WEBVTT

00:15:25.000 --> 00:15:29.000 Okay,

00:15:29.000 --> 00:15:43.000 And so

00:15:43.000 --> 00:15:58.000 Okay, very good. we'll begin good afternoon, and welcome everyone may I ask everyone to mute themselves if they've not already been so prevent feedback.

00:15:58.000 --> 00:16:05.000 My name is Mike Hastings. Today I will moderate this form, which is sponsored by a Katie, a senior college.

00:16:05.000 --> 00:16:14.000 An educational organization, providing intellectual stimulation, practical knowledge and social interaction and fun.

00:16:14.000 --> 00:16:18.000 Primarily for adults over 50. In the words of Dr.

00:16:18.000 --> 00:16:22.000 Linda Dunn, the President of saint that's his senior college.

00:16:22.000 --> 00:16:31.000 Our organization is quote nonpartisan and inherents to a policy of not taking sides on controversial issues.

 $00:16:31.000 \rightarrow 00:16:41.000$ Rather we present all sides of an issue so that our members and members of the local community can decide for themselves which position they will endorse.

00:16:41.000 --> 00:16:55.000 Today we focus on the subject of marine finfish aquaculture, and specifically on a plan by the American Aquiferms Company to establish a salmon farm in Frenchman Bay Today's Presenter

00:16:55.000 --> 00:16:59.000 Mr. Thomas Brennan speaks for the company with the plan.

00:16:59.000 --> 00:17:06.000 A week from today we will receive the views of several persons whose organizations have concerns about American acro farms.

00:17:06.000 --> 00:17:20.000 Proposal. Next week's Presenters will be is your Tad Omiro, a director of Frenchman, Bay, united Miss Stephanie Clement, the acting President of friends of Acadia, and Mr.

00:17:20.000 --> 00:17:32.000 Kevin snyder superintendent of the Kadian National Park, both today's presenter and next week have received in advance a set of 3 questions.

00:17:32.000 --> 00:17:38.000 The Senior College is asked speakers to address these questions in their presentations. 00:17:38.000 --> 00:17:54.000

The first question is a lengthy one, for we have asked the presenters to gauge the impact of the proposed farm on the following marine based enterprises in Frenchman Bay, the Environmental and ecological

00:17:54.000 --> 00:18:02.000 Dynamics of the Bay. Navigational and Recreational Uses of the Bay.

00:18:02.000 --> 00:18:10.000 Experience of visitors to Akadia National Park in residents, in and visitors 2 surrounding communities.

00:18:10.000 --> 00:18:26.000 We asked them to gauge the the impact on local real estate values as well as the native American heritage in our region, which some persons, Wabanaki early settlers and others have referred to as chief

00:18:26.000 --> 00:18:36.000 Astac, whose domain, and lastly, to the overall economy of Hancock County and the State of Maine.

00:18:36.000 --> 00:18:48.000 The second question is much shorter and more general. The question is, Do we need thin fish aqua farming as a community, as a state and as a nation?

00:18:48.000 --> 00:18:52.000 The third question is a fundamental one which relates to governance.

00:18:52.000 --> 00:18:55.000 Given that the citizens of Maine are the stewards.

00:18:55.000 --> 00:19:09.000

Both the ocean floor and the water column. Resources in state waters should means government by granting a renewable lease to American aquifarms, delegate this stewardship to a large 4 profit

00:19:09.000 --> 00:19:13.000 enterprise. These are the questions for which you, Katie, is senior.

00:19:13.000 --> 00:19:20.000 College seeks answers now a word. about format the format of today's forum, and next week will be similar.

00:19:20.000 --> 00:19:25.000 Today's presenter will have up to 45Â min to make his presentation.

00:19:25.000 --> 00:19:30.000 He will then respond to questions and comments from the audience.

00:19:30.000 --> 00:19:35.000 The Forum will end at 5, 30 Pm. Questions and comments from zoom.

00:19:35.000 --> 00:19:42.000 Participants will not be entertained by Mr. Brendan until after he has concluded his presentation.

00:19:42.000 --> 00:19:48.000 So take notes during the question period. I will ask you to use the raise hand.

00:19:48.000 --> 00:19:55.000 Icon. If you wish to speak Senior College Administrator Janice Kenyan, and Events chair. 00:19:55.000 --> 00:20:01.000

Jeff Dunn will help me monitor the zoom chat screen using the rant raise hand.

00:20:01.000 --> 00:20:06.000 Icon will allow us to range questioners in roughly the order they seek.

00:20:06.000 --> 00:20:20.000

Recognition. Alternatively, if you have a question, you can type it in the zoom, chat window, and Janice Jeff, or I will read it on your behalf for the benefit of those who are unable to join us on

00:20:20.000 --> 00:20:27.000 zoom today. This form is being recorded, and will be available after several days on Vimeo.

00:20:27.000 --> 00:20:33.000 All registrants will receive an email with the Url link to the recording.

00:20:33.000 --> 00:20:40.000 I ask you all to be aware that this event is not restricted to senior college members to the contrary.

00:20:40.000 --> 00:20:57.000

It is open to the public. Please keep in mind that questions very well could be posed by members of the press, and it is entirely possible that what is said at this form could be reported in the media as your moderator. I will do my best.

00:20:57.000 --> 00:21:04.000 To keep the discussion moving along. Please help us by keeping both your questions and comments short.

00:21:04.000 --> 00:21:12.000 Please be respectful. Try not to echo questions that have already been asked, or comments that have already been made.

00:21:12.000 --> 00:21:22.000 If any member of the audience begins to dominate these proceedings i'll ask that participant to stand back and give others the opportunity to be heard.

00:21:22.000 --> 00:21:33.000 I've already mentioned that fun is one of the goals of the Kdia Senior College. a wide-ranging debate on a controversy issue can be both informative and fun but a zoom.

00:21:33.000 --> 00:21:42.000 Brawl is not fun. Let today's session be an opportunity to learn to consider new viewpoints and to share ideas.

00:21:42.000 --> 00:21:46.000 Now to our speaker, Mr. Thomas brendan of Portland.

00:21:46.000 --> 00:21:59.000

Tom's professional career stands some 35 years. and has been largely focused on water and natural resource, development and management. In addition to a degree in geology from Bates College.

00:21:59.000 --> 00:22:04.000 He holds geologic certifications in Maine, in Ireland, and in the European Union.

00:22:04.000 --> 00:22:13.000

He worked as an environmental consultant for a dozen years, gaining exposure to many aspects of environmental science and regulatory structures.

00:22:13.000 --> 00:22:18.000 For nearly 2 decades he worked as a natural resources manager.

00:22:18.000 --> 00:22:24.000 Nestle waters North America, chiefly for the Poland Spring brand from Maine.

00:22:24.000 --> 00:22:31.000 Today he presents as American aquifimes representative and spokesperson in Maine.

00:22:31.000 --> 00:22:36.000 Tom, the microphone is yours. thank you, Mike and

00:22:36.000 --> 00:22:40.000 I am going to do what I my best to represent here.

00:22:40.000 --> 00:22:46.000 I will, and I brought it up. When I first joined I did see that

00:22:46.000 --> 00:22:53.000 The intent here, was perhaps mischaracterized in at least one news.

00:22:53.000 --> 00:22:59.000 Article in that I was going to share our plans for the future as well.

00:22:59.000 --> 00:23:07.000 Probably most everybody knows. Recently the Department of Marine Resources has rejected our application.

00:23:07.000 --> 00:23:15.000 It is much too soon to be speculating on my part or anybody else's on what we're going to do in the future.

00:23:15.000 --> 00:23:24.000 So I think I am best suited to talk in some more generalities than was prescribed before.

00:23:24.000 --> 00:23:29.000 There are a lot of There was a lot of specificity in our application to the Dmr.

00:23:29.000 --> 00:23:38.000 All of that remains on file and and should it come back then it will represent what's real and in front of the department.

00:23:38.000 --> 00:23:55.000 But as stands we don't have an application that is actively being reviewed, so I have put together some powerpoint slides, and I will do my best to get that file back to where it was and I will

00:23:55.000 --> 00:24:02.000 proceed,

00:24:02.000 --> 00:24:12.000 Can you see my screen? Alright, Yes, very good. Okay. So American aqu farms.

00:24:12.000 --> 00:24:23.000 Are are broad Goal here is to utilize closed pen technology, to raise salmon it.

00:24:23.000 --> 00:24:27.000

A couple of locations in Frenchman bay and

00:24:27.000 --> 00:24:39.000 Then to take the fully toured salmon to a processing factory which we will construct or reconstruct in Prospect Harbor.

00:24:39.000 --> 00:24:46.000 We have closed on that property in Prospect Harbor, and on that site.

00:24:46.000 --> 00:24:51.000 Not there will be a processing plant as well as a hatchery.

00:24:51.000 --> 00:25:01.000 And that is the I the goal for the project

00:25:01.000 --> 00:25:07.000 Okay, we live in some pretty complicated times I think we'd all agree

00:25:07.000 --> 00:25:18.000 It's it's important for us to pay attention and and think carefully about how we're gonna proceed into the future here.

