#### MAY 16, 2024 MAFAC MEETING (Virtual)

2 "Jocelyn Runnebaum" (3849817600) 00:00:07.760 --> 00:00:09.998 Okay, are we good?

3 "Barry PSMFC" (1394210816) 00:00:09.998 --> 00:00:15.064 Hey, Heidi, this is Barry.

4 "Jocelyn Runnebaum" (3849817600) 00:00:15.064 --> 00:00:18.268 Hey, can I just get a microphone checked? Can you hear me? Yeah. Yeah, thanks.

5 "NMFS OCIO2" (2603446528) 00:00:18.268 --> 00:00:26.266 Okay session stopped and recording started.

6 "Jocelyn Runnebaum" (3849817600) 00:00:26.266 --> 00:00:44.340 Thank you. I'll take it away. Alright, welcome back everybody for day two, just to recap for yesterday, I just wanna really thank everybody for, participating and speaking up and...

7 "Jocelyn Runnebaum" (3849817600)

00:00:44.340 --> 00:01:04.340

I'm seeing-there's a dog, it just confused me. He just looked over, I was like, what is that? A cute puppy. Thank you for bringing in your-oh it's the cat, yeah, thank you for letting us into your lives. So thanks everybody for joining again today.

8 "Jocelyn Runnebaum" (3849817600) 00:01:04.340 --> 00:01:06.750 Yeah.

9 "Jocelyn Runnebaum" (3849817600) 00:01:06.750 --> 00:01:25.830

Just to recap, Gabi provided these amazing notes, so I just wanted to sort of highlight some of the things that she pointed out for what we talked about yesterday. It seems like there's some commonality with the members and excitement to learn from each other.

10 "Jocelyn Runnebaum" (3849817600)

00:01:25.830 --> 00:01:43.140

It's really amazing that everyone brings such a unique perspective, which is really essential for MAFAC, and that there's a lot of interest in this science to policy connection. We heard from Sam and some others that there may be some general interest to coordinate.

11 "Jocelyn Runnebaum" (3849817600)

00:01:43.140 --> 00:02:03.140

With other federal advisory committees that are managed by the agency, when it's appropriate. This idea of succession planning and how to continue implementing long term projects with little to no funding into the future, really kind of kept coming up. And so we're gonna have a presentation today.

12 "Jocelyn Runnebaum" (3849817600)

00:02:03.140 --> 00:02:26.580

That will address some of the budget considerations that the agency has in mind right now. And thanks to Pat for beating this drum, that communication is super important, always and forever, especially quality to a communication.

13 "Jocelyn Runnebaum" (3849817600)

00:02:26.580 --> 00:02:44.580

So we, with a rocky start, managed to pass our recommendations on the seafood import monitoring program. So thank you everybody for your wisdom and enthusiasm there, and we're still.

14 "Jocelyn Runnebaum" (3849817600)

00:02:44.580 --> 00:03:04.580

We still need to discuss where to house the equity and environmental justice working group. It sounds like there's a lot of interest in continuing this group and figuring out where it can live. So I think there's some action items that maybe we can get to at the end of today and we'll compile.

15 "Jocelyn Runnebaum" (3849817600)

00:03:04.580 --> 00:03:24.660

Everything. I was catching up on email so I didn't totally check the questions that I had that. I was just reading through the intros this morning from what everybody provided for what they felt like they could bring to MAFAC.

16 "Jocelyn Runnebaum" (3849817600)

00:03:24.660 --> 00:03:40.140

And I was just really, really blown away by how comprehensive and inspiring this list is, of members and their expertise and interests so if that's something that.

17 "Jocelyn Runnebaum" (3849817600)

00:03:40.140 --> 00:03:57.150

Feels like it would be useful. I think it would be awesome if we could, share that internally with the members to keep our inspiration going. I think Jenni is gonna have-Heidi and Jenni have some remarks for us today.

18 "Jocelyn Runnebaum" (3849817600)

00:03:57.150 --> 00:04:17.150

Before we get started, but just to go over the agenda. Heidi's not gonna take a formal roll call, but she's keeping track of who's here so that we can mark it. We're gonna get reports from the [State] Fisheries Commissions. So I saw Bob-Bill's on-and Barry Thomas.

19 "Jocelyn Runnebaum" (3849817600)

00:04:17.150 --> 00:04:38.150

On, and not sure if David Donaldson will be here. Nope. Oh yeah, it's in my notes here. Okay, then we're gonna talk about the budget updates with Brian Pawlak. Then we're gonna have a little bit of a stretch break, and we're going to get a science update from Cisco and.

20 "Jocelyn Runnebaum" (3849817600) 00:04:38.150 --> 00:04:55.575 Melissa Karp, and then I think we're gonna have a recap and-oh, opportunity for public comment and then a recap and overview of the meeting. So Heidi, I think I'll turn it over to you.

21 "Heidi Lovett, NOAA" (314564608) 00:04:55.575 --> 00:05:01.199 I didn't have anything in particular to note, other than.

22 "Heidi Lovett, NOAA" (314564608)

00:05:01.199 --> 00:05:18.509

Rather than read the full privacy statement, it is on the meeting website. We try to post that every time now, and just a reminder to folks that may have young people in their homes or backgrounds to blur your background or choose a different background as necessary.

23 "Heidi Lovett, NOAA" (314564608) 00:05:18.509 --> 00:05:35.652

I just wanted to remind people of that and, I don't think I have anything else right now. I don't know if Jenni has something to add, but I think we're ready for the presentation. So.

24 "Jenni Wallace" (1034342912)

00:05:35.652 --> 00:05:54.259

I was going to thank-thanks Heidi. Can you all hear me? Am I good? So yesterday, Meredith during one of our discussions brought up the program plans that NOAA is working on. And, since we have a number of new members, I wanted to take a quick step.

25 "Jenni Wallace" (1034342912)

00:05:54.259 --> 00:06:22.429

Back and explain what these program plans are, as well as give you all a super quick update on where, in fact, we are with them and where we're going. So a number of years ago, the National Academy of Public Administration put together a number of recommendations for us, and one of them was related to program management. And I have the, the quote here, but they basically

encouraged us to implement stronger program management at our headquarters level. They asked us to.

26 "Jenni Wallace" (1034342912)

00:06:22.429 --> 00:06:48.829

Designate enhanced and elevate program managers to have responsibility for developing strategic plans, setting budgets, and providing program direction, and it should be done in close collaboration with, within our agency FMCs, which are our financial management centers, basically all of our, all of our different offices and external partners. So this NAPA recommendation came out and we in the Fisheries service are currently.

