

From: [Tapani Vuori](#)
To: [Griffin, Darwina](#); [SDWB](#)
Cc: environmentalaffairs@mauiocceancenter.com; [Sal Marino](#)
Subject: [EXTERNAL] Ma'alaea Triangle Association UIC # UM-1954
Date: Wednesday, April 2, 2025 3:20:11 PM
Attachments: [image001.png](#)

Dear Darwina & DOH UIC,

I am writing you in regard to Ma'alaea Triangle Association (MTA) Wastewater Treatment Facility UIC Permit No. UM-1954.

Yesterday, Tuesday 04/01/25 it came to my attention that the definition of “domestic wastewater” in the authorization to operate the injection wells and the injectant characteristics in Part A.1 do not adequately describe all the wastewater treated at the MTA facility and disposed of via injection well. Specifically, the wastewater contribution from Maui Ocean Center includes the aquarium protein skimmer rinse water and filter backwash water estimated to be approximately 4% of the MOC wastewater volume contribution.

Like I mentioned the effluent characteristics at the facility are within permit parameters and most importantly no negative environmental impact has taken place.

Should you have any questions please feel free to reach out to me any time or contact Robin Knox or Sal Marino both of whom are knowledgeable of the situation.

Tapani Vuori 808.561.2022
Robin Knox 808.866.6659
Sal Marino 808.280.5505

Please advise on how to proceed to revise the injectant characteristics and authorization in the permit. Thank you.

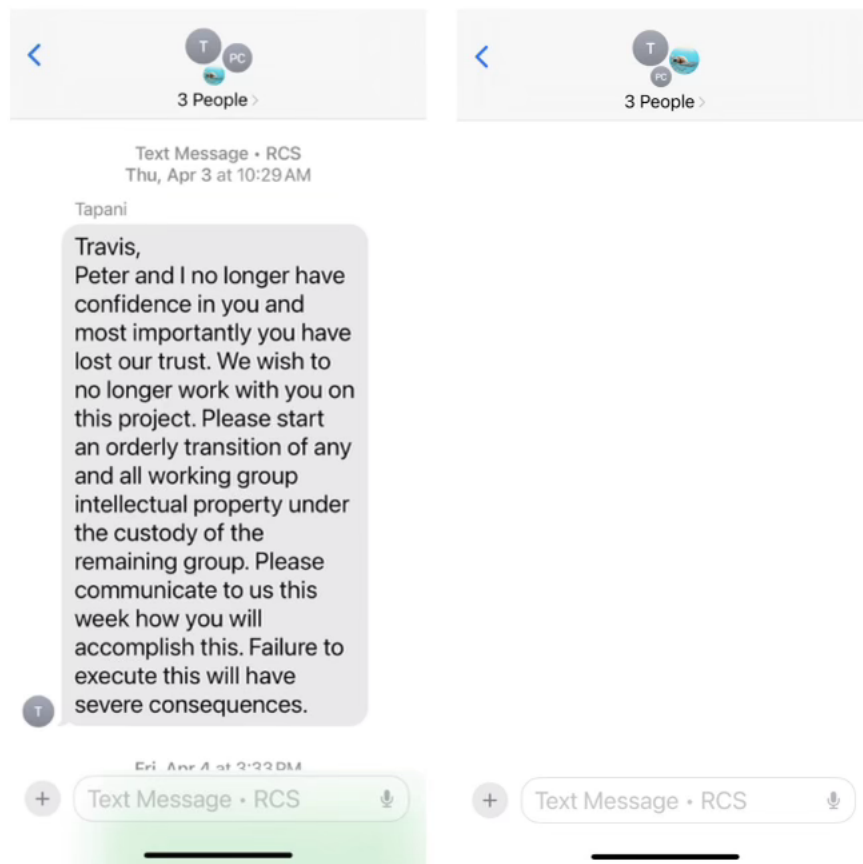
Aloha,

TAPANI VUORI
GENERAL MANAGER

📞 c/txt: 808.561.2022
✉️ tvuori@mauiocceancenter.com
🌐 mauiocceancenter.com
📍 192 Mā'alaea Rd. Wailuku, Hawai'i 96793



Exhibit E – Petitioner's threatening termination text message to Defendant sent 29 minutes after the disclosure, with fragment of text thread that was erased from Respondent devices



Maui Ocean Center Permit Violation Disclosure Call Recording Link

March 24, 2025

drive.google.com/file/d/1EtevW0AbPRZcPx6ihWpOKPHh2evVE4YT

tinyurl.com/MOC-Disclosure-3-24-25

01 TV: Hey, Travis.

02

03 TL: Hi, [name rendered "Tani" in supplied text], how you doing?

04

05 TV: Good. How are you feeling? Better?

06

07 TL: Oh, a little bit. I've just been trying to get caught up on, like, domestic
08 duties, which I'm really slow, so it takes me a long time. But, um, I'm getting
09 there.

10

11 TV [attribution uncertain]: [Unresolved text: "m that's why I am my wife."]

12

13 TL: I know, I don't have any of those. Uh, yeah, so let me just dive right in the
14 sensitive issue. I'm coming straight to you. So I've been a little bit withdrawn on
15 the project, you've probably noticed, but it all started when you sent me the new
16 UIC permit for the Triangle, and I did a really close read on it, and it's very clear
17 it only allows discharge from Maui Ocean Center from the restrooms, from the
18 restaurant and the aquarium, and I went back on the [acronym rendered
19 "MPGS" in supplied text] work, and it seems pretty clear that the process [word
20 rendered "FI" in supplied text] from the aquarium is going into the Triangle. So,
21 um, I'm going into this thinking that maybe you don't know that there's a
22 conflict between the two permits. And also, I might be totally wrong. I might have
23 missed something. So, like I said, I'm coming straight to you because you're
24 signatory on both. So I just wanted to call that to your attention, and I wonder,
25 do you know, is this a big nothing burger? Or is that, like, been an inconsistency

01 for, like, 30 years and it just never got noticed, or what can you tell me?

02

03 TV: [Unresolved text: "stateater, uh has an issue for them."] Um, personally, I
04 don't think it's, uh, [unresolved text: "got big over the, but"]. This was my
05 opinion. Uh, you know, um, I don't see. I mean, what exactly, uh, [unresolved
06 text: "restate it can yours is if concerned?"]

07

08 TL: Well, okay, let me [unresolved text: "so I'veuss.?"] Okay, the UIC permit says
09 lots two, three and four, Maui Ocean Center. This is injectant characteristics:
10 wastewater is generated from the restrooms and a restaurant, 50% contribution.
11 And then in the NPDES application, it says there's .004 gallons of process
12 effluent, which, that's not good stuff. That's like aquarium filter sludge, and it's
13 going to the Triangle, and it's just those UIC permits, they tell you what you're
14 allowed to put in there, and it's just not there. So it seems like you might want to
15 get, like, a permit modification. Is there any way you could truck it away? It's
16 only 4,000 gallons a day. That's like one vacuum truck. And then you would be
17 unloading the bay from all the constituents of the process effluent, and it would
18 be compliant with your UIC permit.

