygen demand of total suspended solids are good indicators of how polluted the water is. And if these quantities are kept low, that indicates good quality wastewater.

Also, in the Draft Permit, there's a condition for total nitrogen action level. And that's at 10 parts per million.

In the Draft Permit is also requirements for Maui County to properly maintain and operate its injection wells.

And then, this public hearing is part of our effort to collect additional information and supporting materials.

The Draft Permit and statement of basis and the application and the comments we've received so far have been online. And they are currently online. So you can refer to those at www.epa.gov/region09/water/groundwater/UIC-permits.html. And if you want, I can give you a sheet on that website,
if you need to refer to it.

And as our Hearing Officer mentioned, our proceedings of our hearing is being recorded by the court reporter. And our transcript will be online. When we have it available, we'll post it online.

And that's it. And our Hearing Officer can take over.

MR. DAVID ALBRIGHT: Okay. Thank you, Nancy.

And, likewise, if anyone has any clarifying questions about what Nancy just spoke about and would like to ask them, we can entertain a couple.

And seeing no hands, I guess we'll move to the public comments. And so we do have quite a few people who have requested to speak. And, obviously, we want to hear from everyone tonight who has requested to speak. So I would ask that you try to keep your remarks to five minutes, at the most.

And what we're going to do is we will call people up to the podium here. And we'll call people in the order that they signed up. And if, when you come up, you could give your name and any affiliation that you have, that you would like to give, so that our court reporter could document that, that would be helpful.

Again, I just want to reiterate that we're here to listen to public comments. And I know that a
lot of people have a lot of issues and concerns. And if we can clarify matters, I certainly want to do that. But we are not looking to get into an extensive debate about these matters. We are really here to listen, mostly, to the comments that you have to give to us, in addition to any comments you would like to provide in writing, or perhaps have already provided.

So with that, I would like to call up Brooke Porter as the first commenter. Brooke.

MS. BROOKE PORTER: Good evening. My name is Brooke Porter. And I'm with Pacific Whale Foundation, a Maui-based nonprofit organization.

We're opposing the permit application to continue injecting the nitrogen-laden wastewaters into the nearshore environment off island.

According to a NOAA study, Hawaii's reef-related tourism and fishery activities generate $360 million annually for the State's economy. Covering 410,000 acres Hawaii's reefs are valued at an estimated $10 billion. The degradation of the coral reefs in nearshore waters around Maui threatens to impact not only tourism and commerce, but, also, our local ways of life.

Maui's coral reefs provide a destination to visitors, a barrier against elements, they provide
residents with recreational activities, and allow others
to practice subsistence gathering.

Studies show that, in some areas around Maui,
our coral cover has diminished by 90 percent over the
past decade. Resource managers from Maui's DLNR
presented scientific evidence of the decimation of
Maui's nearshore reefs to Maui audiences on June 19th
and August 14th, 2008. The presentations depicted an
abnormal and rapid shift from a dominant coral cover to
a dominant algal cover in areas near injection wells.
They're not the only contributing factor to coral loss.
These areas show significant correlation to injection
well sites. The hydraulic conductivity coupled with the
differences in salinity between injectate in groundwater
and causes leaching of effluent to surrounding aquifers
in coastal waters, resulting in an at buoyant plume that
displaces other shoreward flowing groundwater.

According to a 2006 USGS model, groundwater
discharging from the core of an injection plume is made
up of nearly 60 percent effluent ashore. The high
levels of nitrogen-bearing nutrients found in effluent
are pollutants and trigger and agal blooms adversely
affecting our coral reefs. It's prudent that the
Lahaina Injection Permit also meet permitting
requirements defined under the Federal Clean Water Act
and State Pollution Control.

As a marine centric organization, Pacific
Whale Foundation's goal is to protect the valuable coral
reefs and their dependent organisms and ecosystems. We
ask that a practicable approach be taken and that,
"Water reuse is recognized as an environmentally
preferred method of disposing treated wastewater when
compared to the traditional disposal methods throughout
holes in injection wells." As stated in the 2004 Hawaii
Water Reuse Survey and Report prepared for Hawaii DLNR.

To date, the County has failed to bear the
necessary burden of proof required by the permit
application that the continued injection of wastewater
will not result in the release of nitrogen-bearing
nutrients and other water pollutants from our coral
reefs or impair commerce and tourism.

The County has also failed to demonstrate that
the continued injection will yield significantly lower
costs and higher benefits for the citizens of County --
of the County when compared to phasing out injection
wells in favor of reuse. Rather, cultural and
ornamental irrigation, fire prevention, stream flow
restoration and replenishment and other purposes.
Simply stated, the County has not adequately explored
all possible uses of wastewater effluent.
Knowing that wastewater injection wells pose serious threat to nearshore waters and coral reefs, we ask that the permit application be denied and that the EPA require wastewater to be treated to an R-1 level and water reuse strategies be prioritized over the dated method of injection wells.

Thank you.

MR. DAVID ALBRIGHT: Okay. Thank you.

Tonya, are you okay?

MS. BROOKE PORTER: Does she want --

MR. DAVID ALBRIGHT: I was going to say, if people have prepared remarks that they're reading, if they would like to submit them, that would be great.

Thank you.

Okay. Hannah Bernard.

MS. HANNAH BERNARD: Aloha. And mahalo for being here to hear our testimony.

I am Hannah Bernard, President of Hawaii Wildlife Fund. I'm representing Hawaii Wildlife Fund, the Maui Reef Fund, and DIRE Coalition. That's the Don't Inject, Redirect Coalition, a group of nonprofits and residents concerned about our injection wells affect our nearshore environment.

While we acknowledge that there are other sources of pollution that you have to nearshore waters,
land-based pollution, we understand that this hearing
tonight is focused on the permit for the injection wells
for the Lahaina wastewater treatment system. And I will
be focusing on that.

In light of the legal, moral and ethical
mandates of Public Trust Doctrine and the precautionary
principle interpreted by Hawaii Supreme Court to be
implicit or embedded in our State Constitution, the
State's policies on water recycling and reuse of treated
wastewaters, State and Federal pollution laws, the
County's own Community Plan, and the steep decline of
our reefs, we must act swiftly to stop the flow of
wastewater into the ocean, or seepage. Maybe not flow,
maybe it's creeping, but it's going there, as was
already admitted.

We oppose an unlimited and unconditional
renewal of the wastewater injection permit for this
system and request, respectfully, that the EPA denies
this permit on current record.

Instead, we ask that the EPA, Maui County and
the community engage in a meaningful conversation and
action plan about how to best stop or phase out this
wasteful practice of injection of these waters, and,
instead, redirect treated R-1 waters for beneficial
uses, as is the State's policy.
We urge you to consider the seriousness of the dialogue in the face of ongoing drought. As many of you know, in August of this year, the County of Maui and the State of Hawaii were designated as Federal disaster areas by the U.S. Agriculture Secretary Edward Schafer, because of the ongoing drought conditions.

Annual wildfires. We have recurring wildfires. We've lost more than 10,000 acres of land to wildfires, partly because of these ongoing drought conditions. Reusing the wastewater could create a greenbelt.

Reef degradation. Significant algae overgrowth of Maui reefs is correlated with the three County wastewater injection well systems, significantly so. And we appreciate that the EPA employed the precautionary principle and asked for a cap on the amount of effluent that could go into the Lahaina injection wells, reduced the amount of nitrogen, and, also, encouraged some reuse of that water. But we can do better.

We can't afford to lose any more reefs. We've watched them decline in 10 years dramatically. Since Wendy Wiltsie was brought here from your office, in 1994, because of the pernicious algae bloom, we have seen a steady decline. And we know now, from recent
studies by the USGH, UH, and Department of Aquatic Resources that our reefs are impacted by wastewater.

We also have issues of stream diversion. A recent Water Commission decision in just this year, or just September, will be returning millions of gallons of water to streams in East Maui. This has ramifications for West Maui.

Currently, the large ag farmlands are not using the stream water -- they're not using the wastewater because it's not cost-effective for them. Because they're diverting the streams and they're paying so little for that water per gallon, sometimes as little as 15 cents per gallon.

So this will be probably halted or, at least, reduced in the near future. And in order to support our ag as well as support the rightful return of water to the streams for the kalo farmers and for the health of the streams, we need to start reusing our wastewater.

We also want to decrease waterborne infections. We know from research done in the Florida Keys that human pathogens are found in coral mucous nearshore, both bacteria and human viral (inaudible) viruses. And, also, as far as seven miles offshore, human viruses are found in coral mucous.

Not to mention the harm to our economy.
That's already been discussed. If we add in the value of habitat loss from marine life, the loss of esthetic and cultural value and the loss of storm wave protection, if we lose our reefs, the cost is incalculable.

This is why we call our coalition DIRE, Don't Inject, Redirect, because the situation is dire and requires a change of direction starting now.

Maui's water is just too precious to waste, even the wastewater. Our coral reefs are too precious to waste. If we lose them, we lose not only our livelihoods, we lose our way of life and our quality of life.

This permit must be denied based on three arguments. And I am going to just summarize them because I know I'm -- do you have a time? Any idea how long I've got? Too long already?

There's three reasons that we -- that the County must be denied this permit.

First: The County of Maui, as the public trustee of the County's water resources, and the State of Hawaii, are mandated by the State Constitution and Supreme Court decisions to seek the best uses of all County waters, including wastewaters. Because the County has not conducted the necessary exploration of
possible beneficial uses for these wastewaters and has not concluded that such beneficial uses do not exist, the permit should be denied.

Secondly: The County has failed to bear the burden of proof of entitlement to the requested permit. Under the applicable Federal and State court decisions, it means that with respect to all material of issues effect, the permit applicant has the burden of persuasion. The precautionary principle applies to the County in its role as public vestee of all the State's water. Therefore, the County must practically seek the highest and best use of Maui's water and ensure protection of ocean waters and coral reef ecology, even in the face of considerable uncertainty.

The County has failed to bear that burden of persuasion with respect to all the facts necessary for entitlement to the permit under applicable -- under applicable principles of law. Accordingly, the permit should be denied.

Third: We offer, in a document that I will leave with you, specific information, data and studies that together demonstrate that the permit should not be issued. And this block of information, even if the burden of proof was ours, which it is not, the opponents to the permit, is far more persuasive and far bigger
than anything the County has put forth to support the --
the permit.

If the EPA concludes that it cannot deny the
permit, we request that you employ a suite of special
conditions and pollution prevention goals which are
documented in writing, which I won't go into now.