## 27 "Jenni Wallace" (1034342912)

00:06:48.829 --> 00:07:08.829

In the process of working on five programmatic plans, and these are thematic program plans. The one that has been talked about a lot at MAFAC, is our fisheries independent data acquisition program plan. We've kind of previously referred to it as the "survey" one, but in fact, it has been broadened out.

# 28 "Jenni Wallace" (1034342912)

00:07:08.829 --> 00:07:26.819

To get to that idea of independent data acquisition at large. We also have one related to consultations, so essential fish habitat and the Endangered Species Act, trying to be more coordinated in that area. We have one related to North Atlantic right whale recovery.

## 29 "Jenni Wallace" (1034342912)

#### 00:07:26.819 --> 00:07:46.819

We have one that is about considering IUU fishing, and then we have another one related to aquaculture. Each of these five program plans is admittedly at a different, at a different place, right? Some of them are a little bit further ahead because the program.

## 30 "Jenni Wallace" (1034342912)

## 00:07:46.819 --> 00:08:01.859

Is basically already kind of functioning and it's a matter of dotting eyes and crossing Ts. Others, like the aquaculture program, they've been going out and having listening sessions and really trying to get stakeholder feedback into, into putting their, their program plans together.

# 31 "Jenni Wallace" (1034342912)

00:08:01.859 --> 00:08:21.859

We know that MAFAC is very interested in, having a look at these and has been talking about how they, they would be valuable to, to you all. We're hopeful that we will be able to, to share them. I'm not going to give you a specific date, but I'm gonna say hopefully later this year.

32 "Jenni Wallace" (1034342912) 00:08:21.859 --> 00:08:41.859 We'll be able to at least share some of them with you. And at that point in time, we'll really be looking for your feedback as to, does this give you all our partners, some of the information that you have requested from us? And are these documents useful to you in, in that way as well? So.

#### 33 "Jenni Wallace" (1034342912)

#### 00:08:41.859 --> 00:09:04.439

So, that's the kind of question that we'll be asking when, when we share them with you later. Meredith specifically brought up the idea of, and we have talked about, is there a next tranche of program plans that we will start working on? We within the agency have batted around some additional topical program plans, but we are not.

## 34 "Jenni Wallace" (1034342912)

00:09:04.439 --> 00:09:24.439

Moving forward on any of them right now. We really want to finish the ones that we have and get some good feedback on them, dig into lessons learned as we went through the process of putting these, these together. So we are not at this time announcing or moving forward on any other program plans.

#### 35 "Jenni Wallace" (1034342912)

00:09:24.439 --> 00:09:51.349

So to that end, if there is an area that you all in MAFAC have identified that might be something that you have seen that would benefit from a program plan, I'm happy to take and receive that feedback. So that's the quick and dirty update. I just wanted to give-to make sure that everybody was on the same page. Meredith, hopefully that answered some of your questions for you.

36 "Jenni Wallace" (1034342912) 00:09:51.349 --> 00:09:57.943 And, I will pass it back to, to Jocelyn. Meredith.

37 "Jocelyn Runnebaum" (3849817600)

00:09:57.943 --> 00:10:14.167

Looks like she's jumping at the gun to ask a question. So I will say we will have time for a couple of questions and then maybe we can take it from there. Meredith, please. There we go.

# 38 "Meredith Moore" (1411130368)

00:10:14.167 --> 00:10:54.786

Sorry, hello. Thank you so much for the update. All I actually want to say is that I would really love for MAFAC to think about where, in which subcommittee et cetera, we should think about what those recommendations for other program areas that could benefit from that would look like. I think that would be a really important thing for us to try to identify because we have such a breadth of view into the various programs that the agency is involved in, but it-I think that would be really important for us to take a look at. So I just wanted to say I would love for us to put

together to find a way to put together some ideas for that and thank you so much for the update. Great.

39 "Jocelyn Runnebaum" (3849817600) 00:10:54.786 --> 00:11:15.692

Thank you. Anybody else popping at the bit to ask a question? Otherwise I'm gonna turn it over to Bob and Barry to give us the commission updates. Thanks.

40 "Barry PSMFC" (1394210816) 00:11:15.692 --> 00:11:20.219 This is Barry. Hopefully you can hear me, and sorry I'm on travel and I don't know how.

## 41 "Barry PSMFC" (1394210816)

00:11:20.219 --> 00:11:40.219

My connection will be working today, so I'm gonna stay off video in the hopes that it holds together, and I'm gonna jump in 1st just because of that, and then Bob will go 2nd, and Dave Donaldson was unavailable to attend today's meeting, but we usually sort of tag team on some of these things. You know, just from sitting in on the meeting yesterday and, and, and the intro.

## 42 "Barry PSMFC" (1394210816)

#### 00:11:40.219 --> 00:12:01.519

Of this meeting. I just. I wanted to talk a little bit about what the Commissions do and then some of our policy issues that we're working on and moving forward. And, and I'll just, you know, start out by saying there's three commissions, the Gulf, Atlantic, and Pacific Commissions. We're all somewhat different. We're all Commissions, but we all do operate somewhat differently.

## 43 "Barry PSMFC" (1394210816)

#### 00:12:01.519 --> 00:12:29.059

Bob can talk about, he has a more-he has regulatory authority that the Pacific Commission does not have regulatory authority, and some things like that. Within the Pacific State Marine Fisheries Commission, we have some big program. A lot of what we do is data management and a lot of program work, on behalf of the states and federal government, a lot of monitoring work, in-season data collection of fishery dependent data collection and things like that.

## 44 "Barry PSMFC" (1394210816)

## 00:12:29.059 --> 00:12:50.689

With that. We also do quite a bit of policy work. We have seats on both the North Pacific and Pacific Fishery Management Council. We do annual meetings where we develop resolutions across the states to push forward on priorities, and I'll touch on those a little bit in a minute. And we do a lot of coordination work across the states. We also have a big role to play.

45 "Barry PSMFC" (1394210816) 00:12:50.689 --> 00:13:08.609 In fishery disaster funding distribution, and I think Jamie Goen, as a new member, understands that well cause we she's right in the middle of that one right now. And so there's a lot of work going on there and we do have a lobby team at our disposal so we use our team when we go up on the hill to advocate for agency budgets.