19

20 TV: But from the [word rendered "bi" in supplied text] we have under our care
21 here, the marine life that we, uh, [unresolved text: "ret truck out"] or that gets
22 pumped out regularly out of the facility, and then the other effluent is the, uh,
23 [word rendered "thement" in supplied text] that is actually in the restrooms, and
24 of course, you know, the Triangle, uh, you know, the [unresolved text: "lead
25 station and that they sit to the baseboard of treatment facility will close laws are

01 exactly how would have to check what they are"]. They fluctuate, of course, uh,
02 depending [unresolved text: "how the BMSP having the tax"] and how many
03 visitors we have coming into the park. I can't tell you. I would have a [unfinished
04 in supplied text].

05

06 TL: So the permit says two million gallons goes back to the ocean and .004 filter
07 backwash goes to the Triangle, but you're telling me it gets trucked off site?

08

09 TV: The filter backwash [unresolved text: "go to triang that it from the marine
10 life. You know, onstate, you know, that it's actually pumped out and that closing
11 the landfill."]

12

13 TL [attribution uncertain]: Oh, the, the, that, that would be, like, from the filter
14 backwash.

15

16 TV [attribution uncertain]: We have a, what's the name of that container, and
17 everything gets pumped into, and, uh, it is pumped out of there regularly.

18

19 TL: Okay, I'll tell you what, the [acronym rendered "MPGS" in supplied text]
20 permit application says sludge is periodically removed from the sludge settling
21 pit and taken to an off-site solid waste disposal. Okay, inflow reservoir. Oh,
22 [unresolved text: "stupid Don"]. Sorry. My phone is just messing up on me right
23 now. Try it again. Okay, here we go. Backwash outflow. Okay, I'm gonna have to
24 pull it up on my computer, but basically it says very clearly on the [acronym
25 rendered "MPDS" in supplied text] application that filter backwash is going to the

01 Triangle.

02

03 TV [attribution uncertain]: [Unresolved text: "I'm not sorry if that correct."] So I
04 would have to double-check the language there [unresolved text: "except the"].

05

06 TL: Okay. Here it is. Inflow reservoir, foam fractionation backwash, sand filter
07 backwash and protein skimmer one and two process effluent streams flow to
08 Ma'alaea Triangle sanitary sewer, and along with MOC and other Ma'alaea
09 Triangle sanitary wastewater are treated in the wastewater treatment plant. So,
10 yeah, you, there's material going from the Ocean Center to the Triangle, and it's
11 not in the UIC permit. It's the, the one for the injection well. So the injection well
12 permit says basically only human wastewater, full stop, period, no exceptions,
13 human wastewater. And that [unresolved text: "it's"] [acronym rendered
14 "MPDES" in supplied text] permit application from 2018 says all this backwash
15 is going to the Triangle. And that's not in the Triangle injection well permit, so
16 [unfinished in supplied text].

17

18 TV: That's incorrect. [Unresolved text: "s not the case that has been the case"] I
19 don't know why it's there. Would be a question for you to ask Robin why there
20 was actually [unfinished in supplied text].

21

22 TL: Okay. Well, I have my marching orders. I'll follow up with her. I'm just
23 puzzled over this because, well, if it, if there is a transfer of material from the
24 Ocean Center to the UIC permit, that's a permit violation. I don't know if I'm
25 right. I might be completely wrong, but the permit application for [acronym

01 rendered "MPDS" in supplied text] says there is material going from the Ocean
02 Center to the Triangle.

03

04 TV: No, that's not what it says.

05

06 TL: Well, because that's, like, a red-hot issue if it's true. If I'm totally wrong, I
07 apologize in advance and I withdraw. This is why I came to you first. So I really
08 wanted to make sure I did, like, I've been puzzled over this and [word rendered
09 "phlemixed" in supplied text]. And so, yeah, the reason is because if there is a
10 mass transfer from the Ocean Center to the Triangle injection well, and it is a
11 permit violation and somebody finds out about that, it could be, like, a red-hot
12 issue that could create bad press for a group, and I really want to get to the
13 bottom of this because you're on those permits and I care about you and I don't
14 want anything to happen. So if it's a matter of changing the paperwork, then it's
15 something that we need to get on top of. But if it, if it is a violation and it's just,
16 like, something that got missed, and, and it seems like you're not totally clear on
17 it, but it's pretty black and white. And if it is something that got missed, then it
18 needs to be unmissed.

19

20 TV: Hey, Travis and Robin, you're both on the line. Can you both hear?

21

22 UN: Yes.

23

24 RK: Hi, Travis.

25

01 TL: Hi, Robin.

02

03 TV: So, Travis, can you state your concern one more time, uh, so Robin can hear
04 it from you and, and, uh, maybe she can weigh in on this?

05

06 TL: Yeah, so Tapani sent me a new UIC permit the other day, and I read it
07 closely, and I noticed that there is no, it's only rated for, the injection wells are
08 only [word rendered "hated" in supplied text] rated for human wastewater from
09 the restrooms. And the [acronym rendered "MPDS" in supplied text] permit
10 application from 2018 says protein skimmer, filter backwash. So the solids are
11 going to landfill. So there's three mass flows from the aquarium: two million
12 gallons going into the ocean, uh, solids, and then apparently .004 [unit rendered
13 "NGD" in supplied text] of this process [word rendered "fu" in supplied text] going
14 to the Triangle. But the Triangle UIC permit does not, it's only rated for human.
15 So it just seems like an inconsistency between the permits that may need, just
16 need some paperwork or, ideally, maybe the flow would be transported off or
17 something?

18

19 RK: Well, there's, there's some that go to the [acronym rendered "NBA" in
20 supplied text] treatment plant and some that go off site. So, um, it's the
21 backwashes that go to the [acronym rendered "MBA" in supplied text], not the
22 solids. And, yes, I've recognized that issue before and mentioned it before, but
23 the issue lies in the [acronym rendered "NBA" in supplied text] permit. I mean,
24 that's where it needs to be addressed.

25

01 TL [attribution uncertain]: That needs say that flow, that, that filter backwash is
02 permitted. Otherwise, it's not. So that was my concern. And because it seems it
03 just got renewed. Oh my gosh. Yeah, I was [unfinished in supplied text]. Can you
04 do a permit revision?

05

06 RK: A modification, but I'm pretty sure that would be a major modification. I
07 would have to go to public [word rendered "matters" in supplied text] again.

08

09 TL: UIC permit?

10

11 RK: Yeah.

12

13 TL: Okay, well, that's what I've been flustered about, and Tapani knows now, so
14 I, you know, that's only one vacuum truck per day. But here's the other issue.
15 It's saltwater. So the salinity of the effluent going into the injection wells is
16 actually seven grams of total dissolved solids per liter. That reflects about 20%
17 saltwater, so we can't have that effluent in our regional system. That's a
18 60-pound bag of salt per day. So that'll break our greenbelt. So something
19 actually, that has to be diverted sooner or later, sometime before the new plant is
20 installed.

21

22 UN: The plant can't handle it?

23

24 TL: The [word rendered "re" in supplied text], the plant can handle it, but the
25 greenbelt can't handle all that salt.