We are losing over 11 and-a-half million
gallons of wastewater a day into injection wells,
billions of gallons a year. And that water is needed on
the land.

And we support and request that the EPA and
the County of Maui engage the communities of Maui to
discuss the best use of our water and to keep our
healthy reefs thriving.

Mahalo for your time.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for those
comments. And I do appreciate people keeping their
remarks to five minutes. And if you're going too long,
I will start waving or something.

I realize I didn't point out that the men's
room is on this side. We're going to be here a little
while tonight. So the men's room is over here through
the doors, and the ladies' room is on the other side.

The next speaker is George Lavenson.
MR. GEORGE LAVENSON: Thank you very much. I am George Lavenson.

First, I'd like to thank you for -- all of you from San Francisco for making the great sacrifice to come out here to Maui and hear us with this problem. And, very simply, the way we feel is we would like to recommend increase in the recycling of our waste and using it for irrigation purposes, for two reasons.

First: By using it for irrigation purposes, we don't have to use our potable water for that. And by using it, it's a better end for it than in the injection wells. What potable water we have is solely needed for human consumption here in West Maui, since it's often inadequate and at a premium, because of low rainfall, increase in population, overdevelopment, and use of potable water for irrigation purposes. Obtaining water for irrigation of crops and landscaping by recycling wastewater would leave more potable water for the human consumption.

In addition, this is a better way of dealing with the wastewaters than the practice of injecting it into -- the excess into wells, with unavoidable seepage and into the coastal areas with resultant damage to our priceless and dwindling pristine oceanic treasure.

I have two recommendations.
First, I think that we should limit -- here we are. We need to increase the infrastructure to recycle more of the wastewater and deliver it to the irrigation places -- I realize this is expensive -- and, thereby, increase our irrigation of water, decreasing the waste that has to go into injection wells.

And the second recommendation is maybe more ours than yours, but with the Long Range Committee, Planning Committee, getting some handle on the overdevelopment that is producing the excess waste, and, also, making the development companies more accountable for providing the infrastructure you spoke to. And it's needed to handle the excess waste.

Thank you very much.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for those comments.

The next speaker is Irene Bowie.

MS. IRENE BOWIE: Aloha. Irene Bowie of Maui Tomorrow Foundation. And Maui Tomorrow is also a member of the DIRE Coalition.

Thank you for providing this meeting tonight.

Anyone with knowledge of Hawaiian hydrology knows that coastal groundwater is connected to ocean water. Yet, there seems to be a disconnect between Maui
County's stated plans and responsibilities under our water use plan and the County's decision to continue to inject these waters instead of conserving and reusing them. This is not the kind of public stewardship of County waters that is required by both the Hawaii Constitution and the County's own policy.

Maui County recognized that it has the responsibility to manage the County's waters when it developed its 2007 Water Use Development Plan. That plan finds and declares that water is a valuable natural resource that should always be used wisely and managed as a public trust. The 2007 plan also states that the County's policy is to promote water conservation. Yet, Maui County's wastewater permit application does not mention this 2007 Water Use Development Plan, and is inconsistent with this plan, as the County's permit application to inject these wastewaters doesn't consider the possibility of conserving the wastewaters through recycling and reuse. Nor does it recognize, let alone satisfy, the County's duty to treat these waters as a public trust.

For these reasons, Maui Tomorrow Foundation asks that the EPA not renew the injection well permits without a plan of action and a timeline to correct this harmful practice.
Maui Tomorrow Foundation has taken this position because we fear that not all of the injected wastewater stays in the well, but, instead, migrates, leaks or seeps into the groundwater and may eventually be entering Maui's streams and ocean waters.

It's clear from scientific reports that underground injection and treated wastewaters is not a foolproof way to ensure that no leaks occur. A recent EPA report indicated that tracer studies in Florida's Keys showed the release and migration of effluent into area surface waters as soon as eight hours after introduction of viral tracers.

The problems in West Maui's wastewater treatment have become very obvious in recent years. Our supporters have long advocated for the need to protect the nearby reefs along Kahekili Beach, directly seaward from the wastewater treatment facility, from excess of nutrient rich waters.

Sadly, there were no studies in 1996, when the permit was first issued, linking reef health and the nutrient levels of waters discharged from the Lahaina wastewater plant through their injection wells. But now studies have been done. And the reefs of Kahekili undeniably show negative effects of not finding other solutions for this problem. High degrees of bacteria
and viruses have been found in the waters immediately
surrounding Lahaina wastewater plant's injection wells.

Ironically, the same reclaimed effluent
causing severe problems offshore is desperately needed
to irrigate the dry lands of Lahaina during times of
prolonged drought, such as we are experiencing now.

Maui Tomorrow Foundation supports redirecting
treated R-1 effluent to non-potable water uses. We
believe public and private funding should be found to
create additional treatment storage capacity and
delivery lines to transport the treated water. Not only
for fire prevention, but, also, for irrigation of parks,
community gardens, greenbelts and other uses.

In addition, gray water could be used for
residential yard irrigation and toilet flushing.
Thereby, freeing up clean water now being used for these
purposes.

It is imperative to use this effluent for
irrigation and other non-potable uses in order to keep
our reefs healthy and protect them from nutrient-rich
wastewaters increasing algae blooms. Wastewater
reclamation is the best solution. Existing reclamation
facilities should be upgraded and enlarged, and water
and sewage lines laid as funds become available.

We respectfully ask that any treatment plant
permit include conditions which will result in a substantial reduction of wastewater pumped into injection wells and an increase in the amount of reclaimed water, as well as distribution systems to utilize those reclaimed water.

Thank you.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for your comments.

The next speaker is Russell Sparks.

MR. RUSSELL SPARKS: Yeah. Good evening and welcome to Maui. My name is Russell Sparks. I am with the Department of Land and Natural Resources, Division of Aquatic Resources here on Maui.

I would, first off, like to thank the folks from EPA for coming over here and holding a public hearing, and hearing from all the people who have showed up tonight.

It's interesting for me to be here testifying in that I'm usually in the seat you're in, hearing from the very same people who are speaking here tonight. I'll be, just briefly, going over some of the points on the testimony that we already submitted for the record, submitted from my Administrator, Dr. Dan Polhemus.

Basically, our Division is responsible for
managing the living resources within the water. And, ultimately, that also involves coral reefs.

We've -- the monitoring team that works here on Maui has been working pretty much yearly, as well as multiple different types of surveys, for the last 14 to 15 years. And when we stitched together the long-term data set, it was really clear that a lot of reefs are declining quite substantially. The reefs right offshore from the wastewater treatment plant have in fact lost about 50 percent of their coral cover over the last 14 years.

Recent work by the University of Hawaii Botany Department is starting to show more evidence that the nutrients that are fueling some of these declines are in fact likely the result of injection plumes.

Overall evidence that we see on the reef is that the coral reef cover is declining, erosion is increasing, and there's periodic blooms on the base of algae that tends to smother out and kill and stress the coral further.

We recognize, certainly, that there's numerous causes for coral reef decline. But what we would like to see is that certain things that we can deal with and can address be addressed. And although that is costly, as Dave Taylor mentioned, and as though it will probably
cost the taxpayers and citizens of Maui a fair amount of money to do that, it seems to be a high priority to protect something so valuable for us here.

The conditions that we would like to see is that, one, the EPA change the standards by which they issue these permits. Groundwater should be -- protecting groundwater for drinking purposes is important, certainly. But in areas like Hawaii, where the injection wells clearly percolate into the nearshore waters, the Clean Water Act should also be an indicator of whether or not permits should be issued.

The County of Maui currently injects somewhere between three to five million gallons per day. The water they treat to a very high level. In fact, we're lucky here that our sewage treatment plants are run very professionally, by excellent staff, and they have implemented measures to greatly reduce nutrient levels. So, currently, about seven milligrams per liter on the high end with the nutrient levels. What we ask is that the permits be set at those levels. In other words, volume should be set somewhere around five million gallons per day and nutrient levels should be capped at seven milligrams per liter. This would certainly prevent these standards from getting any worse, and the situation from getting any worse as we move forward.
We would like to see that overall permit conditions are set in such a way that ultimately stage out injection wells and encourage reuse. Certainly we don't think that the County can stop injecting water tomorrow. But we would like to see that, over the years, there's an incentive for them to move that way.

And, last, we would strongly encourage that our Federal partners, in managing our resources, such as the EPA, and others, help our local governments fund the needed infrastructure. Unfunded mandates don't help anybody.

So, again, I will drop off a copy of this testimony. We do have some of the science behind our concerns with the reef declines on it as well. And, again, I thank you for the time. Thanks.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for the comments.

The next speaker is Jill Laffin.

MS. JILL LAFFIN: Hello. My name is Jill Laffin. I have been a resident of West Maui since 1987. I do want to thank you all for being here and listening to all our testimonies.

We understand and sympathize with the challenges that the EPA has faced during the last years
of the exiting administration. However, the West Maui
Mountains and her watershed have been severely abused
and neglected for far too long.

Tonight, you're receiving testimony on
scientific, physical and economic reality of the
injection well system used here in this very, very
fragile ecosystem.

Thank you to all the professionals and
volunteers and members of this diverse community that
are here sharing testimony tonight.

In the late eighties, I used to make jokes
about what would happen if everybody in Kaanapali
flushed their toilet at the same time. Since then,
we've added many, many toilets. Being reminded of the
substandard level that this system is currently
operating, the thought of the five new towers being
erected in Honokowai, at 500 rooms per building, being
added to this substandard system is no joke.

Before you begin the process of considering
all the facts presented here tonight, I personally am
here to encourage you all to take some time to acquaint
yourself with the West Maui Mountains and her many
rivers, from Ukumehame to Honokohau Valley.

You will have to refer to topographical maps
prior to 1919 and the agricultural diversions presented
to our precious water system. This knowledge of the
blatant disregard for the flow of the watershed from the
mountain to the ocean might give you a better
understanding of the multitude of environmental issues
that we are facing here in West Maui.

Tonight, you're learning about the true
effects of the injection well system on our reefs, our
marine life and, ultimately, us. The word
"responsibility" is simply the ability to respond. You,
as the Federal Environmental Protection Agency, have
that ability. With the Hawaii State Constitution Water
Rights and the Clean Water Act, I am confident that you
will respond to the magnitude of this ecological
situation and do what is highest and best for this
sacred part of earth, no matter what it costs.

Thank you.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for those
comments.

And the next speaker is Robin Knox.

MS. ROBIN KNOX: Hi there. Thanks for coming
to hear our concerns.