## 46 "Barry PSMFC" (1394210816)

## 00:13:08.609 --> 00:13:28.609

In priorities on behalf of the states. So that's a pretty important piece that we have. Just in terms of updates, I, I think I mentioned it the 1st day, but we are in the process of adding Hawaii as a state to the Pacific States Marine Fisheries Commission. So that legislation has passed the state legislature, we're waiting.

# 47 "Barry PSMFC" (1394210816)

00:13:28.609 --> 00:13:48.179

On the governor's signature on that bill. Hopefully, that'll come sometime soon. And then, they'll be a member that's been I think envisioned since the original charter was developed in 1947, so a long time coming, but it'll be good to have all of the Pacific States as part of the Pacific State Marine Fisheries Commission, moving forward.

# 48 "Barry PSMFC" (1394210816)

## 00:13:48.179 --> 00:14:05.519

In terms of issues, just highlighting a few things. One, just budgets and working on grants. We do annually work with West Coast and Alaska delegations on a couple appropriations letters: one on the house, one on the Senate.

## 49 "Barry PSMFC" (1394210816)

## 00:14:05.519 --> 00:14:20.609

To advocate for NOAA Fisheries budgets, and our priorities related to NOAA Fisheries budgets. Those both have been completed and are both are pretty well aligned with you know some of the discussion that's occurred within MAFAC and the strategic planning and budget committee.

# 50 "Barry PSMFC" (1394210816)

# 00:14:20.609 --> 00:14:40.609

In terms of fisheries data acquisition, data modernization, things like that. One of the big issues we're dealing with right now that's been a challenge is just the lack of grant movement within the, within NOAA Fisheries. We at the Pacific State Marine Fisheries Commission is NOAA's largest.

# 51 "Barry PSMFC" (1394210816)

# 00:14:40.609 --> 00:15:00.149

Grantee, not [the] National Marine Fisheries Service, but NOAA's largest grantee. And we have not been able to receive a new grant from NOAA since last September, was the last time we received a grant. So some real challenges in getting grants moved through the system with the new grant system and the new business system. And that I've noticed has, has come up.

#### 52 "Barry PSMFC" (1394210816)

00:15:00.149 --> 00:15:17.339

With some of the senators and some of the appropriations briefing just recently as well. So we're really pushing hard to get some of the big fishery disaster funding both for crab and some of the tribal grants as well as our base operation grants, interjurisdictional fisheries and things like that through the grant system and moving forward.

#### 53 "Barry PSMFC" (1394210816)

#### 00:15:17.339 --> 00:15:37.339

I'm trying to do what we can to make that happen. Other issues we're dealing with that are priorities, you know, surveys, data acquisition continues to be a big piece. Data modernization continues to be a big piece, looking for near shore data on that data acquisition piece. So, you know, Jamie Diamond is.

#### 54 "Barry PSMFC" (1394210816)

#### 00:15:37.339 --> 00:15:57.339

In the middle of this of trying to get nearshore rock fish habits or survey data on our coast so that they can actually have better data for the stock assessments moving forward. Climate continues to be a big priority as an update, you know, those dams are in the middle of being removed. That's often credit to NOAA, NOAA Fisheries.

#### 55 "Barry PSMFC" (1394210816)

## 00:15:57.339 --> 00:16:29.479

Just for pushing on that with [Department of] Interior and making that happen and getting that done. There have been some, some hiccups along the way but that those projects are moving forward. So that's just a really great progress for California and Oregon. Marine mammals continue to be an issue, you know, that and we talked about that and talked about that in terms of subcommittee work of marine mammal deterrents, sea lions up and down the west Coast and sea line deterrents in the Columbia especially, and then the crab and whale entanglement. I know you know Right Whales get a lot of the news, but there's a tremendous amount of work going on with.

## 56 "Barry PSMFC" (1394210816)

00:16:29.479 --> 00:16:53.539

The dungeonous grab fishery and fixed gear fisheries on our West Coast to try to prevent entanglements with the humpback whales on the West Coast as well. So a lot of innovative work we're doing with vessel loggers, vessel locations and in the middle of distributing those voluntarily to fishermen to make sure we can track and then and be able to manage accordingly within those fisheries moving forward. And then the last priority piece I'll mention is.

57 "Barry PSMFC" (1394210816) 00:16:53.539 --> 00:17:16.609 We are just on the front end of working through the IRA funding and the some of that funding coming through the data modernization fishery information systems and some of the CEFI pieces that Sam mentioned out to the Commissions so that we can actually get some of that work on the ground and moving forward so doing what we can. So those grants are just in the beginning stages.

#### 58 "Barry PSMFC" (1394210816)

#### 00:17:16.609 --> 00:17:35.309

But the Commissions will have, I think, a big role in making sure that money is successful and hitting the ground and being efficient after on the landscape. So that's all I have for an update from the West coast. And I'll I don't know if you want to want to wait until questions at the very end. I'll just let Bob give an update and then we can maybe open up for questions then.

## 59 "Bob Beal" (470661632)

## 00:17:42.291 --> 00:18:13.169

You guys hear me? Yep. All right, great. Thank you all and appreciate the time. Sorry, I have not been able to log in the last couple days and participate in the MAFAC meeting I've been occupied traveling to other meetings, so that's how it goes sometimes. From the East Coast perspective-and thanks to Barry for sort of giving the larger perspective on how the commissions operate-you know, as, as Barry mentioned, we do at ASMFC have a bit different management authority and regulatory authority than the other Commissions. We.

## 60 "Bob Beal" (470661632)

## 00:18:13.169 --> 00:18:33.169

Can bring our states together, the 15 east coast states, and they decide collectively on how they want to manage one of our, one of 27 different species that we coordinate management for through ASMFC. And ultimately, if the states agree to something through our process and the state does not implement.

## 61 "Bob Beal" (470661632)

00:18:33.169 --> 00:18:49.349

Regulations consistent with what the Commission developed, that state with the ASMFC can notify the Secretary of Commerce and she can step in and actually implement a full moratorium on fishing for that species until.

## 62 "Bob Beal" (470661632)

00:18:49.349 --> 00:19:09.349

The regulations of that state in place are consistent with the ASMSC interstate fishery management plans. So it's a, it's a pretty heavy hammer and pretty, you know, high level of authority that Congress has given ASMFC compared to the other Councils, and there's a lot of history on why it.

63 "Bob Beal" (470661632) 00:19:09.349 --> 00:19:43.129 Is today at AMSC and now the other Councils, but a lot of it has to do with just the sheer number of states. We've got 15 states and to get them organized and, on the same page with something is just a lot more work. And if any one of those states sort of breaks camp and wants to do something different, then no one wants to, you know, the other states don't feel like they should be leaders in conservation when this one state's just harvesting above what they are, so, I can go into lengthy history about that if you want. But, you know, the other, other things that we have going on the East Coast. I've talked about these.