01

02 RK [attribution uncertain]: Are they backwashing with saltwater?

03

04 TL: Well, the TDS, the [acronym rendered "TS" in supplied text] in the effluent
05 being seven grams per liter, that, 7,000 milligrams per liter, that says it's 20%
06 saltwater. Just saltwater is 35 grams per liter. So there is a significant salt
07 component. If you compare that to the municipal facilities, they're under a
08 thousand. So it's, like, [unresolved text: "surprised that it's"].

09

10 RK [attribution uncertain]: Yeah, maybe it's more than 20% of the flow.

11

12 TL: Yeah, actually, it's, I can tell you, uh, Maui Ocean Center water bill is, like,
13 14,000 gallons per day, and the majority of that we assume, or a lot of that, is
14 going to the restrooms potentially, and so against 4,000 gallons per day of
15 process effluent, it's a significant portion because MOC is 50% of the injection
16 well permit.

17

18 UN: [Unresolved text: "Well,rigation."]

19

20 RK [attribution uncertain]: Yeah, I think I have to look at all the numbers to
21 know if I agree, but, um [unfinished in supplied text].

22

23 TV [attribution uncertain]: Well, I think, too, [unresolved text: "I don' happen"]
24 we need to take a closer look at it, also look at the [word rendered "lu" in
25 supplied text] streams on this side. [Unresolved text: "I'm not to refresh my

01 memoryviously"] I haven't been involved for a few years now with the [word
02 rendered "slow" in supplied text] issues.
03
04 RK [attribution uncertain]: Yeah, we just [word rendered "stood" in supplied text]
05 a new water balance, but I don't know that it's ever measured how much that
06 flow is. I think it was one of our balance factors the whole time, um, that we've
07 been doing the permitting.
08
09 TL: Okay, well, I'm sorry to be whatever I'm being right now, but it's something
10 that if I were the signatory, I would definitely wanna make that permit airtight.
11 But at the core of it, let me tell you, Tapani [unfinished in supplied text].
12
13 RK [attribution uncertain]: But, um, [unresolved text: "did it up"] I did bring the
14 issue up to [name rendered "rest" in supplied text], and I don't know if you
15 remember [unresolved text: "on"], we had a few other things going on at the time,
16 but way back when, at the very beginning.
17
18 TL: Well, I have more news for you, which is we know that the harbor is
19 importing 2,000 gallons of effluent from municipal facility every day to
20 [unresolved text: "to see the culture"] because they don't have enough effluent
21 from the harbor. That's also not permitted. That's, like, very, very not permitted.
22 So if we could get rid of the two unpermitted effluent streams in Ma'alaea
23 through proactive creative thinking, then we could maybe get rid of a significant
24 loading of the pollution and just truck it all to a municipal plant. That'd be four,
25 that'd [word rendered "foreloads" in supplied text] a day. You'd basically hire a

01 full-time operator to operate a truck. But then that wouldn't be going into the
02 reef in Ma'alaea. Think of if we could eliminate the harbor and the process
03 effluent. That might actually have measurable effects.

04

05 RK: I'm wondering, I guess I'd like to see your calculations about all the sewage
06 from the condos and that source, and, and how you got to the endpoint of what's
07 going to be going to the greenway.

08

09 TL: So if we did take the process effluent to the Green Bay, greenway, greenbelt,
10 it would be like taking a 60-pound bag of salt and dumping it into our effluent
11 reuse basin every day. And I just think that would not be good for the plants. I
12 haven't done the math on how much 60 pounds in 131,000 gallons is for the
13 plants, but I think it would rule out some species.

14

15 RK: I think it is a concentration-based concern with the plants. That's why I was
16 wondering what that concentration would be.

17

18 TL: Yeah, I haven't. Can I give you a call and go over the numbers with you?

19

20 RK: Yeah, anytime.

21

22 TL [attribution uncertain]: Okay, I'll give you a call.

23

24 UN: [Unresolved text: "the IC UIC permits, so you have any your file. You can
25 take a look at it as well."]

01

02 TV: Travis, can you stay online?

03

04 TL: Yeah.

05

06 TV [attribution uncertain]: [Unresolved text: "let Robin..., thanks for the call."] So,
07 um, let's move on to the other issue. Um, so in your last email, um, what exactly
08 are you saying about the [name rendered "Malewood association" in supplied
09 text] website?

10

11 TL: I take full responsibility for not thinking ahead on this. I just, you know, no
12 one actually ever asked me to do a website or an Instagram. I just [word
13 rendered "got" in supplied text] voluntarily did it. Um, but, um, the website is
14 grouped with my other business websites because this was a Reef Power
15 contract, the management. So that should have been, that should be [unfinished
16 in supplied text].

17

18 TV [attribution uncertain]: [Unresolved text: "term grouped"]?

19

20 TL: As in I have one [name rendered "goat" in supplied text] account, and all my
21 URLs are in one account. So what I will do, I will, I promise you I will look into
22 migrating it to a standalone account. I'm sure there's a way.

23

24 UN: [Unresolved text: "'s that's."]

25

01 TL: Yeah, and the other one, Instagram, I did not actually link the accounts, but
02 when I tried to log in with one, it sends a notification to my other accounts, so I
03 think that's just because they're all logged in on the same device. So I will look
04 into that too. I'm sorry I've been so out of touch. I've just been so unplugged. I
05 literally haven't checked my emails since Thursday, so. But I will get on that. I'll
06 get on that, and hopefully as soon as Peter gets back from Spain, we can have
07 our next [acronym rendered "MWA" in supplied text] board meeting and set the
08 course for the social media strategy.

09

10 TV: Yeah, I mean, obviously there's a lot to talk [unresolved text: "when you see
11 coming back, uh at the end month or I have a double stri"]. I don't remember.

12

13 TL [attribution uncertain]: I don't know.

14

15 TV: Um, okay. Um, let's see. Um, did you initiate the, uh, signature issue with
16 EPA already, or you haven't done that yet?

17

18 TL: No, there's no [word rendered "restaurant" in supplied text] [word rendered
19 "it" in supplied text] because they're not anywhere closer to the, to signing a
20 contract than they were a month ago. So I do, I do have a couple meetings
21 brewing for Section Seven, and the wildfire people got back to me, so as soon as I
22 get back on email, I'll send those out. I think they're in a couple weeks.

23

24 TV: Okay. Um, okay, so sounds good. So why don't you go ahead and take a look
25 at how to, uh, transfer the domain, uh, or get it out of there? That should not be

01 a problem. Uh, I've done it in the past myself, so, um [unfinished in supplied
02 text].

03

04 TL: Yeah, did you guys make a video?

05

06 TV: I'm sorry?

07

08 TL: Did you make a video?

09

10 TL [attribution uncertain]: Oh, I can't wait to see it.

11

12 TV [attribution uncertain]: So we'll do that, and, um, anyway, sooner you can do
13 it, the better. Thank you.

14

15 UN: Okay. Bye.



HAWAI'I
JOURNALISM
INITIATIVE

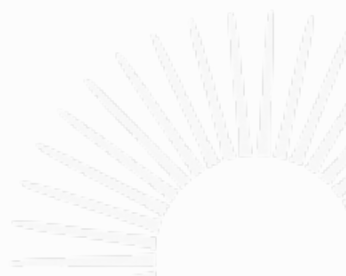
This article brought to you in partnership
with the [Hawai'i Journalism Initiative](#) — a
Maui-based 501(c)(3) nonprofit
organization.