My biggest overall comment -- first of all,
I'm Robin Knox, I'm representing myself. I am a water
quality consultant with 25 years experience, including
ecological studies and being a regulator like yourself, writing permits.

My overall comment is that neither the EPA nor the County of Maui have provided sufficient information to the public to demonstrate that the permit as written is protective of the environment and in compliance with applicable State and Federal laws and regulations, including the Safe Drinking Water Act, Coastal Zone Management Act, Clean Water Act, Hawaii State Constitution and Hawaii Revised Statutes.

Your permit, in Part 3, Paragraph A, says that it doesn't authorize any injury to persons or property, or any infringement on state or local law or regulation, and that nothing in the permit should be construed to relieve the permittee of any of these duties under other regulations. So your own permit recognizes that there are other laws and regulations that need to be complied with.

And the County is a public trustee of the waters of the State. And has a duty not only to comply with your permit and -- but to live up to that public trust.

And, also, as all parties do, everyone has a duty to comply with State water quality standards. No one is allowed to violate State surface water quality
standards.

However, if someone did discharge at the levels allowed in your permit, they would be causing or contributing to violations of those State water quality standards.

So I urge you to really look at the rationale for your permit limits and see if they could not be stricter.

For instance, you have 60-60, 60 BOD, 60 TSS, as your limits, and you call that secondary treatment. But most places in the country, secondary treatment would be 30 BOD, not 60. And, in fact, I believe the State permit actually limits them to 30. So why shouldn't the Federal? I mean, if they are already limited by another permit, this permit should be just as stringent.

Also, the flow that's allowed seems really high compared to what they're actually discharging. And so I think there needs to be a rationale for that.

And these two things combined, when you look at the concentration and flow, your permit is allowing a much larger mass discharge than I think is really justified by any rationale that's presented. And I think if we got sufficient information to look at the water quality impacts that we would in fact come up with
water quality base limits that are much lower.

    The County has a duty to comply with these
water quality standards, whether your permit requires it
or not. But I think that if there are other
requirements that they have to comply with that you
certainly should have the authority to write your permit
at least that stringent. And especially if the County
would agree to it.

    The overall effect of that would be to lower
the nitrogen loads which would improve the circumstances
of what's going on.

    I believe that not only does this permit need
to be issued with those kind of conditions, but that,
also, another permit is needed. And the MPDS permit,
the permit to protect surface water qualities. The
groundwater and coastal ocean waters are hydrologically
connected. That means that the groundwaters fit under
the definition of waters of the U.S. And there is no
allowed discharge from point source to waters of the
U.S. of pollutants without an MPDS permit. So I think
one is warranted in this case.

    And I submitted written comments that have
supporting details for that.

    So -- and in closing, I would just like to
remind everybody that either reuse or injection wells
are merely disposal technologies and they are not
treatment technologies. And regardless of what disposal
technology we choose, we need to make sure that the
treatment level is appropriate to go with it and that
the risk of exposure to aquatic life and human health is
minimized as much as can be. And that is a societal
decision because, as Dave said, we all have to pay for
this.

So I urge you to not only get the Clean Water
Act people involved, but, also, get the water quality
management and planning aspects of that program involved
so that we can help the County to know what does it mean
to comply with -- with State water quality standards.
And I think that is EPA's job in this case.

Thank you.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for those
comments.

The next speaker is Ke'eaumoku Kapu. I'm
sorry if I didn't pronounce that correctly.

MR. KE'EAUMOKU KAPU: Aloha. You live in
Oahu? You live in Oahu?

MR. MOFFATT: No, I do not.

MR. KE'EAUMOKU KAPU: Oh, no. Okay. There's
a famous street called Ke'eaumoku Street. Everybody
knows it. Kind of interesting.

Oh, yeah. My name is Ke'eaumoku Kapu. I am here from Lahaina.

Kind of interesting that we find one subject that has a commonality in all of us, and it's a pile of crap. Kind of interesting that we all on the same side of the fence, too, when we discussing this matter of -- about injection wells.

So I sitting back over there in the back, trying to gather some notes. And here's the kind of things I came across: Probably; possibly; may not; and between two to five years; and last, but not least, the County says that it belongs to us.

That kind of doesn't sit right for me because I don't know where the concept of this injection well came and whether or not it came to our families of this place to be considered that an injection well for this part of a historic -- national historic registered district would be applicable for the constituents of the representatives here.

Well, for me, I'm in -- I'm here as a representative of Kuleana Kukai (phonetic), LLC, and as a minority of the wards of the State. Minority, that's a big word. Ward, also, is a big word.

And when it comes to the general consensus,
whether or not these things can be done, cannot be done,
where does the money go, who pays for what, what
percentage goes where, the minorities, the wards of the
State, always left out.

There was a time when our kupuna, back then,
said -- you know, all these policies and changes are
coming. And they used to tell us, it's for our best, no
worry, let it go, we gotta take care of everybody, we
live on an island, we got to know how to take care of
everybody, not just ourself. And that's coming from the
minorities. And I talking about the Kanaka Maoli.

So we set ourselves aside to be pono in our
place, to make sure that, because of the political
process we go through -- there's a process that we elect
the right officials to sit in office to make sure that
they do things that will benefit us all.

Well, 50 years went by, influxation of new
people come into our islands. Now we at the top of the
most endangered list in the State of Hawaii as
minorities to this State, where we have a Constitution
that's supposed to protect our rights, our gathering
rights, all these different types of rights. Now it
boils down to whether or not the County said they going
to take care of our system.

Never once any of my kupuna ever came and said
that we did this, we had to allow these things to happen
for your future generations. We were never considered.
None of us.

When policies came in, all these different
changes, ordinances, CC&Rs, covenants, came over here,
we couldn't make sense of all these kinds of madness,
all these things, these new invasive ideas that came to
our 'aina. But our kupuna said, take heed, be pono,
don't worry, we gotta find ways of compromising.

Well, it's 2008. And down to the line, no
more compromise. 'Nough already.

I don't know what the possible solution is
gonna be based upon taking care of the environment, but
these are the kind of things that we were looking for
when they came down to the most simplest thing which had
to do with our Constitution of our Native Hawaiian
gathering rights and how, all of a sudden, Maui County
lost their rights of gathering, fishing. And these kind
of issues was never considered, to see whether or not it
was probable that the effect from these injection wells
may possibly had a lot to do with the reproductive cycle
and the replenishment of our reefs.

Mahalo to Russell Sparks for his input on
algae bloom, his input on all the information that he
shared with us. It still defies the fact that we don't
take into consideration about these kinds of things when we start changing or reimplementing or allowing new permits. We don't take into consideration about how this gonna affect the fishing guy who trying to feed his family, how it's going to affect the guy who want to stay in the mountains trying to grow kalo and feed his family. They don't take into consideration all those kind of things.

I sit here in the back, and I listen to all this scientific terminologies on milligrams and 500 million gallons of sewage going into the ground, and a certain percentage, and how many years it's going to surface to the top, until our environment gets affected. It drives me crazy to sit here and listen to all this madness, knowing that our brain -- we so intelligent, we more intelligent than the earth. And the earth cannot catch up with our intelligence. We killing her. We killing her faster than we realize.

And the bottom line, all it boils down to, is one simple little permit, we need to consider on how we gonna take care of the mass people that we have now, not take into consideration maybe possibly asking the County how many more development on the west side is coming. I hear 10,000 homes. So, what? That means more injection wells, more sewage plants, more this, more that. Drives
me crazy.

So on behalf of the minorities of this state, find it within you na'a'u, think about the most simplest thing, the farmer and the fisherman, the person that just trying to provide for his family. Which literally, to this point, we getting screwed and to the point where I guess our representative for the County said it belongs to us. Nah, that's just an excuse. It's just an excuse to say that, because none of my kupuna told me that, oh, we did this for you. They told us, oh, hamau, no get involved, no worry.

Kind of interesting, I standing over here. Because, normally, when I come up and testify, I stay on the opposite side of the fence. So the commonality of a pile of shit, wow, I love it, because it brings everybody together.

Mahalo. Thank you very much.

(Applause.)

MR. DAVID ALBRIGHT: Thank you, Mr. Kapu.

Corrin [sic] Pang is the next speaker. Lorrin Pang. I'm sorry.

DR. LORRIN PANG: It's okay. Thank you. I will speak as a private citizen. I am a physician. I used to run the bacteriology lab for Walter Reed. I've taught epidemiology and biostatistics for the World
Health Organization since 1985.

I'm a little bit new to this field, but I'm not new to regulations versus science. The whole thing really is summed up in Number 10 of your fact sheet where it says, "Studies do not prove that nutrients," dah, dah, dah, "damage the reef." We've seen this kind of statement before, "studies do not prove." You can also say studies do not prove that it doesn't hurt the reef or that it does hurt the reef. The thing is studies -- you will never study the system adequately.

There was just a publication last month in proceedings of National Academy of Science saying how difficult it is to predict the ecological effects, both affecting the reef and on health issues. So, tonight, I was just going to speak about health issues. But since everyone is concerned about the reef, we can talk about that.

The next thing, the issue that comes up, is Number 13. You have criteria for the nitrogen. You have criteria for BOD. You got criteria about sedimentation. I'm not real sure how these criteria relate to science, reef protection or health. And I will bet you -- having read what the proceedings of National Academy of Science said, I bet you that no one really knows. So shall we study it some more?
I bet you we could study it more and, after 10 years, never come up -- never be closer than we are today. Well, we might be a little bit closer, but not for sure. So we will always be kind of vague. Studies that show this and study that show that. So on the precautionary principle, I have to agree with the former speakers that said, let's not do it.

But let me tell you a little story about -- about criteria versus science. It's about five years ago, on Maui, we followed the EPA criteria, Region 9, this was the water Upcountry. And not only did we meet the criteria, there was a mandated additive, it's called C9. We were told to put C9-phosphate into the drinking water. Well, lo and behold, people complained of rash. And lo and behold, when we brought this up with the EPA, they said, gee, Dr. Pang, 500 communities put this thing in and nobody complains about rash except us.

Well, first of all, us is a little different because we're in tropical climates. And when we did call the EPA, they did admit that, in the summer months, in Ohio, all the way through Louisiana, people did complain about the rash. And so this kind of came up that, gee, were we covered up, or did they just think that we were just like the mainland. Because in tropical climates, staph, all these pseudomonas, the
reef, things are very different.

And so we do not follow, very closely,
criteria, especially if they're set in different
climates or different kinds of waters with that
nutrient.