00:25:18.000 --> 00:25:23.000 In in acting acting locally is what we can do.

00:25:23.000 --> 00:25:36.000 But thinking globally, is what we must do and when one considers that 85 to 90% of the seafood that's imported to North America is flown in by by airplane from places like Norway

00:25:36.000 --> 00:25:44.000 and china and chile That greenhouse gas contribution is is significant.

00:25:44.000 --> 00:25:49.000 We have the opportunity to grow that protein here.

00:25:49.000 --> 00:25:56.000 The global populations are forecast to double in the next 30 years.

00:25:56.000 --> 00:26:13.000 And with that the expanding need for food is going to also double, And and you know agriculture is not the way to to sustain that that protein requirement.

 $00:26:13.000 \rightarrow 00:26:25.000$ The carbon footprint of a stake is significantly higher than that of fish, and we have the conditions here off the coast domain to you know.

00:26:25.000 --> 00:26:34.000 Pursue aquaculture. It provides answers to a lot of our challenges here, and

00:26:34.000 --> 00:26:40.000 Hancock County is very well suited

00:26:40.000 --> 00:26:48.000 I think we would also the pandemic has shown us, if if nothing else, The strain on supply chain.

00:26:48.000 --> 00:26:57.000

Hancock County is also very close to the markets of the east coast of the Us.

00:26:57.000 --> 00:27:01.000 Aquaculture is one of the best opportunities G. Romaine's economy.

 $00:27:01.000 \rightarrow 00:27:15.000$ I think the the governor's 10 year economic development strategy underscores, agriculture as a pillar when it enables us to preserve the natural heritage of the State by

00:27:15.000 --> 00:27:20.000 preserving working waterfront. Prospect Harbor is a great example of that.

00:27:20.000 --> 00:27:23.000 The wild fisheries in maine have largely disappeared.

00:27:23.000 --> 00:27:30.000 And we're gonna need to adapt to change in in order to to proceed successfully.

 $00:27:30.000 \rightarrow 00:27:43.000$ The main waters are clean they're close to the markets, and they represent the opportunity for main people to do well while doing good.

00:27:43.000 --> 00:27:49.000 Our challenge is also one of an aging population. We have something of a brain drain with the young.

00:27:49.000 --> 00:27:57.000 Leaving our State resistance to change is our worst and and it's It's been a challenge for us for generations.

 $00:27:57.000 \rightarrow 00:28:07.000$ Even Joshua chamberlain recognize that that when he first became governor, that that you know we weren't short on resources.

00:28:07.000 --> 00:28:18.000 We Weren't short on willing people and we certainly had space but we needed the public policy was was willing to guide and encourage strong action.

00:28:18.000 --> 00:28:24.000 We're still in the same place. but I think our challenges are are much more significant, you know.

00:28:24.000 --> 00:28:32.000 Take climate change as an example. Excuse me,

00:28:32.000 --> 00:28:44.000

We need to collaborate to solve some of these things and and there's no reason why aquaculture can't play that pivotal role here in me it needs to succeed as a sector whether

00:28:44.000 --> 00:28:49.000 it's growing kelp or shellfish or finfish.

00:28:49.000 --> 00:28:56.000 We need to to view this as a means to a successful end as as a sector.

00:28:56.000 --> 00:29:07.000 And you know, I think if we can utilize workforce development as an example of this this the same workforce is going to use the same technology.

00:29:07.000 --> 00:29:13.000 The The aquaculture techniques today are sophisticated.

 $00:29:13.000 \rightarrow 00:29:22.000$ The the you know, the the same skill are going to be used across the sector, and I think we can all benefit from that.

 $00:29:22.000 \rightarrow 00:29:36.000$ This this is a slide showing the the shore side of the old Stinson factory that i'm sitting in right now, and that this facility has been involved in in fish processing for since the civil war.

00:29:36.000 --> 00:29:52.000 For 150 years and There's there's nothing new about this also in in the spirit of collaboration, I recall, I think it was Angus king when he was running for Senate, said he, didn't want to see a

00:29:52.000 --> 00:29:56.000 fish leave Maine with his head on. Well, you know what are we going to do with those heads?

00:29:56.000 --> 00:30:06.000 I think that there's there's opportunities there's opportunity to take the the byproduct of one industry and help another industry.

00:30:06.000 --> 00:30:21.000

And, as I think, we're all aware, the the lobster fishing, sector is is challenged with with finding sustainable bait sources that that is a one example of where we can collaborate and and

00:30:21.000 --> 00:30:30.000 all succeed. there's been a lot of controversy and rhetoric about this project.

00:30:30.000 --> 00:30:37.000 The the the size of it. These are 2 60 acre leases.

00:30:37.000 --> 00:30:43.000 Oh, to accommodate mooring lines 50 acres of those 68 releases are required.

00:30:43.000 --> 00:30:49.000 But that's all subsurface the the actual occupation of pens in each of those leases is 10 acres.

 $00:30:49.000 \rightarrow 00:31:00.000$ That's not a lot in the larger area of frenchman bay, the the technology, the close pen technology is designed to capture waste.

00:31:00.000 --> 00:31:09.000 And that waste is is taken to shore, and it can be used as fertilizer or in a bio reactor to create biofuel.

00:31:09.000 --> 00:31:25.000 Now in this, this, another challenge we're facing here in Maine is the ubiquity of of fluorinated compounds in groundwater from using municipal sludge and and slut from paper

00:31:25.000 --> 00:31:30.000 mills to to fertilize fields over many generations and it's just contaminated our water supplies.

00:31:30.000 --> 00:31:35.000

Well, we still need fertilizer for for agriculture.

00:31:35.000 --> 00:31:42.000 So you know we can. We can look at these things in a collaborative way, and and you know we really need to.

00:31:42.000 --> 00:31:47.000 You know the again this size of a of the pens.

00:31:47.000 --> 00:31:50.000 In the in the larger scheme of Frenchman Bay.

00:31:50.000 --> 00:31:56.000 Is not that much? it's not that big and and in comparison to a cruise ship.

00:31:56.000 --> 00:32:08.000 It is, It is really. you need to keep these things in context to to make a reasonable assessment, and and the and also in that context.

00:32:08.000 --> 00:32:16.000 You know the project overall represents something on the order of 250 to 300 million dollars in capital investment.

00:32:16.000 --> 00:32:30.000 I think that for the future of the youth in in a place like Goalsborough and the opportunity for a workforce development, I think that's a very positive aspect.

00:32:30.000 --> 00:32:33.000 The We hear a lot about preserving working waterfront.

00:32:33.000 --> 00:32:39.000 Well, i'm looking out the window here right now, and this is great opportunity for that.

00:32:39.000 --> 00:32:44.000 And you know. Lastly, I'm I'm just going to talk about the the regulations here in Maine.

00:32:44.000 --> 00:32:50.000 I have a fair amount of experience with getting permits, and and not so much with Dmr.

00:32:50.000 --> 00:33:06.000

But certainly de p and others other agencies and and the process is always rigorous, and my philosophy has always been do more than you need to, and you'll get through it, because it's it's a predictable

00:33:06.000 --> 00:33:24.000

and and once a permit is granted by and large they always come with performance standards and conditions, So that if you're approved for a given activity, you need to keep continuously meet those performance standards and that's part of the

00:33:24.000 --> 00:33:31.000 permit. if you fail, you lose your permit the it's it's a pretty predictable process.

00:33:31.000 --> 00:33:37.000

You know again, we don't have an application currently what we're going to do in the future.

00:33:37.000 --> 00:33:41.000

We are still trying to understand what our options are.

00:33:41.000 --> 00:33:46.000 I will say that Prospect Harbor on some level.

00:33:46.000 --> 00:34:03.000

I could I can call home now. it's where I am and I into to be here a couple of days every week going forward until we do have a plan, and i'll be available, and certainly you can reach out to the company

00:34:03.000 --> 00:34:12.000 at CEO, at American aquiferance, dot com, and happy to answer questions

00:34:12.000 --> 00:34:23.000 Okay, now, just to remind people you can go to the reactions button on your screen.

00:34:23.000 --> 00:34:26.000 Most of you probably have that button, and you can raise the hand.

00:34:26.000 --> 00:34:33.000 Icon. I see David saton's name he did very quickly.

00:34:33.000 --> 00:34:38.000 I will announce who I see And could you stop share screen there?

00:34:38.000 --> 00:34:46.000 Oh, I can see more people stop. Sorry about my Very good.

00:34:46.000 --> 00:35:10.000 Thank you. So we're gonna go to David Satan first, and then Matt Dundas will be up after him, and then Crystal canny David unmute yourself

00:35:10.000 --> 00:35:18.000 David Satan. I think he might have dropped out of the meeting , He'll probably be back.

00:35:18.000 --> 00:35:22.000 Okay, Matt Dundas please Hello, I'm Matt done just hello, Mr.

00:35:22.000 --> 00:35:28.000 Bennett Yes, bye bye yes, I'm.

00:35:28.000 --> 00:35:36.000 A campaign director with Oceana ocean is the world's largest nonprofit dedicated solely to oceans conservation.