Hawai'i Journalism Initiative

Maui Ocean Center touts marine conservation, but nonprofit says it repeatedly violates fish-taking permits with high mortality rates

By [JD Pells](#)

December 15, 2024 · 7:03 AM HST





The only privately owned aquarium in Hawai'i also holds the largest aquarium fish collection permit in the state. JD Pells/Hawai'i Journalism Initiative

In 1998, the \$20 million Maui Ocean Center, the only privately owned aquarium in Hawai'i, opened with a mission that continues to this day of conservation and stewardship of marine life.

Its current website, under the heading "Mālama (Stewardship)," says all animals under its care have been collected under a special permit with the state Division of Aquatic Resources.

But the [nonprofit For the Fishes](#), which conducts courtesy reviews of fish-taking permits for the state, said it has found that the Maui Ocean Center has repeatedly violated these annual permits over the years, and that the state has allowed them to do so with minimal consequences.

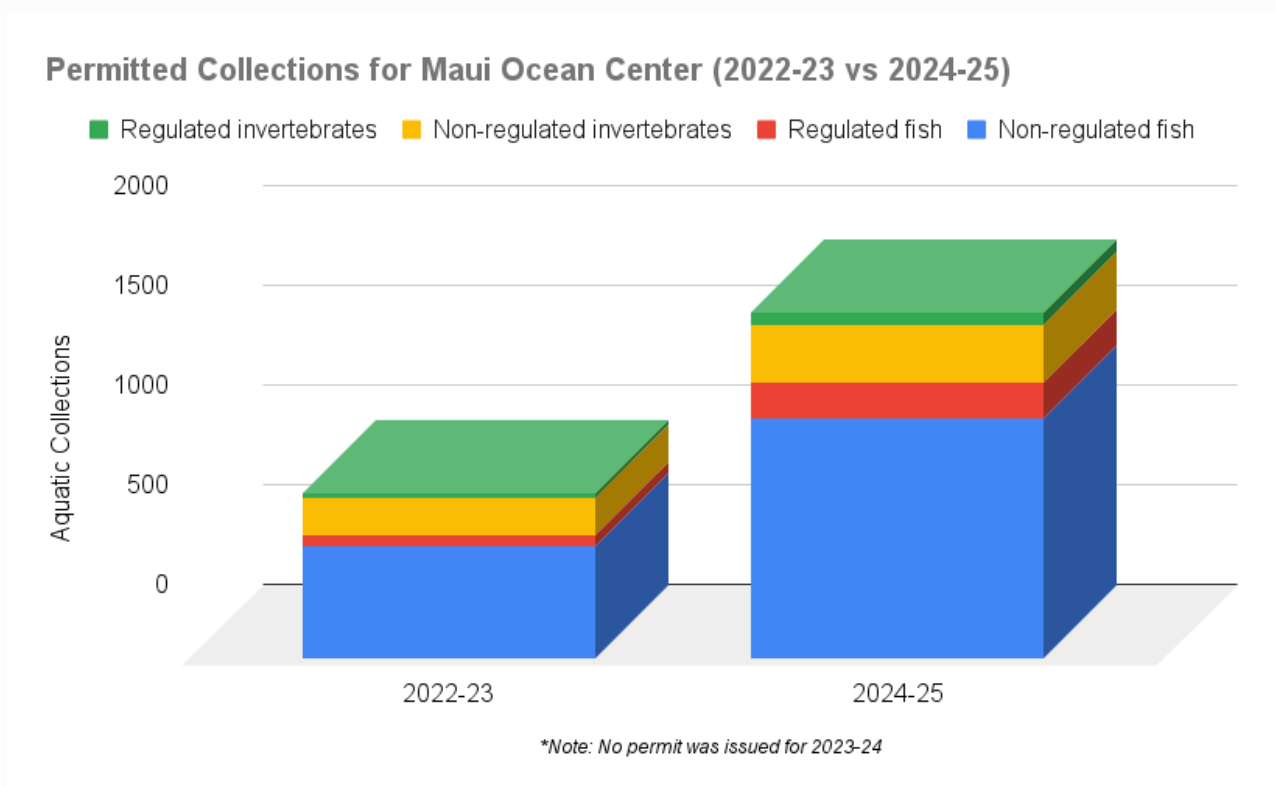
For the Fishes Director Rene Umberger said the nonprofit's compliance review of the ocean center's [2022-23 special activity permit](#) determined there were 91 instances of improper collection from the ocean, including 11 the state also identified. The collected

wildlife also experienced a mortality rate of more than 50% within a year of capture, she said.

But instead of the Division of Aquatic Resources cracking down on the center — and addressing the 118 recommendations made by the nonprofit to deal with the collection issues — the state agency in June renewed the ocean center’s permit. And, it did so with more favorable conditions, Umberger said.

[This year’s permit](#) more than doubled the allowable fish collection to 1,381 — the largest permit of its kind in the state — after a one-year gap in renewal during 2023-24, which the Division of Aquatic Resources attributed to a backlog.

The permit also included a new “opportunistic collection” clause that allows Maui Ocean Center to collect non-regulated marine life without prior permission and seek approval afterward. These activities would otherwise be illegal, according to the Division of Aquatic Resources.



The Division of Aquatic Resources explained in a recent email that the permit needed to be more “realistic to the needs of a large public aquarium,” and that opportunistic collections empower Maui Ocean Center to build its life-like displays while still providing

the agency with the ability to provide oversight.

But Inga Gibson, the former director of the Humane Society of the United States, says this relaxed regulation sets a “dangerous precedent” for other Hawai‘i aquariums within the division’s jurisdiction.

Both Umberger and Gibson argue that opportunistic collections can be exploited as a loophole to bypass longstanding violations. And both have said the agency is “bending over backwards to give the Maui Ocean Center a pass.”

The aquarium and the state both say this isn’t the case, although they both agree there have been some issues with collecting marine animals over the years.

“As the state rules regarding ocean animal welfare evolve, sometimes drastically, we have been working directly with the DLNR and the Department of Aquatic Resources to improve communication, close gaps, and address missteps,” said Maui Ocean Center Marketing Director Mark Matthews.

He said with guidance from the ocean center’s cultural advisor, Dane Maxwell, a comprehensive plan has been enacted to address and improve its processes to ensure actions are culturally appropriate and sustainable, leading to the renewal of the aquarium’s special activity permit this year.

THE START: ALLEGATIONS OF A RUSHED OPENING

Umberger claims a pattern of the state letting Maui Ocean Center off the hook dates to the 1998 opening of the aquarium, which is owned by [Israeli corporation Coral World International](#).

The Maui Ocean Center’s website says entrepreneur and philanthropist Morris Khan, who in the 1970s recognized that fragile marine ecosystems needed protection, partnered with renowned reef biologist David Fridman to create Coral World — which has evolved into an international operation with marine parks worldwide, including on Maui.