But to make a long story short, we actually
did prove that all samples from Upcountry drinking water
were highly contaminated with very high levels of
pseudomonas. Okay. And the EPA had to rethink and they
cut down the additive, then they removed the additive,
and the rashes went away.

So when you set criteria or you set mandates,
in this case it's a criteria, I'm not sure the science
is there to back it up.

But I want to say something constructive.
What shall we do? Shall we go ahead with the permit or
what do we do? Why don't we just go ahead with it on a
year-by-year basis and kind of step it in? We approve
it, but I want to see progress into reclamation of
water. And I want to see more and more (inaudible).
It's kind of like switching from oil to wind power. We
can't just cold turkey switch, but I want to see
progress. And the permit is looked at every year or two
years. And if we don't see progress, then it's ended.

So I know it's a shocking system to switch,
but can't we have some kind of step wise adjustment?
I do not think -- you can study up the wazoos,
I will try to look at the data itself, but I don't think
we're gonna get too far with studies.

Thank you.

(Appause.)

MR. DAVID ALBRIGHT: Thank you for those
comments.

And thanks, everyone, for keeping to time
limits. I think we are doing well.

The next speaker is Wayne Cochran.

MR. WAYNE COCHRAN: Hi. Thanks for coming and
hearing us. My name is Wayne Cochran. I am with
several environmental groups, Maui Unite, Honolua
Coalition and, also, DIRE.

I'm -- I am representing the surfers, I think.
I own Maui Surfboards. It's a mom and pop shop. It's
over 40 years old. I'm in the water nearly daily. And
I started doing stand-up paddle-boarding, where you
paddle up and down the coast. And, you know, from six
feet up, you get a real good view of the reef.

The last five years, I've seen the reef
just -- the live coral disappear right before my eyes.
It's just fading so fast. And I've also seen the fish
disappear.
Like Ke'eaumoku said, they got gathering rights. And there's no more fish because there's no more reef. And I see this because of the algae bloom. And it's incredible, you know. And it's been proven where the injection wells are, the algae bloom is -- has just destroyed the reef and the sea life.

The reef-related tourism business and fishing-generated businesses have given an average of $360 million a year, according to the NOAA Economic Study.

Now, if we lose this reef because of injecting, you know, that's a god-awful shame, and that's our fault, you know. This is -- this is our mission to change this.

You know, 25 years ago, when we -- when we cut off the direct sewer into the ocean, we started injecting it, thinking that would filter, that was state of the art then, to inject it. But, now, we don't have the time for our reefs to keep doing that. I totally think we should at least get that ultraviolet channel in here. At a cost of $5 million to make that ultraviolet channel, we're going to at least save those microbes, those bacteria from going in the reef which, you know, we can know if a beach is polluted. If you go there, you know.
I go in the water. This is a scratch from about -- (indicating) -- it's about three or four weeks old. You know, it just -- I keep it clean. But all our little scratches turn into craters, you know.

And, anyway, we got to keep the bacteria out. The fish don't know that there's bacteria in there. The turtles end up with tumors and stuff. We really gotta -- we gotta really -- the ultraviolet channel is a quick -- a quick save on that one, you know.

I know a lot of guys that work in the Honokowai Sewer Treatment Plant. I've toured it four times, at least. And for your -- for the community's information, a couple of choice items they found clogging the sewer line, one was a bowling ball. How that got there. And pig, there were pig -- pig and pig parts in there all the time. So --

But the main clogger right now is pretty new. It's those paper wipes. You know all the different kind of wipes, that stuff clogs. It doesn't break down like everything else with the treatment plant. That's our -- that's something we got to think about. Throw those things away, don't flush 'em.

The three million gallons plus that are daily injected could be applied to a pipeline and water the Civic Center area, right around here, instead of using
sweet water from the mountains, and, also, water the
park area. They could take -- we could have this whole
park so green and lush, you know, with the R-1 water.
And -- and it would -- it's less -- it's less than two
miles to run the piping down here. It already goes to
the end of Kaanapali Golf Course, which isn't very far.

And the Kaanapali Golf Course also uses sweet
water mix. They take almost two million dollars -- two
million gallons a day of water for that.

The algae blooms confirm there's nitrates,
they're killing our reef. The EPA must improve --
impose conditions that will eliminate the injection
wells eventually.

With so much new development, the Kaanapali
Treatment Plant will be maxed out in the foreseeable
future. Those guys are -- they're working hard to keep
up with what gets -- coming -- comes to 'em, you know,
with all -- it's just -- it's always outdated.

The community needs to support modernization
of all the Maui's treatment centers. And they got to
try to don't inject, redirect.

Thank you.

(Applause.)

MR. DAVID ALBRIGHT: Thank you. Thank you for
your comments.
The next speaker is John Seebart.

MR. JOHN SEEBART: Hello. My name is John Seebart. And I am speaking as a private citizen, also. However, I do volunteer with DAR as a reef surveyor. And we look at herbivore species on the reef and what they're eating and how much they're eating and so forth over a period of time.

We've primarily studied sturgeon fish and parrotfish, which is about 25 different actual varieties.

I got involved in this about a year and-a-half ago. And, subsequently, I've learned about some of these things in the -- the injection plant and so forth, and the phosphates and nitrates, and how they cause the algae blooms, because essentially they're fertilizer.

This reef out here at Kahekili is one of our spots where we are actually working on a regular basis. And we also work in Olowalu and Honolua Bay and Kapalua Bay, and some other places occasionally.

We don't work in Ma'alaea Bay, which is an interesting place because Ma'alaea Bay, 25 years ago, had about, they reckon, 75 to 80 percent coral cover throughout the bay. And now that bay is down to four percent with invasive algae covering the reefs. And the fish are gone and the reefs are gone. And there are
-- there are places along there where the private condos
in Ma'alaea inject, also, as well as there's a --
there's a Maui treatment plant in Kihei.
I'm not really sure what happened there, but
we do have invasive algae. And these are things that,
once the algae starts to go and the reef starts to go,
this provides an environment for human pathogens to live
in. And it doesn't really matter -- I mean, well, it
does matter, but we can't prove whether the pathogens
are coming from the treatment plant or not. But once
the pathogens are -- or the pathogens are in the water.
And as the reef declines, the water gets worse.
Now, it turns out that Maui County has the
highest level of methicillin-resistant staphylococcus
orius hospitalizations in the country of about 188 per
100,000. And the natural average is somewhere around 80
per 100,000. Kauai is right up there, too, with -- I
think with 172 per 100,000.
MRSA started in hospitals. And because of
using various antibiotics improperly over time, the
bacteria became resistant until Vancomycin is now being
used as a prophylactic antibiotic in some hospitals for
surgery. Well, Vancomycin was referred to, 10 years
ago, as a gorilla antibiotic that would kill anything.
Now we're risking losing that as an antibiotic that will
work against these things.

Now -- so you have the decline of the reef on the one hand and you have the -- the human threat on the other hand. The water that comes from that plant in Lahaina exits very, very closely nearby, within half a mile of Kahekili. And I'm sure there are other seeps up closer to the plant itself. But the concentration of the fresh water mingling with the saltwater along the shoreline in very shallow water increases the amount of nutrients that are being injected in that area. If the -- if the pipe was out further in the water, say in 600 feet of water, maybe that would -- and nobody has talked about that yet. But I -- I'm not sure it's a great idea. But if -- it seemed to me that if it was put further offshore that might be helpful, especially if it wasn't released directly on the ocean floor, because there are flora and fauna on the shore. But if it was at some level, 15, 20 feet above the ocean bottom, maybe that might be a help. I don't know. That's my own guess.

But the environment here in Hawaii -- so we have the reef itself and we have the human illness as two big issues that have been talked about tonight. But -- and, also, in essence, the environment in Hawaii for most of the residents here is the economy. So when the
County talks about dollars and cents, they're really
talking about cutting off their nose to spite their
face. Because if you destroy the reefs -- if this is,
in fact, destroying the reefs -- and it seems that the
DAR has shown that -- that if you destroy the reefs, you
-- you detract from the tourist industry. If tourists
come and find out that they're gonna get staph from
going in the water, you're destroying the tourist
industry.

I can't agree more with Ke'eaumoku that this
is crazy. And it's -- it drives you nuts to think about
it.

So I think that we should do something. And I
-- I agree with the doctor here who said, obviously,
this can't be remedied overnight, but -- but there needs
to be some kind of conditional -- conditions --
conditional use permit, where things can improve over
time, hopefully rapidly.

And that's my own personal take on it. Thank
you.

(Applause.)

MR. DAVID ALBRIGHT: Thank you.

The next speaker is Elle Cochran.

MS. ELLE COCHRAN: Good evening. My name is

Elle Cochran.
And thank you, Nancy, for hearing all our testimonies and having this public hearing. I appreciate you folks being here. I get to see a real live EPA guy. You know, it sounds like such a big entity. And thank you.

Hopefully, this will set precedence for us to have a lot more interaction together. You know, I believe in keeping public involved and educated on issues is very, very important.

And that's one reason why DIRE, the group that I am also with, had done that. And, also, we brought up all our major points, pretty much, through Hannah Bernard. So I don't want to sound redundant, but I believe it is very important that, eventually, we phase out these injection wells. I mean, obviously, you've been hearing over and over this evening the negative impacts it has. There are definitely the studies to prove that.

And, obviously, we can't just phase it out, like Dr. Pang had mentioned. But, hopefully -- or completely cut it out. But, hopefully, you know, phase it out. And in the meantime, if we have to continue to use injection wells, to beef up the standards, get stricter, you know, standards there, and make sure that the injection wells comply with that.
I don't want to knock our injection well peoples, Steve Beribacoli, Dave Taylor, everybody, they're doing awesome work. You know, they are following their standards. But right now, I feel they aren't up to par. They need to be more strict. And, you know, even, you heard that from Robin Knox's testimonies and everything. So the scientific data is there. And I would like to see that.

I know money is a really big issue with all of this. To get UV treatment, you know, plants, to get it -- even pure water, and the reuse and recycling, that is number one. But, again, you know, we need the transmission lines to get it to where we can be reused. And we don't have that right now. So we understand that storage, that's a problem, too. So that's all going to take money.

And, you know, the funding that the -- that came from the government back in the early 1990s, I guess, had put up all these treatment facilities nationwide, and then they totally cut out funding. I mean, that, to me, just doesn't make sense. You know, I think they should have some kind of responsibility in what happened here. You know, now we're suffering. I mean, our land, our sea, our people. You know, human health is suffering because of what they had, actually,
you know, put into use.