00:35:36.000 --> 00:35:44.000 Ocean opposes the American aquifer's project in Frenchman Bay, due to its scale. the pollution it would bring.

00:35:44.000 --> 00:35:54.000 Yeah, it's Pumping a 4.1 billion gallons per day of untreated wastewater into the bay, and its proximity to Acadia National Park.

00:35:54.000 --> 00:36:01.000 And despite the claims of environmental stewardship, I want to point out that American alpha Farms face is the opposition.

00:36:01.000 --> 00:36:11.000

Several high profile environmental groups, including Oceana, the National Parks Conservation Association, the Natural Resources Council of me and several local groups.

00:36:11.000 --> 00:36:24.000

A question for you is given that in 2019 Akadia National Park brought in more than 380 million dollars in direct tourists spending in more than 500 million dollars in economic value.

00:36:24.000 --> 00:36:39.000

Statewide, and the main lobster industry brought in more than 220 million dollars in 2021, and that the technology American aquiforms, it tends to use to pump the 4.1 billion gallons per

 $00:36:39.000 \rightarrow 00:36:47.000$ day of untreated wastewater has never been tested at this scale, and the biggest test yet, and it prematurely due to a failure.

00:36:47.000 --> 00:36:52.000 What is the size of the bond that American aqua farms?

00:36:52.000 --> 00:37:00.000 We'll put up to ensure potential losses of fishermen and those in the industries that serve tourists and employee residents.

00:37:00.000 --> 00:37:13.000 Well, first of all understand that the water that is brought in is seawater, and the water that's discharged is the water that the fish are living in right.

00:37:13.000 --> 00:37:26.000

The The whole concept here is to to replicate the the natural, helpful environment of the sea that the fish will grow and and and live in the water.

00:37:26.000 --> 00:37:47.000

Is It's unfair to characterize that as a sewage or wastewater, because the fish would not be alive? It There's the volume is high to represent through dilution represent that that same environment that the fish would

00:37:47.000 --> 00:37:55.000 naturally live in. So you know, we gotta. You gotta be somewhat more accurate than that.

00:37:55.000 --> 00:38:00.000 I think that the scale the way it's been represented to me.

00:38:00.000 --> 00:38:06.000 There are many projects in Norway that use this technology and use it successfully.

00:38:06.000 --> 00:38:13.000 You know. I think also the the you know. again.

00:38:13.000 --> 00:38:28.000 We got it. We got to look at this stuff holistically, and then, you know, I was reading a report from the Worcester Polytechnic Institute is released in in 2,000, and 16 and it did an

00:38:28.000 --> 00:38:31.000 assessment of the carbon footprint of a Kadian national park.

00:38:31.000 --> 00:38:46.000

You know just the vehicular traffic. If 10% of that was reduced, 1,200 metric ton carbon equivalence could be eliminated from from the contribution of the atmosphere, so you know, there

00:38:46.000 --> 00:38:54.000 there are many activities that go on as for representation of a bond.

00:38:54.000 --> 00:38:59.000 I mean, you know that's just sort of a trick question, Matt.

00:38:59.000 --> 00:39:14.000 You know there is there a bond requirement I don't want to say that we we'd skirt any such thing, but you know, and and when one enters into a regulatory scheme you want to want

00:39:14.000 --> 00:39:19.000 it the regulation and the management to be done fairly and equitably right.

00:39:19.000 --> 00:39:25.000 And And so you know our other activities required to to postpon.

00:39:25.000 --> 00:39:32.000 I don't know the answer, but bonds bonding is not part of the regulatory scheme.

00:39:32.000 --> 00:39:37.000 And if it is then somebody should point that out to us.

00:39:37.000 --> 00:39:45.000 I recognize Crystal Kenny, and with David Seaton on deck I had a 2 questions.

00:39:45.000 --> 00:39:49.000 Thank you. Tom, can you tell us If you don't have an application?

00:39:49.000 --> 00:39:59.000 What was the purpose, and of purchasing the processing factory and wouldn't you have to bring in a lot of equipment, because that building is fairly empty for processing?

00:39:59.000 --> 00:40:05.000 Is that correct? Well, I can tell you it was very cold this winter.

00:40:05.000 --> 00:40:16.000 It's a big space. the the again, you know our our I was quite frankly I was shocked that the department took the stance.

00:40:16.000 --> 00:40:35.000 They did in terms of our our application. I thought that we had identified belt and suspenders issue, or solutions to the the the egg genetic issue that was pointed out last fall with the usda and aqua

00:40:35.000 --> 00:40:40.000 bounty, providing the right right data that that they required.

00:40:40.000 --> 00:40:49.000 So you know again we're we have to understand what our options are, and and develop a a strategy for moving forward.

00:40:49.000 --> 00:40:57.000 What what that looks like I don't know the answer crystal alright one follow up to that, And then my next question, which is, are you working with another? 00:40:57.000 --> 00:41:02.000 On, perhaps an on land aquaculture, facility. for processing.

00:41:02.000 --> 00:41:06.000 Have there been any conversations about that? no ma'am okay?

00:41:06.000 --> 00:41:14.000 And then my last question has to do with you mentioned salmon racks that you'd be giving back to the community with salmon racks.

00:41:14.000 --> 00:41:30.000 Is that right? I don't have any specifics the salmon racks use of salmon racks was prohibited 20 years ago because of us. say i'm an anemia that was a potential risk for

 $00:41:30.000 \rightarrow 00:41:42.000$ lobster in the closed pen. system. there's we won't have the need for the same kinds of pharmaceuticals that represented the risk.

00:41:42.000 --> 00:42:03.000 So I think that there's opportunity to go back to the department, and say, look if if we can present propose a process for testing and validating the racks from this kind of salmon or sam raised in this

00:42:03.000 --> 00:42:16.000 manner. don't present a risk if we can show that. Then, yeah, we should be able to use those as bait and work out a relationship with a fishing community.

00:42:16.000 --> 00:42:27.000 Could you define for a second what if salmon rack is for those who Yeah, it's it's the leftover pieces. And actually, I have an email? if you want me to screen share from the department of marine resources

00:42:27.000 --> 00:42:36.000 saying, this is strictly prohibited. and it is in reference to the American Aqua Farms contention that they will be able to do this.

00:42:36.000 --> 00:42:43.000 You can do that at the end of the section we'll go on just one comment crystal, I know it's prohibited.

00:42:43.000 --> 00:42:49.000 It's been prohibited for 20 years. if there is a way to demonstrate that we can you know.

00:42:49.000 --> 00:42:55.000 Eliminate that prohibition by demonstrating that that issue isn't with our fish.

00:42:55.000 --> 00:43:01.000 Then we should be able to proceed in that manner we have not done that we haven't produced any fish.

00:43:01.000 --> 00:43:08.000 David Satan is is up jeff done is on deck Alright, We'll try this again.

00:43:08.000 --> 00:43:15.000 I'm sorry I'm, using my phone as a hot spot because of the pitiful Internet connections we have up here in this region.

00:43:15.000 --> 00:43:24.000

But at any rate, my first question is, who enforces the permit conditions that are placed on you?

00:43:24.000 --> 00:43:28.000 Because I i'm not talking with the dmr enforces anything.

 $00:43:28.000 \rightarrow 00:43:37.000$ They had a a die off in black island of Sam in the summer, and we didn't even know what the cause was, and they didn't even know about the die off for 2 weeks.

00:43:37.000 --> 00:43:42.000 So how is that enforcement? you know i. e.

00:43:42.000 --> 00:43:49.000 The It typically the issuing agency enforces the conditions.

00:43:49.000 --> 00:43:53.000 Whether they do it themselves, or they have a third party.

00:43:53.000 --> 00:44:02.000 That they they that you know, and usually they would charge the applicant for, or the permit holder for the cost of of validating those conditions.

00:44:02.000 --> 00:44:08.000 But you know I don't know the answer I we have our applications to Dmr.

00:44:08.000 --> 00:44:17.000 Have been rejected. Okay, my other question is, the carbon footprint, is it?

00:44:17.000 --> 00:44:33.000 To every 1,700 school buses be converted to elect electrode, just to counteract the pollution that your Diesel generators will spew out, or takes 55 acres of solar panels

00:44:33.000 --> 00:44:38.000 which needs one of those things are something that you're gonna pay for, or our State can afford to do.

00:44:38.000 --> 00:44:46.000 So what do we do about climate change? and the fact you're gonna burn all this fossil fuel for 20 years to raise these salmon there?

00:44:46.000 --> 00:44:51.000 The the generate, the Diesel generators are

00:44:51.000 --> 00:44:58.000 What the technology that we've we entered into our application process.

00:44:58.000 --> 00:45:03.000 We have also been very actively looking at its solar opportunities.

00:45:03.000 --> 00:45:14.000 We understand that this is a problem. it's not a ideal but we wanted to per proceed with a permitting process under the conditions that were acceptable.

00:45:14.000 --> 00:45:20.000 So if we can, if we can improve process by identifying. 00:45:20.000 --> 00:45:28.000

Oh, for example, solar panels that can reside on top of the pen horizontally over the the water.

00:45:28.000 --> 00:45:36.000 You know, flexible type things that can be like lids over the pens.