#### 64 "Bob Beal" (470661632)

#### 00:19:43.129 --> 00:20:15.259

Kind of in at high level at the last couple meetings is really, we have three drivers still: Marine mammals, climate change, and offshore wind energy development along the East Coast. And 90% of what we do have some link back to those [three drivers] one way or another really. On marine mammals, as Barry mentioned, Atlantic Right Whales are getting a lot of publicity and, unfortunately, the population is not in good shape. There's only 350 to 370 of those animals left and.

#### 65 "Bob Beal" (470661632)

#### 00:20:15.259 --> 00:20:43.519

And they're interacting with fishing gear and ship strikes are a problem and a lot of other things that we're working with along the East Coast. The ASMSC manage, they manage the American lobster fishery and the Jonas crab fishery, which are both fixed gear fisheries for the most part and have the potential to interact with Atlantic Right Whales. Each of the states from Maine down through Maryland are now receiving annual funds that move through.

#### 66 "Bob Beal" (470661632)

## 00:20:43.519 --> 00:21:03.519

Through ASMSC to support, whale research, everything from, on demand ropeless gear work, which is actually advancing pretty well recently and there's some promising gears that are out there and that have the potential to scale up to, you know, large scale.

#### 67 "Bob Beal" (470661632)

#### 00:21:03.519 --> 00:21:28.099

Operations similar to what the lobster fishery is along the East Coast. The states through ASMSC are using this money as well to do passive acoustic monitoring. Essentially we're trying to set up a grid from all the way from the Canadian border down through the mid-Atlantic region that will be, it's a combination of state, federal, academic, wind energy, BOEM, NMFS.

#### 68 "Bob Beal" (470661632)

## 00:21:28.099 --> 00:21:54.299

Offshore wind developers, a lot of folks have passive acoustic listening devices out in the ocean right now on the East Coast and we're trying to use the state money to kind of fill in the gaps, so there's a lot going on out there right now, but there are places that aren't sampled very well and

ASMSC in the States are gonna try to sort of plug those holes and make sure we know we get a sort of comprehensive grid along the whole East Coast, or at least the from Maryland North.

#### 69 "Bob Beal" (470661632)

#### 00:21:54.299 --> 00:22:14.299

This money's also being used for Plankton surveys, fly over surveys to count whales, ASMFC recently implemented a new provision that required all lobster vessels with federal permits to, have trackers vessel trackers in place at with a 1 min ping rate, so it's generating a whole lot of data on exactly where these.

#### 70 "Bob Beal" (470661632)

#### 00:22:14.299 --> 00:22:34.469

Vessels are going and what they're doing and with the 1-minute ping rate we're able to tell, you know, when they slow down to fish versus when they're steaming, and, you know, that, that tracker data has a potential to really shed a whole lot of light on where lobster fishing and jonas crab fishing are occurring along the East Coast. We don't, we've got some pretty.

#### 71 "Bob Beal" (470661632)

#### 00:22:34.469 --> 00:22:51.749

Precise data on where the fishery is happening now. And this new tracker data that that's coming in and we're getting tons of data is, you know, it's gonna be able to fill those holes and be able to tell us exactly where the, the fishery is occurring, and then the idea is we.

#### 72 "Bob Beal" (470661632)

#### 00:22:51.749 --> 00:23:11.749

We know where the fishery is occurring and through all these surveillance techniques, we'll know where the whales are and when they're there and we can obviously set up no-fishing zones or ropeless gear zones or whatever it might be in the future moving forward with all this additional information. So we're very much in the data collection mode right now and we'll move into with the federal government obviously into the.

#### 73 "Bob Beal" (470661632)

#### 00:23:11.749 --> 00:23:33.899

Atlantic Right Whale take reduction team process to dial in the regulations for some of the fisheries that we that we manage here along the East Coast. The climate change impacts as you know, everyone knows that the water along the East Coast is getting warmer, species are moving north, Northward and Eastward along the coast, and we're having to react to that. You know, we've got.

#### 74 "Bob Beal" (470661632)

#### 00:23:33.899 --> 00:23:53.899

The unique thing that we also have along the East Coast is three fishery management councils that have somewhat arbitrary boundaries between their jurisdictions and species are moving from one jurisdiction to the other. You know, take Spanish mackerel, for example. It is managed

by the South Atlanta council, but it's being caught all the way up through Rhode Island, which is the New England.

#### 75 "Bob Beal" (470661632)

#### 00:23:53.899 --> 00:24:13.899

Management council jurisdiction. So how did, you know, we're working ASMFC has all the states involved so we can, we can handle some of the allocation processes through our FMP process, but the councils have, you know, this difficulty with all their jurisdictional issues and we're working with the councils on that. So, you know, one of the.

#### 76 "Bob Beal" (470661632)

#### 00:24:13.899 --> 00:24:33.899

The other thing that we're seeing is changing in productivity for a lot of stocks here. The striped bass fishery, which is ASMSC, is one of our flagship species is overfished in the last five years of spawning success have been the lowest on record unfortunately. So we're in a process to rebuild striped bass and.

#### 77 "Bob Beal" (470661632)

#### 00:24:33.899 --> 00:25:02.029

And by 2029, which is hard to do when you have really low recruitment for the last five years. So there's some indication that, you know, the historically the Chesapeake Bay was far and by the largest contributor of striped bass to the coastal migratory population that would expand, expand from North Carolina, basically Cape Patterson all the way up to the Canadian border, and there's some evidence that the spawning contribution by the Chesapeake, maybe lower proportionately than it used to be in Delaware Bay.

#### 78 "Bob Beal" (470661632)

#### 00:25:02.029 --> 00:25:22.029

And other areas are picking up, and so we're, you know, but overall the productivity that stock maybe down. So we're trying to figure out, you know, what is it realistic to try to rebuild striped bass too? You know, we're linked to some of the historic highs and that may, we may not be able to get back there. We're, we're trying to figure that out along the way and it's a difficult process.

#### 79 "Bob Beal" (470661632)

#### 00:25:22.029 --> 00:25:42.109

You know, the other, another example of, of climate impacts on a species is the horseshoe crab. You know, ASMSC manages horseshoe crab, which is kind of an obscure species for fisheries management, but it's, you know, it is, it is used our horseshoe crabber used as bait in gill fisheries and fisheries and.