So where is their accountability with all of this, is what I would like to know? And, hopefully, they can, you know, put up some funding, because that's exactly the bottom line what's happening.

So, you know, the reuse thing I think is very important.

A lot of people spoke with restoring stream flow -- stream flows. I'm a big advocate of that. I do know that there is a agricultural -- well, there's a company further north that has access to using this recyclable water and they have denied use of it. It is one of their options, but because they divert the streams and get water for free, then why should they purchase water from the County?

So I believe I would like to see a mandate to say -- require it for people who have even access to those waters to actually use it, you know. So that is something to, please, look into.

And, yes, you harm our environment, you know, you're harming our economy. That's really the bottom line.

And development. There's a lot more development coming down the pipes right now. A lot of us aren't very happy about that and will do all we can
to, hopefully, stem it. But the truth is there will be some. Why don't we somehow put in some kind of mandate for these developers to put in that infrastructure to use the recyclable water? You know, I mean, it's -- it's the price you pay to build here in paradise.

So somehow -- I don't know who is out there listening, but I would like to just put the costs on the developers. You know, I know the users will -- will also have to pay. But I think, you know, the majority -- it should be accordance -- the rates should be in accordance to the usage. And a lot of these big timeshares with big ol' bathrooms and, you know, everything, they're using a lot of the water.

Personally, I live off the grid, so I'm not part of that system. But, you know, anyways, I just want to thank everyone again for being here. And aloha.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for those comments.

The next speaker is Meghan Dailer.

MS. MEGHAN DAILER: Hi. I am Megan Dailer. And I represent the University of Hawaii.

Can you guys hear?

MR. DAVID ALBRIGHT: Pull it up.

MS. MEGHAN DAILER: Pull it up?
MR. DAVID ALBRIGHT: Pull it up.

MS. MEGHAN DAILER: There, okay.

I've submitted my testimony to you already that's quite long. And I am not going to read any -- I'm just reading the summary from that.

So, nuisance algal blooms consisting of red alga Hypnea musciformis and the green alga Ulva fasciata are problematic in shallow closer waters around urbanized areas of Maui.

The Kahekili area is an area of problematic algal growth, primarily of Ulva fasciata, but other species at times, and substantial reef decline, which has already been mentioned. Kahekili has the highest microagal N15 value on Maui. N15 signals that are high are indicative of sewage. So this indicates the presence of sewage in the nearshore marine environment in the Kahekili area.

Sewage effluent contains elevated levels of many nutrients compared to oceanic background levels, some of which are important for algal growth and photosynthetic needs.

From laboratory studies with reagent grade nutrient enrichments, we see that nitrogen and phosphorous play important roles in the photosynthetic needs of Hypnea musciformis, but are unable to promote
excessive growth on their own. They need more than just nitrogen and phosphorous to grow.

Our sewage effluent addition experiments resulted in growth rates similar to those observed in bloom situations for both Hypnea musciformis and Ulva fasciata, which were significantly higher with increasing levels of sewage effluent. Whereas no significant difference was found between treatment for Acanthophora spicifera and other blooming species here in the islands that's also invasive, or Dictyota acutiloba. Anyway, another native plant that is common to reef flats everywhere in Hawaii.

Therefore, in terms of growth, Hypnea musciformis and Ulva fasciata, primary -- respond -- similarly respond to excess nutrients more positive and faster than A. spicifera and Dictyota.

Additional results from the sewage effluent additions, were that Ulva fasciata requires fewer nutrients to increase photosynthetic performance. So -- anyway, than what is required for H. musciformis and A. spicifera. All three species, except for Dictyota, positively respond to excess nutrients in terms of building photosynthetic capacity. And Ulva fasciata is the most responsive.

The last conclusion here is that the native,
the non-blooming reef plant, Dictyota, does not enhance
photosynthetic properties in the presence of elevated
nutrients.

From another aspect of this study where we did
a nutrient uptake rate determination, we see that
substantial decreases in nitrogen, phosphorous, iron,
molybdenum and manganese were found over a 24-hour
period in the Hypnea musciformis experiment, which
displays the ability of the species to utilize
substantial levels of these nutrients in a short amount
of time.

In addition, these experiments present the
importance of considering more stringent limits on the
total allowable daily loads of algal-promoting macro and
micronutrients such as manganese, total nitrogen, total
phosphorous, iron and molybdenum.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for those
comments.

The next speaker is Daniel Palakiko.

MR. DANIEL PALAKIKO: Thank you guys for
coming and listening to our testimony.

I don't come here with written testimony. I
don't come with high-ranking positions in an
organization. I come as a concerned person about the
way our water has been -- is being used.

First of all, I believe that nature takes care
of itself, that God created this earth in such a way
that, if something happens, it will take care of itself.
It's man that is the trouble. There is a process that
God has put into play where the water comes from the
cloud, gets on there, on the ground, it gathers and it
soaks down and, on the way down, it clears. Man comes
along, drills a well, takes the shortcut, and tells me,
from other people, that you can drink the water. Well,
if you want to drink the water, drink it. Not me. I
want the surface water.

You guys say the water is clean -- they say
the water is clean enough to drink. Well, I don't
believe the County.

So many things that's happening in the State
and in the County. And I been fighting with the County
because of our place, where I don't believe them
anymore. They say it's safe, but I seen. I come with
observation from what I've seen since they started these
injection wells.

I was sitting at a cliff one day and looking
down and enjoying myself. Then I see a turtle coming up
with (Hawaiian) on it. You know what the (Hawaiian) is?
Tumors. It's terrible.
I've seen the fish dwindle. I've seen the limu disappear.

I don't have to be a rocket scientist to know that something is happening. And then there's a algae bloom. Then there's a study where they say they gonna put a dye, so they gonna watch the dye, where the dye goes, but it's inclusive. Well, nature is taking its taking care of itself. It's gonna drift from there to there. The dye is not gonna be there. It's gonna be cleaned out. Common sense will tell you.

The County spends money. County says we own the water, the wastewater, because the -- the money is spent for cleaning it. Well, the County is wrong. We owned the water before had doodoo inside. That's the public trust. And now they tell, we own the wastewater? We owned the water from the beginning. Not because the money was spent, but because it's a public trust.

I say -- drilling a well, last I heard was $100 a foot, 300 feet you gotta drill. That's a lot of money. I say let nature takes its course. If you can't get rid of the water that they clean, go and make reservoirs, put the water inside, let the sun evaporate it, let it sit through and let nature takes its course. Then I believe, then, it's clean, I can drink the water.

But to tell me you're gonna take a shortcut
down there and you -- you don't know where the water goes. We see the ocean, what's happening to the ocean.

So for me, I say don't give 'em the permit until such time as the County catches up with the infrastructure. Why continue getting more rubbing-stamping permits which we are against? And then when all the doodoo come, it's our water?

Come on, you guys. That's -- let's wake up.

You know, I told many people, when it comes to water, you guys gonna hear my anger. You guys are hearing my anger in my voice. Usually, I'm a nice guy. But water is the essence of life. So today, I'm not the nice guy. I got anger in me because of all the times -- I live next to river. And then you have somebody for a million come and tell me what happens to the river. Come on. He's not there when there's a storm and big boulders as big as a Volkswagen rolls on and hits another one and shake your house. I'm there. If you guys want some input, get the people, the grass roots, not the guys with all the studies, with all the sophistics.

Go with observations. Man has came a long way through observation. So I say maka'ala, use your eyes, use your common sense, deny the permit. Amen.

(Applause.)
MR. DAVID ALBRIGHT: Thank you for your comments.

The next speaker is David Hartley.

MR. DAVID HARTLEY: My name is David Hartley. I'm a resident on the west side. And I retired, but I have had over 45 years of experience in financing public infrastructure throughout the western part of the United States, particularly California.

This hearing is excellent, listening to these people and their concerns. The injection system, I think, is understood by most of us not to be the best way to do this. There are other procedures, there are other alternatives that should be explored. And I think it should be the responsibility of the County, together with the EPA, giving conditions to any permits, that they undertake immediate action -- that's difficult on Maui -- to undertake a plan looking at alternatives to how to finance, other than an injection system, to keep the water so it's -- can be used, particularly gray water. We're using entirely too much potable water on this island for purposes of irrigation. And it's not necessary. If you're getting five and six million gallons a day out of a sewage treatment facility, there are ways to create infrastructure systems to put this water into an irrigation system for the entire west side
of this island, certainly this side, Lahaina, north and south. And there are financing procedures available.

There sits in the County now, sitting, getting dust on their desks, a procedure under which long-term financing could be done for this particular area, which is the benefit area. And the people who are using the toilets and who are using and producing the sewage should pay on the basis of what they're doing and what the gallons are that they are putting into the system.

And everybody could take responsibility to step up to the plate, the County Council first, and the people behind it, to stand up, take responsibility and pay their fair, just and equitable share of assisting. Because we are not gonna get it from Uncle Sam and we are not gonna get it from the State. But we can do it ourselves, if we choose to and if we have the political will.

Thank you.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for your comments.

The next speaker is Gordon Clay.

MR. GORDON CLAY: I guess everybody can wait to hear me and not go home.

I would like to thank you all for coming here.
I've heard most of what I would have imagined saying already, so I am going to keep it brief.

I came to Maui a year ago to live, after being away for 15 years. I consider myself to be a guest here.

The reason I'm here tonight is, basically, three reasons.

Number one, I was absolutely shocked to see the degradation of the reefs compared to how I remember them from 15 years ago. I spent most of my recreation time snorkeling on this side of the island.

And number two, I took a course, through the Maui Reef Fund, on reef awareness. And I'm not a scientist, but I am not stupid, either. And what I learned in that course was shocking, absolutely shocking, to me, as an outsider looking at something with clear eyes, that this can be allowed to occur.

And the third reason I'm here is because I know that switching from putting sewage into water bodies, whether they're lakes, rivers or oceans, and using them for irrigation works. It's very cost-effective and it's very doable. I have seen it in my lifetime in several places.

I, also, in most of my adult life, have been involved in environmental remediation work. I have
watched species go extinct. I have watched reefs. I was in Florida just earlier this year. I have seen reefs that have collapsed. That can happen. It will happen if nothing is done. And they don't come back very fast.

On the positive note, I have seen a lake that I grew up near go from being an algae-filled, green, cloudy mess that you wouldn't want to go near, and stink because of sewage, treated sewage, being put into it, transformed into a healthy, vibrant, essential part of both the tourism and domestic, you know, local community. And that's Okanagan Lake in British Columbia.