00:45:36.000 --> 00:45:47.000 You know, that could be. If not, I doubt it would be entirely replacing the General Diesel requirement, but it could offset it significantly.

00:45:47.000 --> 00:46:04.000 And if there are other potential offsets we're absolutely willing to look at those and are looking at those price price point production become unprofitable Well, if you honestly, thought I would have a an

00:46:04.000 --> 00:46:09.000 accurate answer for that question. i'll apologize in advance.

00:46:09.000 --> 00:46:14.000 Jeff done is up, and Nicola Nip is on deck, Tom.

00:46:14.000 --> 00:46:19.000 First, I want to thank you for speaking with us. I have 2 quick questions.

00:46:19.000 --> 00:46:26.000 Number One Early in your presentation you talked about thinking globally and acting locally.

00:46:26.000 --> 00:46:44.000

So. if this finn aquif farm becomes a reality, does your company have any plan of how they can can or will distribute some of this protein to undevelop countries that need it.

00:46:44.000 --> 00:46:51.000 The most. Well, it's a great question and certainly worthy of of understanding and answer.

00:46:51.000 --> 00:47:00.000 I don't have an answer for you at the moment but you know I think you know, bringing the production of the

00:47:00.000 --> 00:47:08.000 High quality seafood to the coast of Maine, and then distributing to markets.

00:47:08.000 --> 00:47:13.000 You know, along the east coast. that brings it all closer.

00:47:13.000 --> 00:47:20.000 And brings the the the economic activity to to Hancock County.

00:47:20.000 --> 00:47:31.000 You know, if if there is opportunity that we should or need to contemplate expanding to other parts of the world.

00:47:31.000 --> 00:47:39.000 Well, it's a certainly a a conversation we ought to have Nicola.

00:47:39.000 --> 00:47:47.000 My second question quickly. Okay? yes. There have been reports not necessarily associated with your activity. 00:47:47.000 --> 00:47:59.000

Excuse me but that the State agencies and large of monitoring and controlling activities like this is woefully poorly financed.

00:47:59.000 --> 00:48:06.000 Has the proposals from American Aqua Farm included some type of financial support of those agencies.

00:48:06.000 --> 00:48:18.000 I you know I it it hasn't been part of the dialogue, you know it's very difficult when you're when you're an applicant in front of an agency to communicate with the agency

 $00:48:18.000 \rightarrow 00:48:26.000$ when I I started this role a little over a year ago, and the first thing I do is reach out to the Commissioner, and I should have known better.

00:48:26.000 --> 00:48:33.000 But he told me I can't talk to you I just want to meet with him and say, Okay, i'm here, I just want you to know who I am, etc.

00:48:33.000 --> 00:48:41.000 And and because that's what i'm used to doing but you know, he said, there's you have an active application.

00:48:41.000 --> 00:48:45.000 I got to put a wall. Okay, got it. I apologize.

00:48:45.000 --> 00:48:54.000 I should have known better. but that really, makes it difficult to, you know.

00:48:54.000 --> 00:49:08.000

Get a clear path in terms of how to proceed so you know I it's it's a challenge and you know we're that's part of what we're scratching our collective head about right now as

00:49:08.000 --> 00:49:16.000 we, you know, understand that understand what our options are having our applications rejected.

00:49:16.000 --> 00:49:25.000 Nicola is wrecking I will ask one of the questions that's on the chat page.

00:49:25.000 --> 00:49:33.000 Nicola. Thank you. yes, My name is Nikola, and I would just like to make a Tom a comment to you, Tom.

00:49:33.000 --> 00:49:51.000

You said that this technology, this closed Pen and technology that You're proposing, is used in Norway, and my understanding is that this particular scale is not used in Norway, because it does not meet Norway's Stricter regulations

00:49:51.000 --> 00:49:58.000 so it looks as though you're coming to maine because the regulations here are minimal and the water is clean.

00:49:58.000 --> 00:50:10.000 But I would also like to point out that it will not stay that way, because you will be discharging wastewater, and you may say it is not soon asage, but it will be full of urine and the

00:50:10.000 --> 00:50:17.000

nitrogen released from salmon gills, which are in the biggest problem and the most dangerous impact on the bay.

00:50:17.000 --> 00:50:21.000 As a recent hydrological study has shown which I'm.

00:50:21.000 --> 00:50:29.000 Sure You're aware of the bay does not flush and the wastewater will only build up, and the impact will be felt throughout Frenchman Day.

00:50:29.000 --> 00:50:37.000 So I just wanted to make that clear well first of all I've I've been here I didn't i'm not from here right

00:50:37.000 --> 00:50:42.000 I I was born in upstate New York but I came here for couple college.

00:50:42.000 --> 00:50:48.000 I've been here since 1978 so i'm i've been here a while.

 $00:50:48.000 \rightarrow 00:51:01.000$ The the the wastewater. you know they, if I think about the reading about the the cod fishery in Frenchman Bay in the 18 sixtys.

00:51:01.000 --> 00:51:07.000 My God! there was a lot of fish cod haddock halibut, you know.

00:51:07.000 --> 00:51:13.000 There was a lot of fish and fish tend to urinate in the water.

00:51:13.000 --> 00:51:27.000 So the the nutrient loading that our project proposes in context of what was is probably pretty tiny.

00:51:27.000 --> 00:51:37.000 And you know it. The it's nutrients you gotta have nutrients for algae and and seaweed to grow

00:51:37.000 --> 00:51:44.000 It's it's part of the natural system and you know ,

00:51:44.000 --> 00:51:50.000 I I just think that I do not believe that cod in 1860 was trapped in a pen.

00:51:50.000 --> 00:51:55.000 They were swimming wild, and they were swimming all over the coast.

00:51:55.000 --> 00:52:06.000 They were not trapped in a one i'm not disagreeing with you, but they were still in Frenchman Bay and you know the the there.

00:52:06.000 --> 00:52:12.000 They were densely populated in Frenchman day. It was a God city, you know.

00:52:12.000 --> 00:52:23.000 I look I. As for the the flushing model my understanding is that model has been presented.

00:52:23.000 --> 00:52:28.000

How are the results of the model Have been presented the the basis for the model?

00:52:28.000 --> 00:52:43.000 Has not it's inconsistent with the work that we've done but it's hard to to even discuss it positively or negatively, until we understand what the inputs are so you know I I I can't

00:52:43.000 --> 00:52:50.000 you know, if you just want an answer, and you want to use a model to support it, and you start with the answer you want.

00:52:50.000 --> 00:52:55.000 Then you just build the a model accordingly so you know I don't.

00:52:55.000 --> 00:53:09.000 I don't know how to respond to to to that point otherwise in the chat Page Gail Conrad asks, Is there some main location other than Frenchman's Bay, where you could locate your fish?

00:53:09.000 --> 00:53:18.000 Pants, You know I that that I said question a 1 million times it.

00:53:18.000 --> 00:53:34.000

You know the the locations were selected before my time, but I will say that the the assignment aspects of depth water, quality shelter, those fundamental aspects.

00:53:34.000 --> 00:53:40.000 That that make for the right location or the best location.

00:53:40.000 --> 00:53:45.000 Frenchman Bay was far in a way the best place.

00:53:45.000 --> 00:54:02.000 Excuse me and the the the it's it. Frenchman Bay represents waters of the State of Maine, and the activities that are permitted on the waters of the State of Maine are governed

00:54:02.000 --> 00:54:17.000 by regulation that is born a statute and and so you if and ultimately they represent the rules of what you can and can't do so If you're gonna invest 250 or 300 million dollars in a project

00:54:17.000 --> 00:54:27.000 you're gonna want to do it in the place that represents the attributes that will give it the highest probability of success.

00:54:27.000 --> 00:54:41.000 And if and then you're going to want to make sure that it's allowed within the laws of the State all of which are true in Frenchman Bay, I recognize Morgan Forney for a question Lincoln Millstein

00:54:41.000 --> 00:54:46.000 is on deck. I used to work with an alcoholic research center with salmon.

00:54:46.000 --> 00:54:57.000 What do you plan on doing and Have You done any studies regarding sea lice and the parasites and viruses that you have to treat the salmon in the pens?

00:54:57.000 --> 00:55:01.000 Yeah. Well, that's that's a fundamental basis of the close pen technology. 00:55:01.000 --> 00:55:18.000

You you you pump water from depth where it's cold and largely free of those pathogens or and or parasites, and and the the water is pumped up it into the pen, and then it's

00:55:18.000 --> 00:55:22.000 discharged, but also back down to depth. the

00:55:22.000 --> 00:55:31.000 The The idea here is that you avoid those things that occur in the shallow or warmer strata of the the water column.

00:55:31.000 --> 00:55:43.000 So have you done any research in Regards to the water you're pumping back at Depth, and how it relates to lobsters, because Prospect Harbor is a giant lobster fishing area i'm

00:55:43.000 --> 00:55:49.000 sorry I I didn't catch that lessons so i'm from Golesborough.

00:55:49.000 --> 00:55:54.000 The area there is incredibly lobster fishing dominated.