In a [2009 email, Bradley Tarr, a former curator at the Maui Ocean Center](#), wrote that the rush to open the aquarium resulted in significant mortality of the collected marine life.

“The MOC was in such a hurry to meet its opening date that the paint from the larger tanks barely had time to dry before organisms were placed in them,” he said in his email to Robin Newbold, a former colleague of Umberger who had asked for background on the damaged reefs closest to the aquarium.

Tarr’s email continues: “Many large coral colonies died initially and were discarded at the seawall of the (Mā’alaea) harbor; very depressing. The same fate for fishes; large trash cans full of fishes were put back on the Boston Whaler and dumped at sea. Clearly there was a toxicity issue causing the mass mortality.”

Tarr also said in that email he was concerned about the over-collecting of marine life, and was instructed to fabricate reports about those collections.

“As curator, I was responsible for documenting all collections, including date, location, type, method and quantity,” Tarr said. “Although the total collection of fishes and corals far exceeded the total amount allowed by the permit, ownership and upper management instructed me to revise the annual report to meet full compliance.”

In the email, Tarr attributed the aquarium’s over-collection to a “disrespect for the terms and conditions of the scientific collection permit issued by the Department of Land and Natural Resources.” He subsequently reported these infractions to the department and left the aquarium. Tarr did not immediately respond to an emailed request for comment.

The Maui Ocean Center’s present-day general manager, Tapani Vuori, who came on board in 2002, said Thursday that he does not know if Tarr’s accounts are true, but if they are, the onus was on Tarr, not on him or the current leadership at Maui Ocean Center.

Matthews, who also joined Maui Ocean Center years after the alleged incidents, said it’s irrelevant to conflate them with Maui Ocean Center’s current practices.

“It sounds like if something happened, it was addressed and then it was repaired, and now we’re on the other side of that,” Matthews said in an interview Thursday.

Regardless, Tarr’s letter to the state Department of Land and Natural Resources has shaped the aquarium’s collection permit for the past two decades by accelerating the terms and conditions put in place for future special activity permits for aquariums in

Hawai'i.

In a Nov. 15 email to the Hawai'i Journalism Initiative, the Division of Aquatic Resources said as a result of that letter the Maui Ocean Center's permits became "the most restrictive and required the most notification and oversight of any permit in the state."

The division also says it has had to update and change aquarium permits over the years to find a balance that allows it to strictly oversee large educational aquarium facilities while providing enough flexibility to the aquariums to be able to function. The division says its philosophy on evaluating fish collections is to find the best outcome for the state and protect aquatic resources to a practical degree, as outlined in Hawai'i Revised Statutes [Chapter 343](#).

But Umberger said the division is bending over backward to enable the aquarium to be in compliance with the permits. She provided a separate [email](#) obtained via a public records request, in which the state suggested "revisions" be made to comply with the 2022-23 special activity permit. An April email from the Division of Aquatic Resources advised Maui Ocean Center curator Chris Keller to revise the annual collection report, providing justifications for unauthorized collections to ensure compliance.

The email reads: "If you cannot find any mention of these red highlighted ones on any of the spreadsheets, can you provide the reason for why they were collected — e.g. it could be collection error — you thought those species were listed on the request spreadsheet, or you thought those amount or life-stages were listed on the request spreadsheet — or I'm not sure if some were accepted as donations from other institutions — i.e. you weren't planning on collecting but they opportunistically became available through a donation?"

To spur the Department of Land and Natural Resources, which oversees aquatic resources, to act on collection violations namely in the pet aquarium trade, a group of conservationists that includes Umberger [petitioned](#) in October for a review of the regulatory framework. They urged the state Board of Land and Natural Resources to clarify its authority to prohibit commercial aquarium collection statewide and deny permits for such activities.

For the Fishes also is calling for the immediate revoking of the Maui Ocean Center's [special activity permit](#) and a review by the state board, warning that without stronger

oversight, the future of Maui's reefs could be at greater risk.

THE PERMITS: COLLECTION VIOLATIONS



About 400,000 people visit the Maui Ocean Center each year. JD Pells/Hawai'i Journalism Initiative

Since January 2022, For The Fishes has provided feedback on 12 special activity permits related to “aquarium purposes” for the Department of Land and Natural Resources. While some of its feedback is integrated into new permits, the issuance of a permit is not contingent upon approval by the nonprofit, the Division of Aquatic Resources said.

In March of 2024, For The Fishes began its review of the Maui Ocean Center's compliance with its 2022-23 permit by analyzing the aquarium's 2022-23 collection report and obtaining related emails through public records requests. The nonprofit concluded there were [91 instances of improper collection](#): 34 unauthorized species, 41 excessive quantities of certain species, and 16 fish collected at unauthorized life stages. These alleged infractions constituted 35% of the collections made during this period.

The state had flagged just [11 violations](#) (taking seven blacklisted species of regulated

organisms: redlip parrotfish, stareye parrotfish, bullethead parrotfish, palenose parrotfish, blacktip shark and two bluefin trevally; and taking unauthorized amounts of species of regulated organisms: two manybar goatfish and two blacktip reef sharks).

For the Fishes sent its findings to the state. In an email dated April 24, the state's coordinator of Special Activity Permits, aquatic biologist Catherine Gewecke, responded by thanking For The Fishes for flagging "issues with the data" and saying it had addressed the "mistakes" with Maui Ocean Center.

On Aug. 13, the state issued the ocean center a [notice of permit violation](#), characterizing all of Maui Ocean Center's 11 official violations as "mis-collections" attributed to "human error." It did not cite Maui Ocean Center for any of the infractions alleged by For the Fishes.

The Division of Aquatic Resources said it addressed these 11 mistakes by integrating additional clarifying language into the permit conditions and updated existing conditions for the Maui Ocean Center's 2024-2025 renewal. The division said the remaining 80 potential violations flagged by For the Fishes were for non-regulated organisms, which "would not require a permit in themselves."

For the Fishes argues that collecting unauthorized fish went against the terms of the permit, which makes these collections illegal per [Hawaii Administrative Rules](#): "When the Maui Ocean Center collects marine animals not specifically authorized under the special activity permit, those collections are illegal, regardless of whether they involve 'regulated' species," Umberger said.