80 "Bob Beal" (470661632) 00:25:42.109 --> 00:26:02.109 Their eggs are an important food source for a migratory shorebird that is endangered. The birds call the red knot. They stop over and eat the eggs on the beaches, and mostly in the, in the Delaware Bay region. But, you know, that there's some indication that the timing maybe off, the crabs are spawning a little bit different times and the birds traditionally have come through here to eat them.

#### 81 "Bob Beal" (470661632)

#### 00:26:02.109 --> 00:26:21.059

We've also got climate change impacting where sea level rise has flooded some of the most important stop over beaches so that if the beach is underwater, the, the birds can't stop there and need eggs and horseshoe crab eggs obviously. So we're, you know, we're seeing a lot of different sort of manifestations of climate change throughout the species that we manage.

#### 82 "Bob Beal" (470661632)

#### 00:26:21.059 --> 00:26:41.059

And, you know, back to the lobster fishery, the Gulf of Maine landings were down a few million pounds last year and the question is, is that a climate driven, change for the Gulf of Maine, which, you know, that's a, the nation's most valuable single species fishery. So, you know, if that population starts.

#### 83 "Bob Beal" (470661632)

#### 00:26:41.059 --> 00:27:11.839

Are significantly changing in the Gulf of Maine. That's gonna be obviously a big economic problem for the coast of Maine given that so many communities are just linked to that, that fishery. Offshore wind is kind of the 3rd driver that I talked about. ASMSC is sort of tangentially involved with offshore wind. I wouldn't really say we're trying to stay out of it, but we might be trying to stay out of it a little bit. But we have, we are involved in, in a number of pieces of the offshore wind work here on the East Coast. One is.

#### 84 "Bob Beal" (470661632)

#### 00:27:11.839 --> 00:27:31.839

Is impacts on surveys. So you get there's large wind farms that are gonna be developed and some are already developed. There's a couple up and running and there's another one that's coming online pretty soon. And obviously once you put a lot of windmills out in the middle of the water, the survey, the ability to go into that area with.

#### 85 "Bob Beal" (470661632)

#### 00:27:31.839 --> 00:27:51.839

Large survey gear that we've been doing in the past is impacted. So how do we, how do we compensate for that? And, and do we use different gear inside that area that we haven't used in the past, and we're doing some pilot programs for hooking line work and other things and some fixed gear trap survey work and other techniques to try to figure out.

86 "Bob Beal" (470661632)

#### 00:27:51.839 --> 00:28:16.309

Out what's the best way to deal with the fact that we can't get into these areas where we've traditionally run our, or the federal government and the states have run their trawl surveys, so, that's gonna, that's a big project and a potential big, impact of the wind farms that that sort of diminished the science that we have and understanding of the fishery stocks. And the other area that we're a bit involved with on wind farms is compensation.

#### 87 "Bob Beal" (470661632)

#### 00:28:16.309 --> 00:28:36.309

And mitigation for commercial and for-hire fisheries that have been displaced from these areas. Some commercial fishing will be able to go on inside these areas, probably fixed gear, you know, lobster fishing and other things might be ok. We're not sure yet. But again, you know, large trawl gear and mobile gears and things like clam dredges and scallop dredges.

#### 88 "Bob Beal" (470661632)

#### 00:28:36.309 --> 00:28:56.309

that don't do well with underwater power cables laying on the bottom of the ocean, so, you know, we have to have to work through that. And so those folks maybe be displaced or their income is diminished or they have to steam a lot farther than they used to fish or whatever it might be, and we're working with the states and the developers in BOEM.

#### 89 "Bob Beal" (470661632)

#### 00:28:56.309 --> 00:29:22.249

To figure out what, what's the best way to administer some of the funds for compensation and mitigation. There, there, there's, there's efforts to put together and stand up a 3rd party administrator to do most of that work, but there's still some ASMSC involvement through data compilation and data access for some of the shared historic files for folks that fished in these areas and now maybe displayed so that they can characterize their past.

#### 90 "Bob Beal" (470661632)

#### 00:29:22.249 --> 00:29:48.599

Performance in those wind farm leases. So those are kind of the big drivers. A couple other highlights of sort of maybe recent how my morning's been going, is there's a couple of lawsuits that are going on that impact a couple of things I've just talked about. One is stripe bass, ASMSC being sued by charter boats and commercial interests because we, you know.

#### 91 "Bob Beal" (470661632)

#### 00:29:48.599 --> 00:30:08.599

We reduce their fishing opportunities and they're concerned that that's gonna have a, a, a, you know, significant impact on their profitability and their ability to, to, to pursue their fisheries. However, you know, as I said earlier, we're, we're, we've got to overfished stock that is the recruitment's been very low and we're trying to re, you know.

92 "Bob Beal" (470661632)

00:30:08.599 --> 00:30:13.049 Rebuild.

#### 93 "Bob Beal" (470661632) 00:30:13.049 --> 00:30:32.429

It's a thing to do when we're getting pushback from the industry and then the other is there's a lawsuit going on relative to vessel trackers in the lobster industry that I mentioned earlier, which hopefully would provide the data that we need to characterize where that fishery is occurring and overlay that with where the whales are. So there's concern that that's a, you know.

#### 94 "Bob Beal" (470661632)

#### 00:30:32.429 --> 00:30:52.429

There's too much information from the vessels and it's a, in, in, you know, impinging on their privacy of the, of the participants in the lobster fishery. So those are two, legal issues that we're wrestling with and on the, on the budget front, and I'm sure you're gonna hear a lot about a lot more about this under your next agenda item from, from Brian Pawlak.

#### 95 "Bob Beal" (470661632)

#### 00:30:52.429 --> 00:31:12.689

Is in the Northeast, there's in the president's budget, there's a proposal or there's a cut to cooperative research. There's ten FTEs that have been potentially canceled and that cooperative research program has been doing what we call the study fleet, which is a.

#### 96 "Bob Beal" (470661632)

#### 00:31:12.689 --> 00:31:32.689

You know, a group of, of fishers that voluntarily participate in a study fleet where they collect a whole lot of additional data, and we're trying to expand that to four higher fleet now, it's only in the commercial industry right now. And you know if that if that funding does go away, just the cooperative research program in the Northeast is.