00:55:54.000 --> 00:56:01.000 Have you done any research regarding that wastewater, and how it affects boxers?

00:56:01.000 --> 00:56:17.000

To affect lobster specifically I Don't believe that any of that is part of the De P's discharge permitting process, but they have evaluated the the water chemistry inputs versus

00:56:17.000 --> 00:56:28.000 outputs at great length. and you know they're they're permitting process is very rigorous, and so you know it.

00:56:28.000 --> 00:56:47.000 You know, we? we've we've done everything we could could think of to follow that process that analytical process in order to pursue, and and hopefully eventually achieve permits that's all I can answer that's the only way I

00:56:47.000 --> 00:56:52.000 can answer your question. So you Haven't looked at the impact of your farm in regards to lobsters at all.

00:56:52.000 --> 00:57:04.000 Yeah, our firm in regards well, our farm in terms of its impact on conditions that may affect lobsters, but not on a lobster.

00:57:04.000 --> 00:57:14.000 Specifically that makes sense. Lincoln millstein to be followed by Mark Harris and then David Seaton.

00:57:14.000 --> 00:57:30.000

Thank you. can you hear me I I apologize because my i'll give it a try. It it's a little bit on and off. but we'll try our best to understand your question what one observation Thomas I think

00:57:30.000 --> 00:57:38.000 you're actually correct about the pollution at a Katie National Park.

00:57:38.000 --> 00:57:43.000 Great allows more than 4 million visits a year. 00:57:43.000 --> 00:57:47.000 And i've written about it, and they seem to not that much.

00:57:47.000 --> 00:57:55.000 But having sold that you seem to say well you're allowing them to pull it, so you should allow me to pollute

00:57:55.000 --> 00:58:01.000 So I I don't I don't know that that is a that is exactly what what what you've met.

00:58:01.000 --> 00:58:07.000 But I just wanna observe that I do you'd wanna have ask your question.

00:58:07.000 --> 00:58:16.000 Number one. Virtually every single operator, Aqua farms in North America has had accidents, and some of them quite severe.

00:58:16.000 --> 00:58:23.000 The only in water salmon farm or fish farm in Maine

00:58:23.000 --> 00:58:29.000 Had a pretty bad dial off last year, as the gentleman earlier mentioned.

00:58:29.000 --> 00:58:45.000

Accident out in Puget Sound, where they 2 and a half 1 million dollars to settle lawsuit, and then up in Canada, in Eastern Canada, the virtually every in water salmon form up there is has major

00:58:45.000 --> 00:58:51.000 accidents. so things break and the weather is getting worse it's not getting better.

00:58:51.000 --> 00:58:54.000 I wanted to kind of follow up on what Matt had had said.

00:58:54.000 --> 00:58:59.000 He he talked about a bond I don't know if that's the right way to go.

00:58:59.000 --> 00:59:04.000 But what contingencies, and I know the application with the De P.

00:59:04.000 --> 00:59:17.000 Indeed. Why are you to do this? What can contingencies have you built in in, in, in user thinking about when things well break and they will break?

00:59:17.000 --> 00:59:25.000 I I don't know how big it will be but you're talking about equipment in the middle of the of a bay with terrible weather.

00:59:25.000 --> 00:59:32.000 Things are gonna break a little bit about what? what continguces what you have already thought about.

00:59:32.000 --> 00:59:51.000 Yeah you know and and it's an important question right it's It's it makes me think sort of planes crash right. But I still fly I think that that you know we have over time engineering evolves and

00:59:51.000 --> 00:59:58.000

and you know, structural and physical components of engineered systems.

00:59:58.000 --> 01:00:11.000 You know I have been tried and in under various different conditions and uses, and you try and use the the materials and and the the use.

 $01:00:11.000 \rightarrow 01:00:24.000$ Utilize the engineering. that's gonna minimize the risk right so that you can say yes, planes are do crash from time to time.

01:00:24.000 --> 01:00:28.000 But it's infrequent enough that i'm still willing to fly.

01:00:28.000 --> 01:00:36.000 So that said in recognizing that stuff happens.

01:00:36.000 --> 01:00:43.000 How are you gonna respond if it does right? And And so you build in a response programs.

01:00:43.000 --> 01:00:51.000 And you know, for example, a boat boats all have fuel tanks.

01:00:51.000 --> 01:01:03.000 So if a fuel tank ruptures in and generators have fuel sources too, if be weather conditions are such that there's an accident, something happens.

01:01:03.000 --> 01:01:08.000 Have the systems in place, and even have the third party response.

01:01:08.000 --> 01:01:19.000 You know professionals on call so when they see the bad weather come, and they're they're on on scene, you know.

01:01:19.000 --> 01:01:41.000 I mean you build the systems in in as intelligent a manner as you can, and that kind of thinking has been going into the engineering of the facilities that that's about is as well as I can can explain that I I think we could all benefit from understanding

01:01:41.000 --> 01:01:52.000 your response programs what? one other question you mentioned capital investment of 200 to 300 million dollars for this project.

01:01:52.000 --> 01:01:58.000 Is that Is that like within the ballpark? Yes, Mr.

01:01:58.000 --> 01:02:01.000 Millstein, can we? I wanna give other people a chance.

01:02:01.000 --> 01:02:08.000 So. please put your hand up again, and we'll come back to you, Mark Harris, what's your question?

01:02:08.000 --> 01:02:19.000 Speaking of stuff happening, Tom, my understanding is that the pens extend about 3 feet above the water.

01:02:19.000 --> 01:02:32.000

So my my question relates to what happens when we have a noreaster, or just very high winds here, and you have swells of 5 at 6 feet.

 $01:02:32.000 \rightarrow 01:02:51.000$ That swamp depends, and the waste that's supposed to drop to the bottom is just flushed by the swamping out into the the bay, and and you could have many of your salmon escape as well into the

 $01:02:51.000 \rightarrow 01:02:59.000$ bay That's The the again the purpose of the closed pen is you have the net, and you have the a membrane on the outside.

01:02:59.000 --> 01:03:10.000 It's it's impervious the the the waste goes down into a sum in between and is pumped out the the ring.

01:03:10.000 --> 01:03:16.000 That's a meter above the the water surface is buoyant

01:03:16.000 --> 01:03:34.000

And so the the this the the structures not gonna get swamped, and it's also because the depth requirement for all the reasons that it's it exists.

01:03:34.000 --> 01:03:43.000 It it is, you know, 150 feet deep, and and the the solids go to the bottom.

01:03:43.000 --> 01:03:47.000 So the the waste is not going to just spill out

01:03:47.000 --> 01:03:53.000 I you know I i'm not sure I know how to better explain that.

01:03:53.000 --> 01:03:58.000 But the the ring that is at the surface is buoyant.

01:03:58.000 --> 01:04:02.000 I said that I would go to David Seaton next, and I will do so.

01:04:02.000 --> 01:04:07.000 And then after that I will read a couple of the questions that are on the chat. page.

01:04:07.000 --> 01:04:12.000 David Seaton. Thank you i'll leave my video off maybe I can stay connected.

01:04:12.000 --> 01:04:23.000 I'm gonna go back to the concentration of the fish that there is no way that codfish or any other natural fishery would be concentrated to the amount that you're going to

 $01:04:23.000 \rightarrow 01:04:34.000$ concentrate in these pens and in fact isn't it true that you're gonna have oxygen tanks on the pens that you can inject in the water because there'll be so many fish there will

01:04:34.000 --> 01:04:40.000 be times that they'll overwhelm the oxygen availability in the water Is that not true time?

01:04:40.000 --> 01:04:44.000

Well, Again You want to optimize the

01:04:44.000 --> 01:04:49.000 The conditions, and and certainly oxygen content is an important one.

01:04:49.000 --> 01:05:05.000 I think that if and i'm not expert, to the specific occasion but I think the Black Island die off resulted from, you know, a sudden depletion and oxygen, and of course that was an open pen situation.

01:05:05.000 --> 01:05:12.000 Maybe there are some predator, some seals, or something that really made the fish panic.

 $01:05:12.000 \rightarrow 01:05:27.000$ I don't know the answer, you're right in the pen specifically the the concentration of the fish is higher than you might see in in the water outside, but the number is more limited with respect to the entirety of the

01:05:27.000 --> 01:05:44.000 bay. you know it's it's contextual but yes, there the the conditions within the pen are going to be monitored for those you know life critical elements, such as oxygen, and we will have that on hand so that we can ensure

01:05:44.000 --> 01:05:51.000 that they're they're not depleted and they don't get into a situation where they're

01:05:51.000 --> 01:06:00.000 They're dying, Kate harris asked are the Atlantic salmon eggs.

01:06:00.000 --> 01:06:08.000 That American aquiferms proposed to buy from aquab bounty farms genetically modified eggs.

01:06:08.000 --> 01:06:17.000 No they are not, and yeah and and we're very specific about that.

01:06:17.000 --> 01:06:30.000 And the the the standardization in canada is different than in Maine, and the way aqua bounty does their testing and reporting is different than what you know.