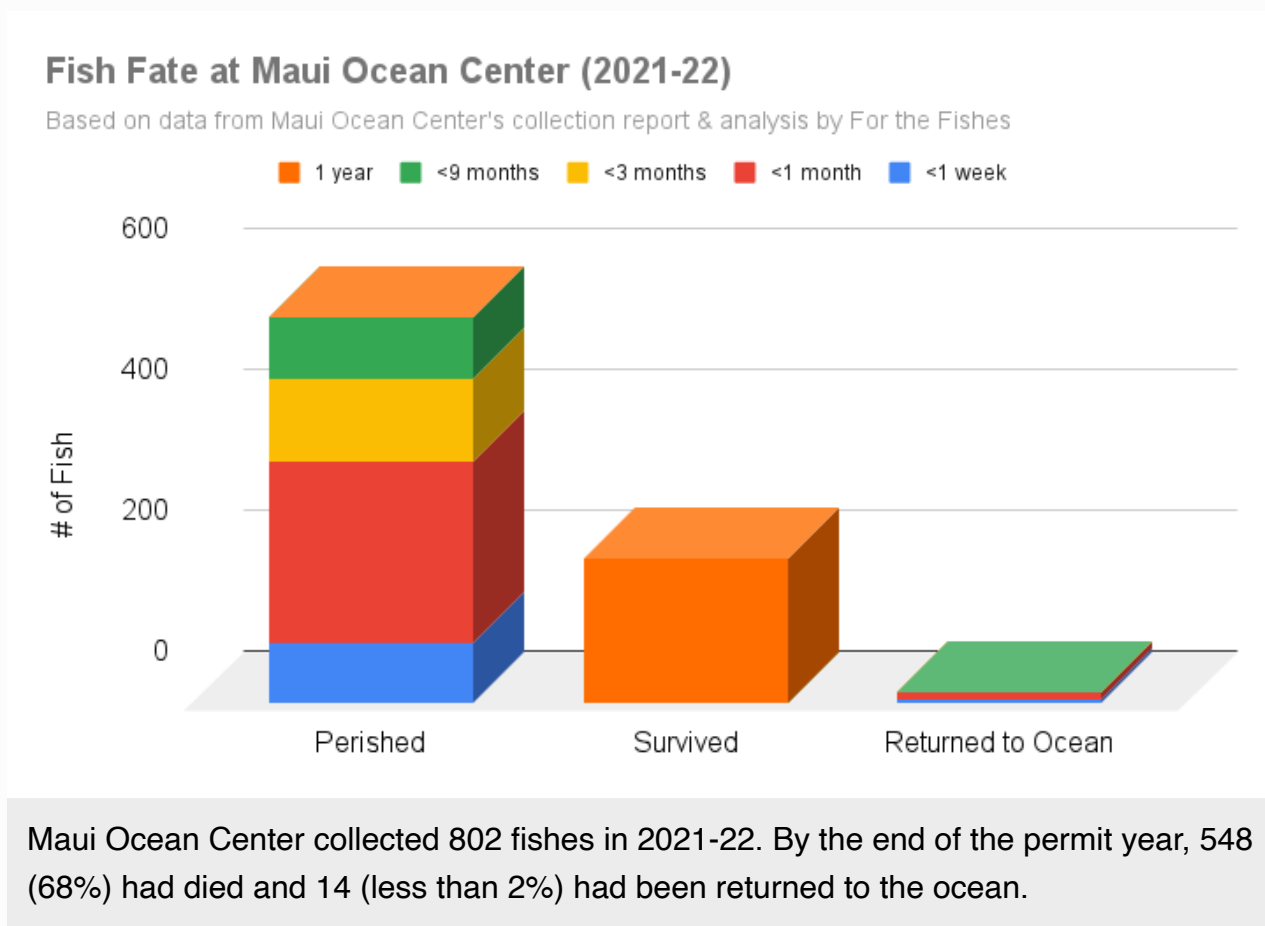
Matthews said the nonprofit misrepresented the number of violations, which "is unfortunate and disappointing." He said to remedy its "small number of unintentional mis-collections," the center has implemented corrective measures that include additional training about how to identify the species and age of fish.

After the Maui Ocean Center's latest special activity permit was issued, Umberger said she adopted a more vigilant approach to assess the [collection report under the aquarium's permit in 2021](#). She said that report revealed an even greater number of unauthorized takings, [500 violations](#), accounting for 62% of all ocean collections that year.

Her analysis concluded the aquarium illegally took 224 fish across 41 unauthorized species, exceeded collection limits by 264, and captured 12 fish at unauthorized life stages.

The documents confirm a pattern by the Maui Ocean Center of a “total disregard for the terms and conditions” of its permits and “appalling mortality rates that go hand in hand with their complete disrespect for the animals under their care,” Umberger said.

THE DATA: HIGH MORTALITY RATES



Unlike fish collection, there are no regulatory limits on animal mortality at the Maui Ocean Center. The aquarium has acknowledged, however, that its mortality rates exceed the norm.

In a “Potential Permit Violation List” [document](#) Maui Ocean Center sent earlier this year to the Division of Aquatic Resources in response to mitigating mortalities, the aquarium estimated that the normal mortality rate for animals collected for public aquariums is

between 20% and 30% within a year, and that it's usually related to transport.

The Maui Ocean Center reported its animal mortality rate was double that from 2021-2023, and the animals were transported only short distances and not flown in planes.

While a "standard" mortality rate is up for debate and still being defined by the Department of Land and Natural Resources, Matthews of the Maui Ocean Center said the typical mortality rate often bandied around is 43%. Over the last two permit years, the aquarium's mortality was still higher than that.

The reported mortality rates for fish and invertebrates within the first year of collection was [68% in 2021-22](#) and [58% in 2022-23](#). Most deaths occurred within a month of capture and were not attributed to transport, according to the aquarium.

The [700 newly collected animals that perished from 2021 to 2023](#) died of various causes, including age, predation, failing to eat in captivity and contracting bacterial infections or parasitic infections shortly after arrival, the collection reports said.



One of three saddle wrasse died within a year of capture in the most recent collection report. JD Pells/Hawai'i Journalism Initiative

Matthews said some fish that died had arrived injured or sick. For instance, a blacktip reef

shark labeled as “dead on arrival” had been treated in Maui Ocean Center’s quarantine area for an ulua fishing hook injury that ultimately led to its death two weeks later.

Vuori said the mortality rate figure misrepresents the nuances of the aquarium because “dead on arrival” had been the only animal-death designation in the Division of Aquatic Resources identification methodology up until 2023.

“Presented at face value, it looks like 50% just died through our mishandling,” Vuori said. “We are working with the state to calibrate this so it’s a more accurate representation of what is actually happening. It should be available for the public to see and, ultimately, the public needs to decide what is acceptable for them.”

But Umberger suspects that many of the mortality cases stem from poor husbandry. She suggested that the aquarium may lack motivation to protect fish that are collected for free and without the risk of penalties.

Collection reports show the Maui Ocean Center also continually collects a multitude of fish species despite a well-documented history of mortality in captivity.

Among the unique species in this category are spotted boxfish. The square-bodied, slow-moving fish rely on specific reef habitats to thrive. According to For the Fishes, they should not be collected due to their complex dietary needs and sensitivity to water conditions.

Records show that out of the 11 spotted boxfish collected in 2021–22 — nine over the permitted limit — seven died, two were returned to the sea sick, and one had missing data. Despite a zero percent success rate, the next year four more boxfish were collected from Mā‘alaea, two without authorization. None survived.



A marine snail known as a nudibranch crawls across a reef. *Photo: Joe Belanger/ Envato Elements*

Nudibranchs, often called “sea slugs,” also are known to [fare poorly in captivity](#) but are not listed as a restricted species in the permit. Matthews says, because of their ability to serve as “entry points” for many people, the “awe and wonder attached,” significance of nudibranchs in the ecosystem and education possibilities are worth the collection. In 2022-2023, all but one nudibranch — collected by the Maui Ocean Center to be put on display — died.