#### 97 "Bob Beal" (470661632)

## 00:31:32.689 --> 00:32:06.049

Essentially gutted and which is too bad because that that data has been great and it's an area that the commercial industry in particular really trusts and really wants to be engaged with. And, you know, when we're, when trusted data disappears, it's kind of really bad for all managers and everybody in this business. So we're trying to push back on that. As Barry mentioned, we were able to lobby you up on the Capitol Hill and mention that. The other area similar to that is Interjurisdictional Fisheries Act. The President's Budget zeros that out. It's not a big sum of money, it's only about three million.

#### 98 "Bob Beal" (470661632)

00:32:06.049 --> 00:32:40.699

Million dollars, but it does provide some money to each of the states, each of the states then has to leverage that money and have state matching money, so \$3 million turns into \$6 million

and all the states and nationwide do a lot of really cool research with it and other things that. If it goes away, some small but really important data collection programs may go away with it. And then the other sort of timely topic is, you know, we're still wrestling here on the east Coast with overall diminished survey work. The fishery independent surveys at the federal level in particular are, you know, struggling.

#### 99 "Bob Beal" (470661632)

#### 00:32:40.699 --> 00:32:57.509

Going with funding and vessel, availability, the [R/V] Henry Bigelow, which is the federal boat that does a lot of the survey work in the Northeast is has been down a lot recently and been in the ship yard, which you can't do surveys from there. So.

#### 100 "Bob Beal" (470661632)

#### 00:32:57.509 --> 00:33:13.199

We're concerned overall about data collection. Biological sampling in particular in the Northeast is down about 50 % from historic levels, and that's already starting to impact stock assessments and as everyone knows, you know, less data equals greater uncertainty, greater uncertainty.

#### 101 "Bob Beal" (470661632)

#### 00:33:13.199 --> 00:33:32.669

Usually means reduced access to fisheries, which is not ideal. So we're trying to find ways to shore up the survey work and shore up the biological sampling here on the east coast. But it's as everyone who knows also it's a really expensive endeavor. So those are my highlights and happy to answer any questions with Barry if the group has any.

## 102 "Jocelyn Runnebaum" (3849817600)

## 00:33:34.442 --> 00:34:03.366

Hey, thank you both. I would note that we have a little bit of extra time with you all than maybe what we normally get because these are always super helpful conversations. So I saw that Kristina has a question or a comment. So we'll go Kristina, Bobbi, Tom, and then Hugh, and then Jaime Diamond or and Jamie Goen. Great. Awesome. Okay, Kristina, take it away. Hello.

#### 103 "Kristina Alexander" (2993122816)

#### 00:34:03.366 --> 00:34:20.549

Thank you both. Very interesting stuff. Barry, I had a quick question. You had said that the Pacific States Marine Fisheries Commission hasn't received a grant since in this fiscal year. Do you mean you haven't received funding or you haven't received the permission to do a project?

## 104 "Barry PSMFC" (1394210816)

## 00:34:26.346 --> 00:34:57.764

We have not received any new approved grants, so we can still draw down money for our existing grants, but we not received our new grants even from last year's fiscal year funds, like the Interjurisdictional Act fisheries money, not only has it been zeroed out into President's

Budget for FY25, we haven't received our FY23 funding for that program yet. Thank you. So that's just an example.

105 "Jocelyn Runnebaum" (3849817600)

00:34:57.764 --> 00:35:12.770

Thanks Barry. I think your travels are starting to take you into the underwater territory, so it's a little bit hard to understand you, but I think we might have gotten that. Kristina, did you, was it good enough?

106 "Kristina Alexander" (2993122816) 00:35:12.770 --> 00:35:17.311 Hasn't received funding for this fiscal year.

107 "Jocelyn Runnebaum" (3849817600) 00:35:17.311 --> 00:35:28.410 And maybe FY23 as well for one of the programs. Ok, Bob Bobbi, you're up next. Yeah, somewhat related to.

108 "Bobbi Hudson, Pac. Shellfish Inst." (3139179264) 00:35:28.410 --> 00:35:42.419

Thanks and hopefully Barry can answer, but maybe Bob can chime in as well. So yeah, thank you both for those updates. Obviously I am interested in the research side of aquaculture. I didn't hear either of you mention aquaculture.

109 "Bobbi Hudson, Pac. Shellfish Inst." (3139179264)

00:35:42.419 --> 00:36:02.419

I am concerned about the funding, as Barry mentioned, I have been aware of that, but what I'm seeing right now is the pilot projects that Pacific States and other groups have run have funded some really important research. My organization has received about \$2 million in, in recent years to.

110 "Bobbi Hudson, Pac. Shellfish Inst." (3139179264)

00:36:02.419 --> 00:36:26.129

Pull together groups looking at some significant issues like eel grass interactions and doing state-of-the-science workshops on that to give back to managers. We also have done what I think is pretty important work on emerging species like rock scallops and sea cucumbers and sort of developing techniques for hatcheries and grow out for these aquaculture species.

111 "Bobbi Hudson, Pac. Shellfish Inst." (3139179264)

00:36:26.129 --> 00:36:46.129

So these funding streams, particularly in my case through Pacific States, have been pretty important for development of aquaculture, and I'm not seeing those right now in any significant level, and then that consortia funding was sort of a one-time thing I understand, but it was a pretty big pot of funds that allowed us to do some, some expansive.

# 112 "Bobbi Hudson, Pac. Shellfish Inst." (3139179264)

00:36:46.129 --> 00:37:07.679 That's important work. So if you have any, input on that comment and ideas about where that might go in the future, if those research funding opportunities will come up again as it relates to aquaculture and not just these cooperative research entities that, that you did reference.

## 113 "Barry PSMFC" (1394210816)

00:37:10.346 --> 00:37:30.259

Yeah I'll try that, and can you hear me better? Yeah. Okay, that's ok. Yeah, so on the aquaculture, I'll just highlight Bobbi, you're right, the aquaculture pilot projects which were, that funding was congressionally directed a couple of years ago. My understanding is switching once that becames.

#### 114 "Barry PSMFC" (1394210816)

#### 00:37:30.259 --> 00:37:59.569

Not congressionally directed, NOAA has reorganized some of that funding in their budget, and some of that's going to the Aquaculture Opportunity Area analysis that's going on in Alaska and other places, but we are ramping down the pilot projects based on the lack of funding and Brian is maybe able to talk about that a little bit in the budget discussion so that it has been a challenge, but I mean we are basically ramping that down given that change in priorities. And I'm not aware of any sort of.

115 "Barry PSMFC" (1394210816)

00:37:59.569 --> 00:38:10.628

New funding other than the emphasis right now that funding coming through us to help organize some of the AOA planning work that's going on with Alaska right now.