01:06:30.000 --> 01:06:41.000 It's. I think that if I got aqua bounty I like to think that if I got the Aqua Bounty people into the same room with Dmr they could come up with some you know

01:06:41.000 --> 01:06:54.000 translatable common way of reporting these things so that we wouldn't have had that situation, I you know i'm just hopeful that that's a something we can pursue.

01:06:54.000 --> 01:07:04.000 But no, gmo is not part of the plan. Jeff Dunn is up next, and or Jen or Linda done is up next.

01:07:04.000 --> 01:07:06.000 Pardon me And then Lincoln Millstein.

01:07:06.000 --> 01:07:17.000 For a second question. Yeah, Yeah, it's my question I it refers to a previous questioner.

 $01:07:17.000 \rightarrow 01:07:34.000$

The questioner asked about regulations in Norway compared to regulations in Maine, and the question are implied that the regulations in Norway were strictter, and therefore Maine was a more favorable place to situate a

01:07:34.000 --> 01:07:51.000

Salmon Farm i'm wondering if that's true are the regulations different and less strict here, and if that's true, what are the differences, you know much like the way the aquabani reports

 $01:07:51.000 \rightarrow 01:07:57.000$ the gen genetic characteristics of fish eggs in Canada relative to the what the Dmr wants to see there.

01:07:57.000 --> 01:08:07.000 You know by and large, from what I understand that the equilibrium covers all the bases. it's just they they didn't do it in a format that was acceptable.

01:08:07.000 --> 01:08:18.000 So I mean yes, I I that I think it's safe. to say that the regulations in Norway are going to be different than they are in Maine. Whether they're stricter or not.

01:08:18.000 --> 01:08:32.000 I, I will say that the open pen technology is gradually being done away with in Norway and close pens are going to be what's required in the future.

01:08:32.000 --> 01:08:47.000 Another sister company of American aquifarms. pure cod was just give, gotten, just was given permits to pursue a project a cod project using close pens.

01:08:47.000 --> 01:08:55.000 I think I think we're We're seeing the same regulatory shift happening in British Columbia.

01:08:55.000 --> 01:09:07.000

You know, I think that there's just a an emerging recognition that the close pen technology is superior and and and should become the standard going forward.

01:09:07.000 --> 01:09:20.000 And this technology began in Norway, which is why you know where the the origin of the project was.

01:09:20.000 --> 01:09:33.000 So you know in terms of what's stricter I Norway has a long history of of this kind of economic activity.

01:09:33.000 --> 01:09:43.000 So it would stand a reason that they have a larger body of experience to base the regulations on. John Korea.

01:09:43.000 --> 01:10:01.000

On the chat says, Have you done a project of this nature or is this a first I'm going to jump to the I'm going to recall actually the previous comment that someone felt that perhaps this has been done in Nori but not to

01:10:01.000 --> 01:10:09.000 the not of the scale that you're proposing for me would you respond to them?

01:10:09.000 --> 01:10:22.000

You know, I know that the the technology has been used at a variety of scales in Norway, for you know, 30 or 40 years whether there's one that identically matches.

01:10:22.000 --> 01:10:27.000

This particular situation they're usually more restrictive fiords.

 $01:10:27.000 \rightarrow 01:10:38.000$ They may have more pens in different fiords, and in this particular case the conditions were appropriate are appropriate in a broader area of a larger bay, ie.

01:10:38.000 --> 01:10:47.000 Frenchman Bay. So you know, I think I I think it's an apples and orange is kind of a comparative question.

01:10:47.000 --> 01:10:55.000 But the use of the technology has been in place for decades.

01:10:55.000 --> 01:11:00.000 Thank you. Mr. Millstein, on the chat, asked, If this recording will be made public.

01:11:00.000 --> 01:11:08.000 The recording will be made available to those of you who participated in the in the session. Mr.

01:11:08.000 --> 01:11:13.000 Millstein, Do you have a further question? I think I had you on my speakers list for the next question.

01:11:13.000 --> 01:11:32.000

Yeah, I wanted to. Mr. Brandon, whether the your investors are still solidly supporting this idea, or as the Dmr rejection and the overwhelming protest of this project made them lose a little bit of confidence

01:11:32.000 --> 01:11:38.000 in the project. well, I certainly haven't communicated with all of them.

01:11:38.000 --> 01:11:56.000 I would say that they're you know play the they understand the evolving challenges of regulatory environment and and a shift in geographic location.

01:11:56.000 --> 01:12:10.000 I think that their willingness to invest in the project comes with a recognition that that it may take time.

01:12:10.000 --> 01:12:18.000 Tray, and Garra is recognized, and then I have a a chat question from mine at Weld. Hey, hey, Tom?

01:12:18.000 --> 01:12:28.000 Thanks for taking the time today. I just had, you know, when I look at this project I always kind of try to, you know, when you hear 66 million pounds.

01:12:28.000 --> 01:12:38.000 I try to put in context. So I just just in my mind you know I'm thinking Frenchman bay what is 66 million pounds and other speech fees.

01:12:38.000 --> 01:12:46.000 So just so, you know, like the Alaskan co-host, Salmon, harvest for the entire for all of Alaska.

01:12:46.000 --> 01:13:02.000

Was only 25 million pounds, so what you're gonna grow in Frenchman. Bay is 2 and a half times with the entire co-host. salmon harvest would be over thousands tens hundreds of thousands of square miles in

01:13:02.000 --> 01:13:15.000

Alaska. we always in mean, we think, about cocoa culture, cocoal culture, and it's global production which produces salmon on the East Coast West Coast and down in Chile they produce a total of 100

01:13:15.000 --> 01:13:27.000 and 30 1,000 metric tons. so this one site would be over half of the 20 production of of cook faculty culture globally.

01:13:27.000 --> 01:13:43.000 And And when I think of this, I I just keep on thinking that maybe Ransom's model or dilution of waste can't be accurate, and I know that university of Rhode Island and some other folks have come up with different

01:13:43.000 --> 01:13:59.000 models, and I know de P. have been looking at those. Is it possible that you know Ransom made a mistake, and that your business model is premised on, perhaps even in a negligent for projection for waste

01:13:59.000 --> 01:14:06.000 dilution. you know, when you you know you put in context right when you actually think of those numbers.

01:14:06.000 --> 01:14:12.000 These are huge numbers. Does it even make sense like? Does it pass the smell test?

01:14:12.000 --> 01:14:16.000

You know what I mean. I mean just just i'm not asking you to make a scientific determination.

01:14:16.000 --> 01:14:25.000 But just when you hear those numbers does it does it not make you think that maybe something's not right. great.

01:14:25.000 --> 01:14:39.000

Can you can you describe or characterize ransom's test I i'm not really technical on that, and I but I I know there are people on the call that can it's a it's a test of and I don't want to

01:14:39.000 --> 01:14:51.000 mischaracterize it it's not a test it's it's a test for a dilution of of waste in a flowing system like that or like a river you know like the like

01:14:51.000 --> 01:15:06.000 we're losing something at a state and it' be washed up to see whereas the the way that the base situation is is it's kind of the what ebbs and flows, back and forth so uses a different

01:15:06.000 --> 01:15:09.000 model and I I keep it I i'm sure there's people in the call.

01:15:09.000 --> 01:15:14.000 I could just describe it better than I and I would let Mr. Brendan try.

01:15:14.000 --> 01:15:19.000 And then if somebody can enlighten us on ransom tests, that would be great.

01:15:19.000 --> 01:15:24.000 Yeah, thank you it's you know it's a it's a computer.

01:15:24.000 --> 01:15:36.000

Simulate, simulate mathematical simulation of conditions, including tides and and deaths and and currents that are all you know, measured.

01:15:36.000 --> 01:15:44.000

And and so that is part and parcel of the parameterization of their model, their simulation.

01:15:44.000 --> 01:15:56.000

And then there are, you know, inputs such as concentrations and and of background conditions that are actual test results.

01:15:56.000 --> 01:16:15.000

And then, you know, based on projected inputs from the salmon and then the volume in the pens and dilution, and and that whatever the number was that that a previous caller cited for

01:16:15.000 --> 01:16:24.000 yeah, the the matt from motion. the volume that is discharged

 $01:16:24.000 \rightarrow 01:16:36.000$ And then, you know, understanding, the simulation is is made for what the concentration is in that, and all of that is is used by the De P.

01:16:36.000 --> 01:16:40.000 In their evaluation of of Oh, just what you described.

01:16:40.000 --> 01:16:58.000 Tray. and the Dp. has their own modelers on staff that understand the the the parameterization that is being proposed by the ransom modeler, and they work together to to you know so the dep can

01:16:58.000 --> 01:17:13.000

honestly say they understand what's what's what's. what the inputs are. and then they these are standard techniques that are used in in the science, and they these guys are modelers.

01:17:13.000 --> 01:17:17.000 This is what they do, and they understand what those techniques are.

01:17:17.000 --> 01:17:23.000 And they will dep will make their analysis based on that.

01:17:23.000 --> 01:17:30.000 And then, presumably there will be conditions that will validate that in time.

01:17:30.000 --> 01:17:37.000 So that the discharge of concentration of discharge is ultimately demonstrated to be. What is is?