Now, I ask you, as, you know, people who I believe are well-intended and trying to do the best you can do, to meet your responsibilities.

I don't know. Is there any elected officials here tonight? No. Where are they?

To communicate the facts, the truth, the common sense of what needs to be done -- okay. If I do the math correctly, where I live, paying a very low rate, we pay $3 per 1,000 gallons of fresh water. Okay. At five million gallons a day, that translates into about $50 million over the life of this permit. If you assume that all of that fresh water that's being used
for irrigation can be used for potable purposes in a
place where there's people waiting for water, you know,
I mean, it's just -- it is common sense.

The final thing I have to say is that for
those who, you know, don't want this permit to be
approved for a 10-year period, but would agree to a
highly conditionalized annual renewal process that
ensures the public continued input into the solution to
the problem. And, again, the solution is very
achievable. We've heard that here tonight. Is that --
I have here the Hawaii Environmental Law Handbook. I am
sure at least one of you is familiar with it. And the
law is on our side. Everything in this book that I am
newly acquainted with -- and I am not a lawyer -- tells
me that the solution is available to the public if we
don't fail.

Thank you.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for your
comments.

The next speaker is Ed Lindsey.

MR. ED LINDSEY: Aloha. My name is Edward
Robert (Hawaiian) Lindsey. I represent the Maui Nui
Marine Resource Council. I also represent the kupunas
who have lived here for over 1,000 years. I am a living
representative of their voice.

(Hawaiian.) We're killing ourselves.

I have a prepared text, but I would like to preface it in what Western technology is doing to us.

The Kumulipo, the Creation Chant, coming from the darkness, and going on into the darkness, the first thing to have been created was the coral. And all things from the ocean had been created long before man.

The fish was created, the limu was created, the sea mammals were created, and still man had not been created.

The first plant to get onto land is called akahi akahi, that's number one, number one. And then the things from the plants were created, the insects, the birds -- and there's one insect here -- have been created, but not man.

After everything had been finished and had been created, then man was created. And man was created to use all of the resources to sustain himself. But as we go along, and as we become more populated, we have such things as these injection wells.

So what is happening to us? We are killing the corals. We are killing the animals in the water.

And the secret that nobody has really acknowledged yet is that we, according to the Kumulipo,
are related to the coral and everything that had been created before humankind. So we have a responsibility not only to ourselves but to all things that God had created.

When you cry, the tears are salty. Evidence that we came from the ocean.

What we need to do is to become smarter and to use the technology that God has given us to clean up our act. The current system does not provide for sustainable living.

Maui, most recently, had been elected, so-called, if there's such a thing, as the best island in the world. But don't go back out and tell 'em all secret, we have poo-poo problems.

You know, the prepared speech had been already turned in. And so as a chairperson to the Maui Nui Marine Resource Council, I would like to read parts of it with your permission.

The Maui Nui Marine Resource Council is a broad-based community group, working to apply ecological principles to education, research and agency management such as this so that our nearshore waters will be restored with an abundance of fish, healthy corals, avoid algae bloom.

I took my grandson out to the ocean to
introduce him to his family, the fish and the corals, 
that my dad had put out what we Hawaiians call koa. The 
Hawaiian word for coral is koa. When you have a fishing 
koa, that means this is where the fish gather. 
(Hawaiian) means to gather over here. A fishing koa is 
a practice, cultural practice, to bring the fish in. 
And then I took him out, there was no fish. I took him 
out -- he is a four-year-old little boy. I took him out 
to introduce him to the limu. I found only weeds that 
they call invasive limu. 

So these things are really impacting not only 
our culture, but our souls. 
There is no time to get angry. We must act. 
When the ship is sinking, you don't discuss false 
scientific evidence. You go out and do the work that 
needs to be done. 

Our coral reefs are sinking. We don't have 
time for anything else. 
And to do purpose, credibility to the Maui Nui 
Marine Resource Council, I would like to read the 
recommendations. We ask that your permit include 
conditions to protect our groundwater sources for 
drinking water use and all aquatic ecosystems that 
support cultural fishing and recreation. We ask that 
you specifically include water-quality-based permit
limits designed to achieve compliance with surface water quality standards in the coastal waters.

You know, if you walk down the seashore, you can feel -- if you walk in the sand, you can feel cold water coming -- seeping out from under the sand. But sometimes, some places that's, also, drinking water. Some animals on Lana'i, where the spring water is still going out into the ocean, you see the animals going out, the deer, and what used to be cattle before, and some of the goats went out into the water. And they know where the seepages are coming through and they drinking that water.

So guess what our injection wells are doing?

We ask that the permit be required to comply with any total maximum daily loads established to support attaining water quality standards. I don't know if the total maximum daily loads have been established or not.

And the fourth one we ask is that the EPA address comprehensive watershed planning -- let me repeat that, comprehensive watershed planning -- to ensure that this and all decisions support clean and healthy nearshores waters that we and our visitors and our (Hawaiian) can fish or swim with no concern for health hazards.
Currently, it is paramount that solutions are beneficial to all concerned. Currently, there are people on the West Coast who are finding pathogens are impinging on the swimming population on California. We have some friends who are doing that kind of work. And they are amazed and they're very concerned that we don't have this thing going on over here on Maui.

And with that, I thank you for coming. And I bid you aloha. And let's get things done.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for those comments.

The next speaker is Alan Arakawa.

MR. ALAN ARAKAWA: Good evening. And thank you very much for having this hearing here at Lahaina.

As a former mayor of Maui County, I also was a former wastewater operator and supervisor at the Kahului Treatment Plant. And I worked at Kahului, Lahaina and Kihei Wastewater Treatment Plants.

One of the things that you should be looking at is the fact that division is entitled Wastewater Reclamation Division. The very purpose of the Division is to take the water, reclaim it so that we can have reuse.

Now, early on, when the treatment plants were
created, there was very little scientific data that was
available because no one was doing baseline studies of
how the oceans were being affected, no one was doing
studies on exactly what the cause and effects are.

When you look at the Lahaina Treatment Plant
and the Kahului Treatment Plant, the effluent is very
close, the wells are very close to the ocean. They are
not miles above the ocean; they're hundreds of yards
above the ocean. And I think that you will find that
the water that's going from the treatment plant, going
into the ocean, is probably getting there a lot sooner
than most people think. Even though there's no
definitive scientific proof, there's a common sense
application of that.

I know that, in Kahului, the water goes into
the injection well, it comes out almost immediately at
the ocean side. We can even see traces of it bubbling
up almost as a stream.

In Lahaina, we're not much further. I believe
the effects of the water getting into the ocean is a lot
sooner than what we think.

Okay. That being said, there's also a severe
water shortage problem that the Water Department of the
County is having to go through. So you have to balance
off what are the community needs. The community needs
to have more water availability. We cannot continuously
dilute streams to get more water. So it makes sense --
and a lot of speakers have pointed this out -- that we
start to reuse and make it a requirement to reuse water
that we have available that can be used in the proper
way, like for irrigation.

It's a question of cost. And when we start
talking about cost, we also have to talk about the
defered cost from having to deal with many of the
things that we do not know what is occurring. You had
Department speak to you representing the State,
representing the University, you've had scientists
talking to you about different effects on the ocean
life, what studies they have. At the same time, you
have heard that there is no definitive study that the
County is using or can look at and say there is no
problem that is occurring because there are no
scientific studies that can back that up.

I think you have a very clear mandate with
what is available to seriously consider banning the
injection well use and start doing things to clean up
that water so that it's actually much cleaner and you
have much better tracking system for it.

Now, you cannot do it overnight. As Dr. Pang
was pointing out, perhaps we need to be able to step it
so that it's a requirement that is met, you know, periodic improvements, so every year, so many percent of it has to be reused, and get away from the injection wells altogether.

Now, there's also a couple of other things that need to be considered when you're -- when you're looking at this. If the Water Department is having to go through the cost of looking for water and providing water for the community, some of those costs could be deferred into the wastewater treatment system to be able to get water that's readily available, and substitute that water for drinking water that's being used for irrigation and other -- other kinds of uses like that.

So you would be trading one cost for another cost. So it might become more cost-effective. That's something that needs to be looked at.

But if it's not mandated, if it's not mandated as a condition, it will probably not happen. And you, as administrators of this system, really need to look at are we gonna be responsible, later on, for trying to work on tumors that the fish life have or possibly other kinds of consequences that we really don't have any scientific basis to say is not occurring, when all the scientists that have spoken to you are saying that there is a challenge that is occurring and they're seeing
definite problems that are arising that are changing the environment?

I think the evidence is overwhelming that something needs to be done to make sure that we are on the right side of the scientific evidence. And that is seeing what is occurring, taking that as a reality and recognizing what we don't have as information and taking that as a reality as well.

I'd like to recommend that we really start looking at this, as you start mandating. And as Dave Taylor pointed out, if you start mandating that the County has to be able to start changing systems, going to total reuse, then the budget has to be altered to require that.

There are many conflicting areas in trying to get the financing done. There are a lot of water that have been very inexpensively used in the area -- the agricultural area in the past. But the competition for that water, now that the cane fields and the pineapple fields seem to be disappearing, should also be altered so that more water are returned to the streams, more water are left in the natural habitats, so we are not diluting a lot of these areas. And the areas of water where we're wasting, such as the reused water, should be applied to make it balance out a little better. And you
have it within your control to be able to do this in
your permitting process.

I'd also like to recommend that -- when you
start doing this, that baseline studies be required, you
know, to -- to track what is happening.

Now, when Wendy Wiltsie came here in the early
1990s, I was working in wastewater. And we actually
started the discussion on doing tracking studies as to
what's happening in the ocean. And many of these
scientists that are talking to you today are starting to
do a lot of that tracking, which is why they can see the
reef degradation, which is why they can now tell you
about the fish population changing, or the algae
population growth changing, because that scientific
background is there, it's being accumulated, where there
was nothing when we first started the injection well.
And I think that -- that scientific evidence is
overwhelming and you really need to consider that
strongly.

It's not a question in -- in my mind, it's not
a question for you to have to decide what the costs are
or whether it's going to take a lot of money to do it or
not do it. I think, in my mind, your decision is, is
the scientific evidence that is available showing that
there could be much more damage by not requiring the
reuse and not requiring the change of the system from injection well to total reuse. Is that damage much more pressing than allowing the cheaper, less expensive way of disposing of water? I think that is the question that you have to decide as administrators of this.