“The team is well aware of the challenges associated with certain species,” said Maui Ocean Center curator Chris Keller in an email. “However, these decisions are made in consultation with marine biologists, veterinarians, and specialists to weigh the benefits of education, research, and conservation against the challenges of their care.”

For species known to have higher mortality rates, the ocean center implements “specialized care protocols, including acclimation procedures, advanced tank setups, and monitoring to improve survival outcomes,” This method contributes to a broader understanding and potential improvements in husbandry practices globally, Keller said.

“While mortality for some species is higher, the larger program’s conservation and educational value remain significant,” he said.

Matthews said For the Fishes’ opinion of its husbandry’s quality is “willfully negligent and harmful.”

He touted the aquarium’s highly skilled, educated and experienced staff, saying some have double master’s degrees in marine biology and others have been in the field for more than 30 years.

“It is important to note that we are talking about the mortality of a small number of fish introduced within their first year,” Matthews said. “We have over 84 exhibits ... and over 2,000 animals of over 240 species that thrive under our care.”



A yellow tang hovers in the corner at one of the darker tanks of Maui Ocean Center’s “Living Reef” exhibit on Oct. 26, 2024. JD Pells/Hawai’i Journalism Initiative

THE FUTURE: WILL FISH COLLECTION PRACTICES CHANGE?

Umberger has wrestled with the state to curb commercial fish collectors for over a

decade.

Fish collectors in Hawai'i used to be the [third-largest aquarium supplier](#) in the nation. But that began to change when Umberger lobbied for fish extraction regulations that led to strict Maui County [ordinances](#) being passed in 2010 and 2011. This all but ended the aquarium fish trade in Maui Nui.

But Umberger wanted to expand the prohibition to all of Hawai'i. In 2014, she was documenting fish collection underwater on the Big Island [when a fish-collector pulled the air regulator from her mouth at 50 feet deep](#). This incident led to her being the plaintiff in a successful [lawsuit against the state](#) that initially lost in lower courts. The Supreme Court in 2017 ordered a stop to the commercial collection of aquarium fish in Hawai'i pending an [environmental review](#).

Compared to the larger fish trade, Umberger acknowledges that the Maui Ocean Center's yearly collection numbers are relatively small. However, she believes the focus should be on protecting Maui's rapidly degrading coastal ecosystems, which are threatened by concentrated fish collections on the same reefs.

According to the latest collection report, about 46% of the fish lack locational data, making it difficult to assess the full impact. Among the remaining fish, Mā'alaea Bay, the nearest to the Maui Ocean Center, was the most common collection site, accounting for 22% of all specimens.

"What I noticed from the spreadsheet was how heavily they were hitting certain places," Umberger said. "That's where the impact would be most significant."

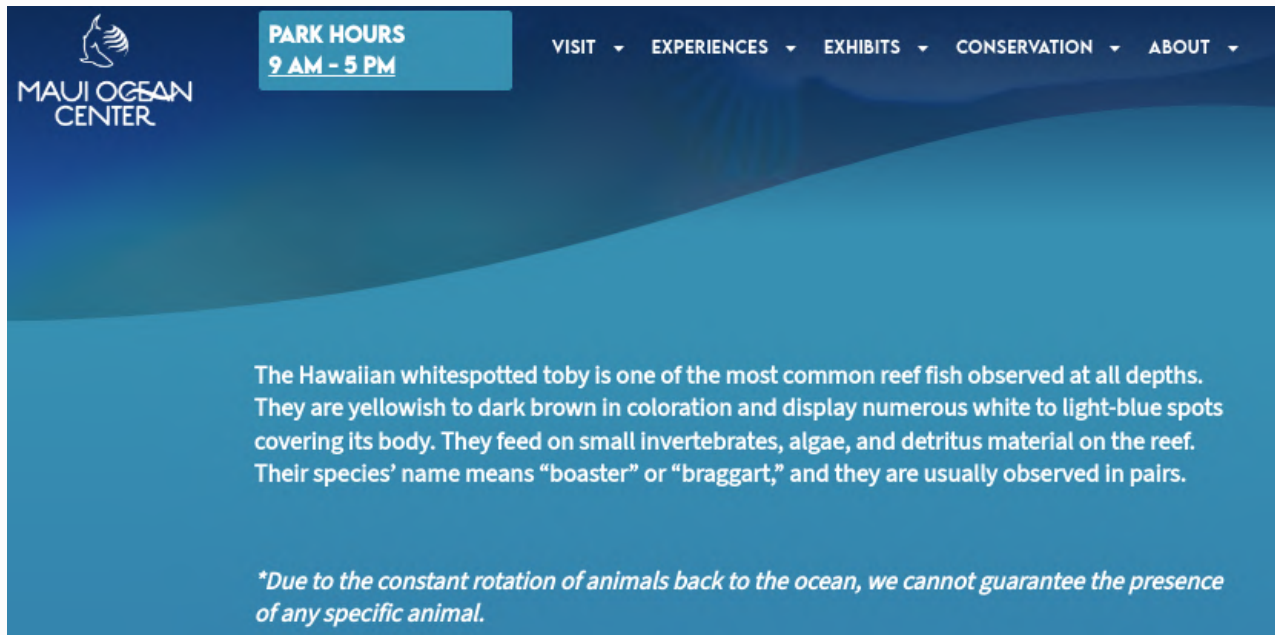


For the Fishes executive director and founder Rene Umberger has been instrumental in the passage of two Maui County ordinances that have restricted the aquarium pet trade. *Courtesy photo*

The Maui Ocean Center, which is visited by about 400,000 people each year, said it also cares about ecological consequences. It hosts numerous educational events each year, is heavily involved in islandwide conservancy and rehabilitation efforts, and employs Maui residents, many of whom are passionate about marine conservation, sustainability and advocacy.

This year, it was voted the [7th best aquarium in the country](#) by USA Today readers.

But Umberger said the high mortality rates contradict Maui Ocean Center's position as a conservation hub. And both Umberger and Gibson have criticized the way the Maui Ocean Center presents information, with Umberger adding it would be a shame that the Maui aquarium could potentially fracture its public trust.



Maui Ocean Center website disclaimer on rotating fish back to ocean. Screenshot taken on Friday, Dec. 13, 2024.

The Maui Ocean Center points out that it does return some species, saying [online](#) that some fish may not be on display “due to constant rotation of animals back to the ocean.”

Umberger and Gibson say that is misleading. For example, the species listed on the same page as the online disclaimer saw a combined mortality of 53% within a year of capture, with only two animals being returned to the ocean from 2022 to 2023. The prior permit year saw 14 individual fish returned to the ocean, while 548 died after collection.

Since it opened 26 years ago, the aquarium has never had to make collection data accessible to the general public. And in 2017, [Vuori told The Maui News](#) that the ocean center returned more than half of the fish it collected, but declined to share raw numbers. Vuori said Thursday that he may have “misspoken” at the time.



The Maui Ocean Center was opened on March 13, 1998. JD Pells/Hawai'i Journalism Initiative

But Keller, in an email to the Hawai'i Journalism Initiative days earlier, said Vuori's 2017 statement was accurate at the time, and said that operational goals and collection strategies have since evolved in response to research, conservation priorities and resource management.