01:17:37.000 --> 01:17:50.000

It is protected, projected to be so you know That's the process. Now there is a gentleman from the University of Rhode Island who says his model has a different result.

01:17:50.000 --> 01:18:00.000 The the specific inputs that that are used to to make that representation have not been shared to my understanding.

01:18:00.000 --> 01:18:06.000 And and so that's that that piece of it is is unknown.

01:18:06.000 --> 01:18:14.000 I think the reason we have this regulatory component of the process within the De P. 01:18:14.000 --> 01:18:18.000 Is because they have the expertise for this evaluation.

01:18:18.000 --> 01:18:39.000

And you know I, my participation in those discussions would indicate that there have been participating in it, and that I am not aware that they had any fundamental discomfort with the with the inputs or the

01:18:39.000 --> 01:18:52.000 results. So you know, this is a process. This is a a time honored analysis, analytical process within the the the regulatory agencies per view.

01:18:52.000 --> 01:19:00.000 And so I think that if Ransom was going to grossly miscarriage, I think the De P.

01:19:00.000 --> 01:19:05.000 People would pick it up pretty quickly. Next question will come from Ted Omera.

01:19:05.000 --> 01:19:13.000 I will follow with a question from the Chat page and Then We'll go to Linda Toedema. Wyland.

01:19:13.000 --> 01:19:18.000 Yeah, thanks, Mike. Not so much a question and i'm gonna have an opportunity next week.

01:19:18.000 --> 01:19:29.000

So I don't wanna take a lot of time Now but it's disingenuous to say that for instance, a united model that we decided the answer, and then had the public done Kristin kate is a physical

01:19:29.000 --> 01:19:37.000 oceanographer at the University of Rhode Island Graduate School of Oceanography, one of those prominent oceanography schools in the country.

01:19:37.000 --> 01:19:52.000

He has done work on on currents and and mapping for the National Oceanic and atmospheric administration all along the East coast he is someone who's whose credentials are impeccable the the modeling that

01:19:52.000 --> 01:19:57.000 American. Yeah, makes it sound like it's just like flushing a toilet.

01:19:57.000 --> 01:20:05.000 All this just kind of goes away Dr. kincaid's model, which is far more robust and far more detailed shows, in fact, the opposite.

01:20:05.000 --> 01:20:15.000

This waste concentrates in the bay, that in a very short period of time all the capacity of the bay to absorb additional nutrients and nitrogen is taken up.

01:20:15.000 --> 01:20:24.000

And then the next logical extension of that is that you see you grass dying off, and you see eutrophication, the bay. And you see algebraums, algae blooms.

01:20:24.000 --> 01:20:37.000

So yeah, in the core mixed model that American acid consult used. the The makers of the software admit that it is not suitable for title waters.

01:20:37.000 --> 01:20:42.000 It is used a lot in in rivers where there may be a discharge for one source that's all flushed down river.

 $01:20:42.000 \rightarrow 01:20:52.000$ It's not appropriate, even according to the manufacturer of the software for title from looking at title situations, which is what the modeling that Dr.

01:20:52.000 --> 01:20:57.000 King Okay, did so. i'll i'll have more to say on it next week, and more graphics.

01:20:57.000 --> 01:21:02.000 But it is a much more detailed, much more robust model, and it has gotten the attention of the dep.

01:21:02.000 --> 01:21:08.000 Thank you, hey? Thank you. Meredith Ackerstein asks.

01:21:08.000 --> 01:21:18.000 He first states that she's new domain into this issue and she asked, Are the Simon eggs that American aqua farms plans to use?

01:21:18.000 --> 01:21:25.000 Will they be locally sourced? and if not, why not?

01:21:25.000 --> 01:21:38.000 I I presume that's to me for some reason i'm losing my you can presume that it's to you in all cases the last one went to ted so anyway.

01:21:38.000 --> 01:21:46.000 Yeah. I Well, the the we identified 2 sources of eggs.

01:21:46.000 --> 01:21:49.000 One was Aquibani which is based in Canada.

01:21:49.000 --> 01:21:56.000 East. Yeah. Canada, East east from Canada, and then the other is the Usfda facility in Franklin, Maine.

01:21:56.000 --> 01:22:04.000 Our project includes a hatchery as well as the processing plant.

01:22:04.000 --> 01:22:22.000 The where wherever we get the eggs. Ultimately the goal is to raise root stock from those eggs, so that we can maintain a the the genetic consistency and and if we whether we get them from

01:22:22.000 --> 01:22:36.000

aqua bounty or the usfda we understand that we're to to meet the what it when we get to production goals to get that many eggs we're gonna have to grow them ourselves.

01:22:36.000 --> 01:22:56.000

From the seedst you know that that's a given us da can give us eggs they're only commercial So they are the supplier to cook, currently and only to cook aside from some research

01:22:56.000 --> 01:23:13.000

activities, we would enter into the same situation, so that the the the original feedstock would come from the Usda's facility in Franklin, or from the Aqua bounty facility all of which would be the cons consistently the same

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01:23:13.000 --> 01:23:23.000 strain genetically. so that we're we're not introducing any genetics that aren't that are inconsistent.

01:23:23.000 --> 01:23:26.000 So that is the goal. I hope that answers your question.

01:23:26.000 --> 01:23:38.000 Thank you Linda to demo while You're up hi I'm Linda Katma weeland and thank you for trying

01:23:38.000 --> 01:23:45.000 I've been sitting here taking copious notes and I have a couple of questions.

01:23:45.000 --> 01:23:58.000 And that for you a Mr. brandon you said that they're going to be 2 60 acre.

01:23:58.000 --> 01:24:12.000 That's what's gonna be covered by your enterprise. but that only can. Acres is going to actually have the salmon is my correct.

 $01:24:12.000 \rightarrow 01:24:21.000$ You you essentially. yes, the 60 acres. if you think about a rectangular area of 60 acres in the middle of that will be the pens.

01:24:21.000 --> 01:24:27.000 There are mooring lines that extend diagonally away from the pens that will occupy

01:24:27.000 --> 01:24:35.000 That's the the remaining 50 acres underwater so you know it's it.

01:24:35.000 --> 01:24:49.000 It won't prohibit people from boating across the top and given the currents of the bay it probably will prohibit any people. I'm the feedback i'm getting from blaststerman.

01:24:49.000 --> 01:25:01.000

Are that they're probably wouldn't want to put their traps in there, because with the currents moving to and fro, they're they're mooring the lines would likely get caught up but in terms.

01:25:01.000 --> 01:25:06.000 Of surface occupation. there would be 2 10 acre areas.

01:25:06.000 --> 01:25:17.000 That will be taken up by the pence. So the other part of my question is in that 10 acre space.

01:25:17.000 --> 01:25:39.000 How many salmon would be expected to live there it Okay, So if there's 60 million pounds, and there's 2 in a roughly 2 and a half pounds per fish, it'd be something on the order

01:25:39.000 --> 01:25:41.000 i'm i'm doing math fast and it's late in the day.

01:25:41.000 --> 01:26:01.000 1 million fish in, divided by 2 so in each 1 13 million fish over the course of a year, so you know they they will be cycled through. 01:26:01.000 --> 01:26:06.000 I'm trying to visualize it and i'm really having a lot of trouble.

01:26:06.000 --> 01:26:16.000 You say that? of course you're going to be farming them so all of them won't be there God willing at one time.

01:26:16.000 --> 01:26:30.000 So what is the expectation on a given our or day of the number of salmon in that pen?

01:26:30.000 --> 01:26:38.000 I'm gonna have to look that up for you I can't I i'm not i'm not i'll be making it up if I come up with an answer right now.

01:26:38.000 --> 01:26:46.000 It sounds like it's gonna be a heck of a lot that's a concern.

 $01:26:46.000 \rightarrow 01:27:06.000$ Oh, my other question, and is, is there a similar enterprise in the United States or Canada that we can visit and talk to those people.

01:27:06.000 --> 01:27:15.000 Doesn't have to be yours. it can be anybody's certainly the the the cook, agriculture open pens are

01:27:15.000 --> 01:27:30.000

They exist up and down the the coast here up into canada and as well as off Maine, i'm sure they'd be willing to talk to you close pence isn't that what you're going to

01:27:30.000 --> 01:27:34.000 be we're doing close pens our note close pence, to my knowledge.

01:27:34.000 --> 01:27:42.000 In in the Us. currently but that is what we propose.

01:27:42.000 --> 01:27:52.000 I have another question from Tom howard I haven't heard anyone talk about growth hormones or antibiotics.

01:27:52.000 --> 01:27:59.000 Never mind unconsumed food effluent on top of the regular fish waste.

01:27:59.000 --> 01:28:14.000

All of these things must be on the table, so why aren't they being mentioned on consume food that will be collected with the solid waste and taken out taken to shore, either composted or find some productive

01:28:14.000 --> 01:28:33.000

repurpose. And the reason for the the technology. the close pen technology is to try is to get reproduce or produce an environment where we don't need a lot of hormones and other

01:28:33.000 --> 01:28:37.000 pharmaceuticals to maintain a helpful environment.

01:28:37.000 --> 01:28:43.000 We are the taking water from depth and discharging it back to depth.