116 "Bobbi Hudson, Pac. Shellfish Inst." (3139179264)00:38:10.628 --> 00:38:15.908Thank you, that's helpful for me to hear from you, Barry.

117 "Jocelyn Runnebaum" (3849817600) 00:38:15.908 --> 00:38:20.387 Great, thank you Bobbi. Tom, please go ahead.

118 "Tom Fote" (1036044288) 00:38:20.387 --> 00:38:36.810

It's good to see you again and I look at eels as one of the things that we should really be concentrating on because the United States Marine Fisheries Commission can act best than on a specific species when we look at it.

119 "Tom Fote" (1036044288) 00:38:36.810 --> 00:38:53.820 And my concern is with the slowing down of the Gulf Stream, that years like before the time is gonna be off. It can wind up instead of coming during the season when you expect the water in the streams to go up the streams that they're not gonna be able to go up.

#### 120 "Tom Fote" (1036044288)

## 00:38:53.820 --> 00:39:25.031

You also, if it collapses totally, how do, what are we gonna do about that? And I was wondering cause I brought up in two of the hearings I was at and most times board meeting the other day after I can bring it up for the 30 years I was sitting on and when we started realizing what climate change before, maybe it should be a useful pilot to basically see what we can do an immediate future on specific species.

## 121 "Bob Beal" (470661632)

00:39:25.031 --> 00:39:32.910

Yeah, Tom, you broke up at the end there, but I think you were, you're sort of talking about American eel and the Gulf Stream and the potential impacts on management.

#### 122 "Bob Beal" (470661632)

#### 00:39:32.910 --> 00:39:50.010

Yeah, American Eel is a really hard species to manage, you know, it's one mixed stock from the Canadian maritime all the way down through the Caribbean and Dominican Republican, Haiti, and Mexico and everywhere. And, and, you know, the, the.

## 123 "Bob Beal" (470661632)

## 00:39:50.010 --> 00:40:09.840

Fishing pressure throughout that range varies a whole lot. You know, we from Florida through Maine have indicated that the stock is depleted here on the east coast, and we have a very small yellow wheel quota and a, and a quite small glass eel or elvers quota as well. But you know, I that the.

## 124 "Bob Beal" (470661632)

## 00:40:09.840 --> 00:40:29.840

We've had those in place for quite a while. Actually, we just reduced the yellow eel quota, last week or two weeks ago. So, you know, but with that in with those relatively tight measures in place, the stock hasn't shown much of a response here on the east coast. So, you know, we're still trying to.

## 125 "Bob Beal" (470661632)

#### 00:40:29.840 --> 00:40:49.840

Assess it. We're working with Canada now on a sort of bi-national stock assessment that may show a little bit more information that, you know, we are, there have been some recent articles published about closing of glass eels, which are the, you know, small inch and a half, 2 " long, elvers that are very.

#### 126 "Bob Beal" (470661632)

00:40:49.840 --> 00:41:21.060

Valuable, they're shipped live over to Asian grow up facilities and aquaculture facilities, and they're worth, you know, literally \$1000 to \$2000 a pound some during some parts of the year. So, and we've heard that some numbers out there are up to a hundred and 50 metric tons of glass eels, which is a lot of baby eels have been shipped out of the US or out of the Americas, there's generic Americas.

127 "Bob Beal" (470661632)

00:41:21.060 --> 00:41:41.060

To Asian countries for grow-out. So if that number is true, I think that maybe a strong indication of where this sort of cryptic mortality is coming from and why we can't rebuild this stuff. But Tom I, you know, I take your point exactly that, you know, getting a whole or getting a handle on eel management is something we need to do a better job.

128 "Jocelyn Runnebaum" (470661632) 00:41:41.060 --> 00:41:52.828 Great, thank you. Hugh, go ahead. Great.

129 "Hugh Cowperthwaite" (1897219840)

00:41:52.828 --> 00:42:20.790

Thank you Bob. I appreciate the update, and I just follow on with a plug that we actually do have an eel farm here in Maine, the 1st one in the country that's trying to reverse some of that trend of exporting glass yields for grow out. And I've personally been through the facility a couple times and it's working. It's an RAS, land based system and it's, it's it's pretty impressive.

130 "Hugh Cowperthwaite" (1897219840)

00:42:20.790 --> 00:42:38.850

So just wanted to follow on Tom's comment there, but I was curious of the funding that you spoke about coming to, Atlantic States for, you know, vessel tracking and.

131 "Hugh Cowperthwaite" (1897219840)

00:42:38.850 --> 00:42:54.587

You know, ropeless gear, things like that. Is there any funding specifically targeted for non-invasive tagging efforts of whales themselves?

132 "Bob Beal" (470661632) 00:42:54.587 --> 00:43:00.510 Yet not, well, to, to your comment on eels, yeah, the American eel.

133 "Bob Beal" (470661632)

00:43:00.510 --> 00:43:18.990

Eel farm, aquaculture facility in Maine is, is unbelievable. If anyone ever gets a shot to go through there, you should absolutely do it. The owner, she's, she's brilliant and she does a great

marketing and that one facility that's about the size of maybe a smallish Walmart is able to grow more eel yields in a single year than the entire wild caught.

#### 134 "Bob Beal" (470661632)

00:43:18.990 --> 00:43:34.890

You know wild-caught yields along from Maine through Florida. So that gives you a scale of how successful she's been in her one, one relatively small facility, it's pretty impressive. So I agree with you there you on Whales, the money that's coming to us does we.

#### 135 "Bob Beal" (470661632)

00:43:34.890 --> 00:43:54.890

Are none of that money is going toward non-invasive tagging or tracking of whales. Some of the money, there's, additional funds through the Inflation Reduction Act that are, that are going to NOAA. And I think part of that money is being used for tagging efforts or exploring tagging efforts. I think the total there was.

136 "Bob Beal" (470661632)

00:43:54.890 --> 00:44:10.653

There's about 75 million of Inflation Reduction Act money going toward whale work. So the, the federal government's handling the, the tagging efforts.

137 "Hugh Cowperthwaite" (1897219840)

00:44:10.653 --> 00:44:21.750

Okay, thanks. I just to me seems like a, you know, if there's, if we're looking at right whales and there's 370 left, I mean it's.

138 "Hugh Cowperthwaite" (1897219840)

00:44:21.750 --> 00:44:39.510

It seems I know it's a daunting task, but I think we should push some efforts towards that, because it seems, there seems to still be a lot of question about where the whales are and where they're congregating and we know they travel somewhat in pods, but.