The recent small number of animals returned to the sea reflect the aquarium's current "conservation realities," Keller said. He cited risks of releasing unhealthy fish into wild populations and strict regulations in how frequently animals can be released.

Keller said the online disclaimer about the "constant rotation of animals back to the ocean" is intended to reflect the aquarium's philosophy of managing its collection responsibly and sustainably, but "may require refinement to better align public perception with current practices."



JD Pells

JD is a news reporter for Maui Now. He has contributed stories to TCU



360, Fort Worth Report and the Pulitzer Center on Crisis Reporting. JD interned at Maui Now in 2021. He graduated from the Bob Schieffer College of Communication at Texas Christian University, with a bachelor's in journalism and business in 2022, before coming back home to Maui with the purpose of serving his community. He can be reached at jdpells@pmghawaii.com.

[READ FULL BIO](#)

Help Fund Local Journalism

[Learn More about HJL](#)

Donate \$500.00/month



MAUI NOW

Copyright © 2026 [Pacific Media Group](#).

All Rights Reserved.

[Privacy Policy](#) | [About Our Ads](#)



Maui Ocean Center SAP 2023-50 – Permit Totals

WILD FISHES					
Total Taken (Reported)	Alive	Perished	Mortality rate	Returned to ocean	Taken in potential violation of permit terms/conditions
257	147	110	43%	1 tiger shark 1 parrotfish	91 (35% of total)
WILD INVERTS – MOBILE					
54	22	32	59%	1 octopus	Not yet determined
WILD INVERTS – SESSILE					
54	14	9	17%	31 rice coral colonies	Not yet determined

Maui Ocean Center SAP 2023-50 – Potential Permit Violations

Unauthorized Species				Unauthorized Qty.		
	Species	Qty.	Regulated	Species	Qty. in Excess	Regulated
1	Redlip Parrotfish	1	X	Manybar Goatfish	2	X
2	Stareye Parrotfish	1	X	Blacktip Reef Shark	2	X
3	Bullethead Parrotfish	1	X	Moorish Idol	5	
4	Palenose Parrotfish	1	X	Elegant Coris	1	
5	Bluefin Trevally	2	X	Belted Wrasse	3	
6	Blacktip Shark	1	X	Flagtail Tilefish	2	
7	Barred Jack	1		Forcepsfish	11	
8	Hawaiian Sergeant	3		Hawaiian Dascyllus	9	
9	Twospot Sand Goby	1		Bay Cardinalfish	23	
10	Lowfin Scorpionfish	1		Crown Toby	1	
11	Scrawled Filefish	1		Thornback Cowfish	1	
12	Bluestripe Squirrelfish	2		Spotted Boxfish	2	
13	Hawaiian Conger Eel	1		Lavender Tang	6	
14	Cigar Wrasse	1		Bigscale Soldierfish	7	
15	Bird Wrasse	1		Total	41	4
16	Disappearing Wrasse	2				
17	Twospot Wrasse	2				
18	Hawaiian Cleaner Wrasse	2		Unauthorized Life Stage		
19	Longtail Dragonet	1		Yellow Tang/adult	3	
20	Tiger Moray	1		Orangespine Unicornfish/adult	5	
21	Barred Moray	1		Raccoon Butterflyfish/adult	2	
22	Hawaiian Silverside	1		Iridescent Cardinalfish/adult	2	
23	Peacock Grouper	1		Big Eye Emperor/adult	1	
24	Multiband Butterflyfish	2		Spotted Boxfish/adult	3	
25	Whitetongue Jack	1		Total	16	0
26	Spotted Coral Blenny	1				
	Total	34	7			

Maui Ocean Center SAP 2022-50 – Permit Totals

WILD FISHES					
Total Taken (Reported)	Alive	Perished	Mortality rate	Returned to ocean sick/injured	Taken in violation of permit terms/conditions
802	254	548	68%	2 Forcepsfish 3 Randalls puffers 2 Spotted Boxfish 1 Teardrop Bfly 1 Cornetfish 1 Arc-eye Hawkfish	500 (62% of total)

Maui Ocean Center SAP 2022-50 – Permit Violations

UNAUTHORIZED SPECIES					UNAUTHORIZED SPECIES			
No.	Species	Qty.	Regulated		No.	Species	Qty.	Regulated
1	Akule	46	X		33	Argus Grouper	1	
2	Uouoa Mullet	46			34	Scrawled Filefish	1	
3	Hawaiian Silverside	24	X		35	Cigar Wrasse	1	
4	Randall's Pufferfish	20			36	Psychedelic Wrasse	1	
5	Hawaiian Flagtail	11	X		37	Spotfin Porcupinefish	1	
6	Teardrop Butterflyfish	8			38	Leatherback/lai	1	
7	Hawaiian Eye-bar Goby	7			39	Yellowspotted Snake Eel	1	
8	'Ama'ama Mullet	6	X		40	Ringtail Wrasse	1	
9	Yellowfin Goatfish	4	X		41	Black Durgon	1	
10	Multiband Butterflyfish	4				TOTAL	224	93
11	Ornate Butterflyfish	4						
12	Saddled Snake Eel	3						
13	Hawaiian Cleaner Wrasse	3						
14	Jobfish	3						
15	Hawaiian Sargeant	3						
16	Shy Filefish	2						
17	Threadfin Butterflyfish	2						
18	Hawaiian Spaghetti Eel	2						
19	Opelu	2						
20	Galactic Scorpionfish	2						
21	Blackspot Sargeant	2						
22	Hawaiian Bigeye	1						
23	Decorated Dragonette	1						
24	Giant Trevally	1	X					
25	HI Orbicular Velvetfish	1						
26	Pinktail Durgon	1						
27	Fourspot Butterflufish	1						
28	Palenose Parrotfish	1	X					
29	Squairetail Filefish	1						
30	Ewa Fangblenny	1						
31	Waikiki Cardinalfish	1						
32	Painted Frogfish	1						

	UNAUTHORIZED QUANTITY				UNAUTHORIZED LIFE STAGE		
No.	Species	Qty. in Excess	Regulated		Species	Qty.	Regulated
1	Blackfin Chromis	71			Yellow Tang	7	
2	Manybar Goatfish	52	X		Orangespine Unicornfish	1	
3	Hawaiian Dascyllus (Damsel)	42			Bluespine Unicornfish	1	
4	Forcepsfish	21			Yellowtail Coris	1	
5	Bluestripe Snapper	17			Raccoon Butterflyfish	2	
6	Lavender Tang	10			TOTAL	12	
7	Spotted Boxfish	9					
8	Hawaiian Whitespotted Toby	6					
9	Bicolor Anthias	5					
10	Bluespotted Cornetfish	4					
11	Agile Chromis	4					
12	Iridescent Cardinalfish	4					
13	Panther Flounder	4					
14	Devil Scorpionfish	3					
15	Pennant Butterflyfish	3					
16	Yellow Tang	2					
17	Belted Wrasse	2					
18	Arc-eye Hawkfish	1					
19	Bluestripe Pipefish	1					
20	Zebra Eel	1					
21	Saddle Wrasse	1					
22	Crown Toby	1					
	TOTAL	264	1				