01:28:43.000 --> 01:28:53.000

And Try and avoid that shallow, warmer zone, where those issues exist.

01:28:53.000 --> 01:29:02.000 And Hershorn asks, Where states I am not an engineer, but, as I understand it, they use the core.

01:29:02.000 --> 01:29:07.000 Mix model for projections which is based on one way flow as from a river.

01:29:07.000 --> 01:29:16.000 The manufacturer itself says it's in its literature, that the model is not appropriate for tidal waters.

01:29:16.000 --> 01:29:24.000 Your comment. maybe Ted wants to take that one too I I don't I? You know I I don't have a comment on that.

01:29:24.000 --> 01:29:30.000 Okay, the last one on the chat is what is your plan for ice?

01:29:30.000 --> 01:29:33.000 Not long ago the bay would freeze over each winter.

01:29:33.000 --> 01:29:43.000 How does ice affect your farm? you know I I it's It's a good question, and again i'll go back to the engineering.

01:29:43.000 --> 01:29:51.000 I mean it it there's ice in norway and the technology comes from Norway.

01:29:51.000 --> 01:30:00.000 They They have incorporated these variables and can conditions into their engineering. You know I can validate that.

01:30:00.000 --> 01:30:16.000 That's part of it. But I I have a level of confidence, just like I do get on airplanes without looking at their engineering design and and you know, stress and and pencil analyses.

01:30:16.000 --> 01:30:21.000 But you know I I I can validate that I beyond that I don't have an answer.

 $01:30:21.000 \rightarrow 01:30:28.000$ We have one more hand raise, but we have almost $50\hat{A}$ min left in the session. That's okay.

01:30:28.000 --> 01:30:32.000 We can We can end early there's nothing against no nothing wrong with that crystal canny.

01:30:32.000 --> 01:30:39.000 I you're recognized so 2 questions one when you talk about close net pen.

01:30:39.000 --> 01:30:47.000 The feces, as I understand it, the water from that gets rung out and goes back into the ocean, and I know that's a very pedestrian way of looking at it.

01:30:47.000 --> 01:30:54.000 But is that not correct, Tom? That is correct. Fish P. in the water in the ocean? No.

01:30:54.000 --> 01:31:10.000 But from the feces it kind of gets twisted, and and those , the run off from that anything that gets caught up in the filter is taken to shore. and this disposed of the the nutrients the liquid part Yes, that is that is

01:31:10.000 --> 01:31:17.000 discharge just where next to the pens. It is discharge pump back to depth because we don't want it.

01:31:17.000 --> 01:31:23.000 We want to maintain the thermal strata, the existing thermal stratification.

01:31:23.000 --> 01:31:29.000 So. yeah, it it is pumped out at at the same rate effectively.

01:31:29.000 --> 01:31:37.000 That's what water being pumped in so you know we maintain a certain level of higher than the the surrounding water.

01:31:37.000 --> 01:31:50.000 Just keep everything in a positive pressure situation. but yes, it is the the characterization of sewage.

01:31:50.000 --> 01:31:55.000 So underneath those net pens when that water goes back underneath.

01:31:55.000 --> 01:31:59.000 In the State of Maine. They did away with the State Run dive program years ago.

01:31:59.000 --> 01:32:07.000 Would American aqua farms be willing to allow private divers under their pens to see what kind of damage is being done?

01:32:07.000 --> 01:32:19.000 You know we're not gonna stop people from diving and well, actually you can, because if you don't allow them to do that, it's trespassing, because you have your meters your mooring balls are

01:32:19.000 --> 01:32:24.000 at 35 meters from the Nap. Ps: Anything on that you own.

01:32:24.000 --> 01:32:27.000 Yeah, but our our plan is not to control other people's activities there.

01:32:27.000 --> 01:32:31.000 I mean we don't wanna be in a situation where people are unsafe.

01:32:31.000 --> 01:32:38.000 But that said, You know recreational activities other than where exactly where the pens are.

01:32:38.000 --> 01:33:00.000 Okay, good. Next next up is Carol Chappelle.

01:33:00.000 --> 01:33:06.000 Thank you. Bar Harvard resident here. Mr. Brennan, and one of your earlier slides.

01:33:06.000 --> 01:33:12.000 You have said that main people are being kept down. That may be a paraphrase.

01:33:12.000 --> 01:33:25.000

I was writing quickly. you are proposing putting these pins in a bay that is rich with current aquaculture production, very rich with lobster production.

01:33:25.000 --> 01:33:41.000

You are proposing putting these bins in a situation where Akkadia National Park provides an incredible tourism, development and financial resources to our committee to our community.

01:33:41.000 --> 01:33:49.000 Can you please explain to me? Main people are kept down. Thank you.

01:33:49.000 --> 01:34:12.000

Look. Nothing derogatory was meant by that I my my experience working in rural Maine is that economic opportunity doesn't spread inland all that distant. and when there's an object to bring economic vitality economic development to a

01:34:12.000 --> 01:34:33.000

rural part of Maine. i'm generally in favor of evaluating that on the basis of its merits And and so whether it's, you know, we we had a thriving paper industry, for many people you know millennock

01:34:33.000 --> 01:34:47.000 it was known as the Magic City right that thriving economy is gone, and and the vibrance of the economic vibrance of those regions has really suffered.

01:34:47.000 --> 01:34:54.000 And and so I think the economic opportunities for people that live in that area has suffered.

01:34:54.000 --> 01:35:08.000

So you know when it when I say that that you know we we need to replace those things mindfully of the future, and how we're going to deal with things and challenges like climate change, right?

01:35:08.000 --> 01:35:23.000

And I think we've got a lot of resources in this state. And I think that we have a lot of smart people. And I think that we can find solutions for our problems and also help the

01:35:23.000 --> 01:35:40.000

Our neighbors, , I would propose. that we already have an economically vibrant area here. that in my opinion, you're gonna hurt and Hofner is recognized.

01:35:40.000 --> 01:35:45.000 Yeah, If this is directly relevant to the economic factors that Mr.

01:35:45.000 --> 01:35:57.000 Brennan's talking about one you repeatedly American act form cites the 250 million dollar capital investment.

01:35:57.000 --> 01:36:04.000 My understanding much that is an equipment and and facilities that come from Norway.

01:36:04.000 --> 01:36:14.000 What percentage of what is the actual capital investment in Maine and relevant to the the previous question.

01:36:14.000 --> 01:36:23.000 We've never really gotten very specific answers on how many people will be employed, and what salary levels

01:36:23.000 --> 01:36:40.000 So those are yeah no and they're they're good questions, and as soon as we have a an active application, and we can start

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putting some actual numbers around those questions I think we're at a disadvantage,

01:36:40.000 --> 01:36:48.000 at this point you've had a year well, but our applications were just rejected.

01:36:48.000 --> 01:36:56.000 So the question before the rejection alright, I think we're done here, mike.

01:36:56.000 --> 01:37:12.000 Okay, Thank you, Mr. Grant. I if you crystal I had you had asked to post something or if you would send that to me.

01:37:12.000 --> 01:37:17.000 I'll would you would you want a screen share it I can pull it up.

01:37:17.000 --> 01:37:21.000 I have it right. I think I think this is really meant to be Mr.

01:37:21.000 --> 01:37:39.000 Brennan's, session to answer the question and perhaps if you could contact one of the folks that's going to present next week, and perhaps they can integrate your comments into theirs

01:37:39.000 --> 01:37:51.000 And I I it's really the only hand that's raised now, and i'd like to to to let it let her at least say it and you can decide whether or not you want to answer Linda. it's very it's very

01:37:51.000 --> 01:38:01.000 quick. How many What is the death right per year?

01:38:01.000 --> 01:38:13.000 Of the many salmon that will be in your pens rate per year, or per month, or per week.

01:38:13.000 --> 01:38:33.000

I just wonder how many do you have 20% you mean? Do you mean that die from harvesting, or for or from other reasons that just die for whatever reasons, maybe lack of oxygen may be disease, Maybe Maybe harvesting although I don't

01:38:33.000 --> 01:38:42.000 know why. Well, I I think that they they're all gonna die eventually, as we process them.

01:38:42.000 --> 01:38:50.000 But in terms of dying in the the pens or in the process of growing.

01:38:50.000 --> 01:39:01.000

That's not what we want to have happen and that's not the point of the close pen technology we want to replicate a helpful environment.

01:39:01.000 --> 01:39:11.000 So that the fish are happy and robust and and you know as they're growing, and and the the healthier.

01:39:11.000 --> 01:39:15.000 Their environment is the healthier they are, and the more we produce.

01:39:15.000 --> 01:39:25.000 Thank you, Mr. Brennan has asked that we conclude now, and i'm going to do as he wishes.

01:39:25.000 --> 01:39:31.000

So I thank you all if you have. If any of you have some comments about the format.

01:39:31.000 --> 01:39:36.000 Ways to improve it. my email is M. Hastings at Maine, M. A. I.

01:39:36.000 --> 01:40:06.000

And e dot E. d u and I welcome your your feedback on the format we've we've gone through a lot of material here in an hour and a half, and I thank you all for your participation Thank you Mike.