And are you protecting the public health, safety, welfare and quality of life, when you -- when this is showing that there's a lot of degradation, and the quality of life is degradating [sic]. You protecting that to the level that it should be versus just allowing a cheaper way to drop water away from the site and not have to deal with it?

From a practical standpoint, if you require reuse -- if there are any kind of accidents that happen or upsets within the system, 100 percent reuse will require that some kind of treatment be made and not just disposed of in the wells, never to be seen again. It will require much more and better management by the County in how they run the systems. But then shouldn't that be what it -- is being required?

You know, as we advance scientifically, we have to start advancing the way we handle our treatment systems and the way we handle the response to the public.

So I thank you very much for your time. I
hope you take this into consideration. And I would recommend that you make very decisive measures, requirements within your recommendations of how you're going to allow the injection wells to continue or not continue. Thank you.

(Applause.)

MR. DAVID ALBRIGHT: I am going to ask that we take a very short break, say three minutes, and then we'll resume with the next speaker.

(Recess, 8:16 p.m. to 8:24 p.m.)

MR. DAVID ALBRIGHT: Okay. I think we're ready to get started again. If you can take your seats, please. If we could get started again, please, in the interest of time, I know we want to hear from all the people who have signed up to speak.

Okay. I would like to call the next speaker up. And that is Tamara Paltin. Thank you.

MS. TAMARA PALTIN: Hi. My name is Tamara Paltin. I'm here representing myself. And I also belong to a couple environmental organizations -- I also belong to a couple organizations. And I work at the beach as a lifeguard, too.

So just kind of saying like we heard over like couple hours of testimony. And pretty much nobody asked you to approve the permit. So I just was -- wanted to
point that out.

But, seriously, that us guys that live in the ocean and have to work in the ocean and things like that, we hear all of the studies of Meghan Dailer and Robin Knox. And that's why I came over here today, just to like ask your guys' help to help our County.

None of the elected officials are here today, but if you deny the permit, then they'll have to fall in line because that's the law. Right? So just pretty much just asking your help, if you can help us out, to deny the permit. Or at least do what the people suggested, you know, like to set up a process by which we can eventually phase out of injection wells. Because like the former mayor and everybody else was saying, it just makes sense, it's logical. We need water and we're dumping it into the ocean. And it's kind of messing up the system. And people are getting all kind of diseases and things like that.

Like us guys that are right there on the beach, we see it more than, I think, someone sitting in the office. And it's true. And I just hope that you would listen to everybody and follow the community wishes and help us to let the Council see the light, at least. It's one of the most important issues facing Maui, is water, natural water, how we deal with our
wastewater. It's all kind of interconnected. And if you can help us out and deny the permit, then they'll have to fall in line. That's just the way I feel like.

And thanks for coming here and listening to us.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for your comments.

The next speaker is Lucienne deNaie.

MS. LUCIENNE deNAIE: Aloha, everyone. My name is Lucienne deNaie. I am the Chairperson of the Sierra Club, Hawaii Chapter. That's the statewide Sierra Club. But I live here on Maui. And I'm here offering comments on behalf of the Sierra Club, Maui Group.

We are really, really happy that you folks have come here. You can see the need. And you can see how much we are looking forward to having both our local and our Federal regulations move us all forward here. We really need to not let the same thing happen on our watch that's been happening the last 15 years.

You know, over the years, the Sierra Club here in Hawaii has had a long history of weighing in on wastewater facilities. In fact, we just settled a lawsuit in Honolulu for their improper dumping of
sewage. And our settlement said, you know, don't give us any money, fix the problem. We're solution-oriented.

Here on Maui, we've weighed in on this particular facility, oh, for over a decade. And our members have expressed concern about the continued degradation of the nearby reefs, the marine life habitat and the marine water quality in this area that is just ocean side of the injection wells. We call it North Beach, this area, Kaanapali, North Beach, Honokowai. It's -- it's really a very popular area. It's very culturally significant. And it's a place a lot of folks go to fish, to swim, to dive, to go surfing. So folks spend time in this water. And we need those waters to be healthy.

And right now, the situation that we have with the level of treatment that's going in there from the injection wells, as well as the onslaught of new sewage that's gonna be generated by all the developments surrounding here, it's just a recipe for disaster. Now is the time to act.

During the last decade, our members have reported, you know, to us, through letters, through attending meetings -- we have a yearly meeting, we have breakout groups and things like water quality and things like, you know, ocean access. And we have folks talking
about the shocking decrease in native fish species,
especially in the West Maui area, and especially in that
general area, all along the developed part of Kaanapali.
Also, the degradation of the living coral formations and
the mats of algae that people are seeing. We have folks
that email us photos, "You're the Sierra Club, what are
you going to do," like we're the government. But, you
know -- so we're here talking to the government. That's
what we're gonna do.

We have many members who regularly have
recreational activities in these waters. They fish
there. They go boating. They -- you know, they
snorkel. And some have even reported an increase in
infections, you know, like Wayne was speaking of,
Mr. Cochran. That it's just hard to feel that these
waters are clean now. They -- they can't like carry the
load of what is going into them.

So these things are all happening because we
are not having the right balance in how we're treating
our oceans in these highly urbanized areas.

So we would really like to find a better
solution. Our Sierra Club volunteers have addressed
this over the years. They, actually, have strongly
supported the land-based reuse of this reclaimed water,
long before it was popular. You know, at least 10 years
ago, folks were advocating for this.

When Wendy Wiltsie was here and working with the EPA, we attended, you know, some of her groups. And we were told, yeah, yeah, yeah, you know, less is going to happen. And Steve Beribacoli, bless his soul, has done a wonderful job. And our wastewater treatment operators, they're all behind this, too. It just seems to be that, you know, it's all about money. So --

But in the early nineties, when the EPA issued a permit for this same facility, you know, the County was asked to reduce the nitrogen levels and to begin to use the wastewater for irrigation rather than injection. And we testified at that time. And we said that we thought there was a very strong connection between the injected effluent and the algae that was growing on the reefs, which was, you know, the reason Wendy was here, because of all these algae. And we were told that no, no, no, there's studies that prove it isn't true and so forth.

Well, we're like all the other people, common sense doesn't tell you that. You know, this didn't used to happen, it's happening now, it has to be connected, what's going on. And, of course, there are more recent studies that finally are linking these two.

And we realized that we really can't just kind
of wait for more studies to prove more things. Everyone who said that is absolutely right. It's time to like have progress and have, you know, a real timetable for getting something done.

Because we're hampered by the political will to find the funding for the necessary pipelines and storage areas and distribution infrastructure, we feel that you folks have a role to play. And as folks have said, you know, in your permit review, if you can help put the pressure on that this is a condition of any permit, that we need to actually have a real timetable to redirect from the injection wells and get this water out into a land-based use where it's desperately needed.

I just want to give you example, you know, about how hard it can be to accomplish this, you know, from a citizen level. About four or five years ago, Sierra Club members, myself included, testified in our State Land Commission, Land Use Commission, at our County Planning Commission, and we advocated that these commissions would impose conditions on a large proposed luxury development in Kapalua, just north of the -- where the treatment plant and everything is. And these conditions that we asked for would have required the development to extend reclaimed water lines when it installed its sewage hookup lines. We thought, hey, you
get one trench, you know, just put in two pipes, one one
way, one the other. And this would have allowed the use
of several million gallons or more of the R-1 effluent
from the Lahaina Wastewater Facility.

This resort has extensive golf courses and
lush landscaping. Well, these folks were proposing over
600 new multi-million-dollar residences. And, yet, they
couldn't afford this onetime investment. And no one
would require them to afford it.

It was very frustrating because, you know, you
have folks say, well, development should pay for this,
you know, they have impacts, they need to be part of the
solution, but we don't have the backbone here to make
that happen.

I went to three Land Use Commission meetings.
I had to drive all the way here. I live 100 miles from
here, round trip. But it was worth it to try to have
something happen. Instead, these developers were
allowed to continue bleeding the waters of Honokohau
Stream that are really needed to have healthy stream
life, simply because it's cheap water.

So, you know, we need to make it possible to
use the effluent well and use it to replace our fresh
water supplies, to use it to replace our potable water
supplies. But this ain't gonna happen by just kind of
So we are very happy that you are here. It makes ecological sense to start reusing as much water as possible.

I am a water junkie. You know, I've studied water resources here for the last five years. Our rainfall levels have fallen to record lows throughout West Maui. We really need to use and reuse every drop of water that is, you know, coming into the public system. And, yet, we are, instead, sending it out in the ocean where it's impairing our ocean waters.

So, please, we are asking of you to put conditions on this permit which will result in a timetable and help create a Federal/local partnership to provide the infrastructure solutions for redistribution of all of the reclaimed water for the Lahaina Treatment Facility to land-based uses.

We also request that the EPA ensure compliance with its own Clean Water Act standards, which we do not feel are really being met right now, by phasing out the use of the Lahaina Wastewater Facility injection wells except in emergency situations. And we feel that, you know, with the new Administration, there is going to be an interest in supporting communities to find ways to improve their own infrastructure, instead of throwing
this money down a rathole in Iraq, pardon my political
leanings here. But we need to find a way to keep this
multi-million-dollar resource, our coastal areas, which
are valuable to Hawaiian culture, which are valuable to
our people, and which are the basis of our
resort-oriented economy, we need to keep it healthy.
And we need you to take a hard line here.

So thank you for helping us. Aloha.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for those
comments.

The next speaker is Kai Nishiki.

MS. KAI NISHIKI: Aloha, you guys. Thanks for
coming over and listening to the concerns of the
community.

And I also want to say thank you very much to
our wastewater treatment facility operators. They do a
great job every day with equipment and technology that
they have available to them.

Because of overdevelopment, we can barely even
see the ocean when we're driving. And it has also
impacted our coastal access. And, lastly, our water
quality has been diminished.

We have all these studies and we have the
observations and the experiences of our people. And I
think that those experiences and observations should hold just as much water as the studies do. Pardon the pun. But we don't really need to have these studies to see what the negative effects are. And I hope that you will consider those observances and experiences of our people with as much weight.

We can see that there's extreme damage happening. And how can you put a price on the ocean, the reef, and the native people who rely on those resources? We really need the infrastructure to reuse the water. And we are hoping and asking for your help to make it a mandate that they must phase out the use of injection wells. We can see that they are just unnecessary and that we could be reusing this water. And, also, for the reuse of -- of gray water and water catchment, that lessens the impact of -- or lessens the impact on our water treatment facilities. So we need a lot of things to be done here. And this is a first step. So we just ask you to please phase out the use of injection wells and put conditions on the permit that will -- will allow us to do that.

Thank you very much. (Applause.)

MR. DAVID ALBRIGHT: Thank you.
The next speaker is Uilani Kapu.

MS. UILANI KAPU: Good evening. My name is Uilani Kapu.

You have heard everybody, so I won't -- I looked at the time and it was 8:30 already, so it must be going on to 9:00. You guys have been here for so long. The community has spoken out.

We need to reuse our waters. I am a living testimony to having staph twice from our oceans out here. I got infected from these waters. My kids don't go into 'em anymore because of how many people have caughten staph, algae bloom and everything.

Everybody has testified to you folks on behalf of all of the studies that has been done in Kahekili.

It has been going on around our whole island. We live on an island. We need to protect what we have here.

Everybody has spoken out. I don't want to repeat anybody. So do the right thing, you folks are here for it, community has spoken.

Mahalo.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for that.

The next speaker -- it looks like we have two speakers remaining. The next speaker is Yolanda Dizon.
MS. YOLANDA DIZON: Aloha. My name is Yolanda Dizon, not Dizon, but that's okay.

Can I ask you, any of you live on the islands?

It was asked before, but I -- I didn't hear.

MR. DAVID ALBRIGHT: No. Well, Chauncey lives on the islands.

MR. CHAUNCEY HEW: Oahu.

MS. YOLANDA DIZON: You're Oahu? And how long have you three been here?

MR. DAVID ALBRIGHT: You mean this trip?

MS. YOLANDA DIZON: Yeah, this trip.

MR. DAVID ALBRIGHT: We got here yesterday.

MS. YOLANDA DIZON: Oh, yesterday. How long are you going to stay?

MR. DAVID ALBRIGHT: We're leaving tomorrow.

MS. YOLANDA DIZON: Oh, tomorrow already.

The only reason why I'm asking this question is I would like to invite you to come swim in our waters, please. I am not really joking. I mean, I am serious. Come swim in our waters.

UNIDENTIFIED SPEAKER: For how long?

MS. YOLANDA DIZON: Because this is testimony, yeah, for what is happening. All this that you see, you see, all this -- (indicating) -- it's from out there.

So I invite you, come swim in our waters with your
families, your children, and enjoy it. And I pray you
don't look like this when you come out.

   Every life in this room, everyone who gave a
testimony, their lives are priceless. There is no
compromise for any individual, any living human being
that lives on our islands, or anywhere in the world. So
when it comes to the weighing of cost and life, there is
no -- life is precious.

   So after hearing all the testimonies -- and I
am so happy to be here tonight, because this is the
first meeting I've ever been to that everyone in the
room are all on one side of the fence and all agree.

   (Applause.)

MS. YOLANDA DIZON: And I love it. Because it
is about lives, our precious human lives.

   So, please, EPA -- what is that, Environmental
Protection Agency -- I ask you, please, do your
fiduciary duties for our lives.

   Mahalo.

MR. DAVID ALBRIGHT: Thank you for those
comments. And if I mispronounced that last name, I am
sure I'm gonna mess up on this one. It's the last
speaker, Kekai Keahi.

   (Applause.)

MR. KEKAI KEAHI: Aloha. My name is Kekai
Keahi. I'm a convicted criminal. And just keep that in mind. I going to tell you why.

I gonna start off with young kid days, yeah, when we used to go ocean, always out there, we get hurt, we get cut, the old folks used to tell us go (Hawaiian), go down to the ocean and go clean your cut, because the ocean gonna heal 'em. My mother is one white wahine from the mainland, not used to that kine stuff. We went to the doctor one time. The doctors told my grandpa and my mother, which was -- he was a haole, too -- go down to ocean, go clean your cut. That's the truth, yeah.

Nowadays, I coach (inaudible) with 250 members. You should see the staph outbreaks we get. You wouldn't even believe one -- one guy, two years ago, got -- was so bad, he had staph, he had to go in surgery. They almost going to take off his arm. That's how bad he was.

And I -- to me, I don't know where this staph problem came from, until I start learning about injection wells and all that kind of stuff like that.

This is a -- another -- you know, one of the old folks, he used to be the foreman at the golf course right here in Kaanapali. If you look at the golf course, there's only -- at some places, it's only about six feet above sea level, maybe less. He tell me that
they fertilize their golf courses using 144,000 pounds of fertilizer, that they water with two million gallons of water, and that thing percolate right back down into the ocean. Six feet above sea level.

One other thing, too, is, me, I born and raised in the ocean. I'm a fisherman. I'm not one commercial fisherman, but subsistence fisherman. From my tutu to my father to me, we always were taught for respect the ocean, no take more than you need. If you get extra, you go give your friends or your family. That's how we live. That's Hawaiian style, yeah.

Recently, maybe one past couple years, they went put one law into place that I cannot use nets at nighttime, because we was a problem. Us Hawaiian people was a problem, the reason why no more fish in the ocean anymore because we overfishing. But that's not how us guys was raised. We only take what we need.

But then, at the same time, I look back at all these injection wells, the hotels is right on the beach, with the fertilizers. If you go to Kaanapali, they get this big lake kind of thing where all the fertilizers collect. And they -- they turn on the pumps and they pump 'em out into the ocean. I think that's an EPA violation. You guys should go check that thing out, you know what I mean, for real. Yeah.
And us guys, we live there, we catch the fish and we eat 'em.

Going back to the criminal thing. Because that's the way I was raised and we go use net, yeah, respectfully of the ocean. Because the law did pass saying because we was a problem, now me, as one Hawaiian, practicing what we did for 2,000 years, has become one criminal, yeah. And I give you permission to judge me. Am I a criminal for living my -- you know, the way our people have lived for 2,000 years? Am I a criminal? I mean, you can answer yes on no. Because I think I'm not one criminal.

I think the criminals is the guys who using injection wells, all the hotels that pumping the fertilizers into the lawns and into the golf courses, the Maui Land and Pineapple, Amfac, sugar cane and pineapple, who use pesticides beyond, before 100 years, they been pumping into the ground. All this problem is surfacing right now, yeah.

And we was the one, us Hawaiians, we was the one, who had to better problem because our fault the reason why the fish is depleting in these oceans?

I want to tell you just one thing. Back in maybe up to the late sixties, this whole west side was plantation camps. In those plantation camps, the
majority of people was subsistence fishermen. If you look nowadays, we no more have those camps. The majority of the people now is subsistence Foodland buyers. They go Foodland and Safeway. You get -- I can tell you we probably get, on this side of the island, less than half the amount of fishermen that there was before. And we still practice the same way we practiced. But, yet, we get less fish.

And so us Hawaiians was made criminals for living the way we lived respectfully, yeah.

We was in one contested case hearing at one time. And a lawyer told me, are you -- are you -- are you educated, did you go to college, how do you know about the ocean, yeah. I said, I never go college for learning about the ocean, anything like that, I just know. They say, well, then you no expert on the ocean because you don't know, you're not educated. But, funny, 'cause I came back, told him, you know what, I educated in the ocean, I didn't go to one college and get one degree for and say that I'm a doctor or anything, but I betcha I more educated than you because my education comes from 2,000 years of trial and error and observation. So who would know more, a person that go to college and study the ocean for five, six, seven years, or me, who born and raised in here, where I get
my (Hawaiian) come back from 2,000 years, yeah.

So, again, if you looking at me, do you think
I am one criminal for living how I like live? Because
we went build a pond for everybody.

So you know what, no to the injection wells.
In fact, go beyond that, go tag all the hotels, go tag
all the golf courses, Maui Land & Pine and Amfac, who
was the true problem to this place.

And that's all I got. Different angle on the
situation.

(Applause.)

MR. DAVID ALBRIGHT: Thank you for those
comments.

And thank you to everyone for coming out
tonight, for providing the comments that you did, for
staying this long. We really do appreciate it.

I just want to say a bit about the process
that we're going forward from here with. Obviously, we
are going to get a transcript of tonight. We've gotten
a substantial number of comments in the mail, by email,
turned in tonight, a lot of public comments tonight.
The EPA will need to process all those comments and
concerns and start to look at this issue in relation to
what we've proposed with the injection well permit.

This is going to take a little while, obviously, for us
to do that. But as of tonight, there will be -- the formal public comment period is closing. And we will then undertake this review of the comments and make a decision on the permit, whether to issue the permit as proposed, whether to modify the permit, whether to deny the permit, just what the precise action is that EPA will take on the permit based on the comments that have been submitted, the day that it has been submitted, and the County's application.

So with that, I just want to thank you -- I guess we got a couple questions. Hold on.

If you have a quick question or two, why don't you come to the podium?

MS. UILANI KAPU: I just wanted to know when the draft comment period is closed?

MR. DAVID ALBRIGHT: The comment period on the Draft Permit, we opened that period in August when we first issued the proposed permit. It was extended, I think it was September 23rd, through tonight, to afford people the opportunity to submit written comments and then, obviously, to come tonight and submit any comments or provide oral testimony. But after tonight, the comment period is closed. That doesn't mean that we wouldn't consider information that was provided to us, but the formal public comment period is closed after
tonight.

MR. BILL FRAMPTON: Once the -- the next step, the permit will be issued? Once it's issued, is there a review of that or an appeal process we're looking at?

MR. DAVID ALBRIGHT: I can't say that the permit will be issued. I can say that the agency needs to take into consideration the comments that have been submitted and make a final decision. That decision could be to issue the permit. It could be to deny the permit. It could be to issue a permit that's different from the proposed permit.

MR. BILL FRAMPTON: Okay. Thank you.

MR. DAVID ALBRIGHT: If EPA or -- in a situation where EPA issues a UIC permit -- this isn't just for the Lahaina permit, but for any permit -- there is a 30-day period of time after issuance of a permit where anyone who has commented upon the permit, including providing comments at a public hearing such as this, can appeal to the Environmental Appeals Board, if they feel that is appropriate.

Okay. Again, thank you very much. And that closes the public hearing.

(Applause.)

(Public Hearing adjourned at 8:55 p.m.)
CERTIFICATE

I, TONYA McDADE, a Court Reporter of the State of Hawaii, do hereby certify that the proceedings contained herein were taken by me in machine shorthand and thereafter was reduced to print by means of computer-aided transcription; that the foregoing represents, to the best of my ability, a true and accurate transcript of the proceedings had in the foregoing matter.

I further certify that I am not an attorney for any of the parties hereto, nor in any way concerned with the cause.

DATED this ___ day of ___________, 2008.

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