## 139 "Hugh Cowperthwaite" (1897219840)

00:44:39.510 --> 00:45:05.896

It seems like if, you know, if everyone's got a cellphone and they could go to an app that's called, you know, the whale app and they could physically see where some of these whales are, that would be pretty useful, at least with ship strikes and, you know, fishing effort. So, thanks Bob, I appreciate it.

140 "Jocelyn Runnebaum" (3849817600)00:45:05.896 --> 00:45:18.405Thank you Huge. As a fellow Mainer, that's a big topic up here. Jaime Diamond, please go.

141 "Jaime Diamond" (640132096)

#### 00:45:18.405 --> 00:45:33.710

Good morning from California for those of us on the West Coast. So hi, Jamie Diamond, in recreational fisheries on the West Coast charter fleet. But a.

#### 142 "Jaime Diamond" (640132096)

#### 00:45:33.710 --> 00:46:02.330

A frequent flyer, if you will, at the Pacific Fisheries Management Council. And, and I really appreciate Barry, your, your specifically calling out the intent on the nearshore sampling and surveying. It's, it's an incredibly important and missed area for the entire non troll sector, not just recreational, commercial as well, but really that is the bulk of where public.

#### 143 "Jaime Diamond" (640132096)

#### 00:46:02.330 --> 00:46:27.390

Access is, is in the nearshore, and if we aren't getting accurate data or any data on it, then, you know, we're, we're really not serving the people of the nation who access this fishery. What I really want to point out and this kind of goes for both coasts, and I've been talking with some folks at the Northwest Science Center about this, in regards to wind farms.

#### 144 "Jaime Diamond" (640132096)

#### 00:46:27.390 --> 00:46:47.390

And the historical surveys, like the west Coast trawl survey. We know these wind farms are going in. We know that the general area they're going to be going in and we know when pretty much when it's going to start. So now is the time to identify a.

#### 145 "Jaime Diamond" (640132096)

#### 00:46:47.390 --> 00:47:09.110

On it parallel area to start surveying now in addition to the standard areas, so then you can essentially like seem in, the new that that newer area once those, those zones get closed out for the construction and installation of.

## 146 "Jaime Diamond" (640132096)

## 00:47:09.110 --> 00:47:29.720

Of the wind farms and the importance of time series, as we all know, is such a big deal. So starting now before, before they're even there, before we're forced out of our normal area, I see as something that's that we really need to get going on. And.

## 147 "Jaime Diamond" (640132096)

#### 00:47:29.720 --> 00:47:54.020

And, and this, I mean the East Coast, they already have a bunch of these areas that have already happened. So, I love that you're looking at alternative ways to survey in that area, but then also identifying, you know, a parallel similarly habitated area for the species that you normally would have surveyed in that zone to.

148 "Jaime Diamond" (640132096)

#### 00:47:54.020 --> 00:48:18.990

Start continue your trial survey or whatever your traditional surveys are for that zone. But, but the urgency, on the West Coast is in that we have the opportunity now to start the time series before we're forced out of the area. So, just really getting, putting an emphasis on that, so we aren't stuck in a place where.

149 "Jaime Diamond" (640132096)

#### 00:48:18.990 --> 00:48:43.079

We're surveying and we say, we can't use that because we only have one year of data. We know it is coming. So I that's just my comment for both as far as the surveys and the importance of them. It is the idea of really thinking ahead and how to, how to move forward with what we have to deal with. Thank you.

150 "Jocelyn Runnebaum" (3849817600)

00:48:43.079 --> 00:49:08.621

Thanks Jaime. That might be a good conversation to have with Cisco as we talk about the science update. I completely agree that this is probably one of the most pressing issues that needs to get figured out ASAP. So I don't want to, I'm, I don't want.

#### 151 "Jaime Diamond" (640132096)

00:49:08.621 --> 00:49:15.358

It's in kind of both zones, but they had brought it up, so I just wanted to touch on it while they were while we still had them. Thank you.

#### 152 "Jocelyn Runnebaum" (3849817600)

00:49:15.358 --> 00:49:38.216

Yeah, I think they, maybe Heidi and Bob-Bob, did ASMFC put together a letter about survey and funding recently that kind of mirrored some of the things that MAFAC was asking for that might be helpful to share?

#### 153 "Bob Beal" (470661632)

#### 00:49:38.216 --> 00:50:06.480

We have not, you know, it is included in our, as a highlight for our appropriations request to the offices and appropriation staff that we have this year, but it's not really a formal letter, it's just a sort of couple paragraphs. But what we are working on is a larger project with the three East Coast Councils and the Atlantic States Marine Fisheries Commission to characterize the deficiencies in survey data up and down the East Coast. And then.

#### 154 "Bob Beal" (470661632)

00:50:06.480 --> 00:50:26.480

That's step one is, you know, describe where the problems are. Step two is describe the impacts of those problems. So how is this negatively impacting or positively impacting potentially any stock assessments or, you know, leading toward increased uncertainty which diminishes fishing, and then step three is kind of a management strategy.

155 "Bob Beal" (470661632)

00:50:26.480 --> 00:50:43.985

Evaluation type project to sort of describe what an ideal survey program for the whole East Coast and fishery independent and port sampling type program would look like. So we are working on that, but it's, it's gonna take a little while to pull it together. We haven't done it yet.

156 "Jocelyn Runnebaum" (3849817600)00:50:43.985 --> 00:50:54.105Okay, do you have a general timeline that might be optimistic for us to look towards?

157 "Bob Beal" (470661632)

00:50:54.105 --> 00:51:20.723

Maybe the Mid Atlantic Council is going to receive some IRA funding, you know, each of the Councils are able to apply for some money for under IRA and they're gonna, one of the projects that the mid is gonna work on is this project and we're gonna hire a contractor to help us all out. But it's still, I don't know, a year, maybe 18 months away before we have a really solid product.

158 "Jocelyn Runnebaum" (3849817600)

00:51:20.723 --> 00:51:38.205

Okay, thank you. Yeah, I think this is a, it's a pretty critical question. So thank you for raising it Jaime Diamond. Jamie Goen, I will go to you now.

## 159 "Jamie Goen" (266718208)

00:51:38.205 --> 00:51:54.570

Thanks Jocelyn, and thanks Bob and Barry for the updates. Really appreciate it. Jamie Goen with Alaska Bering Sea crabbers. And Barry I'm gonna spare you today because we're in weekly contact lately on disasters. I actually have a question for Bob. Good to see you again, Bob.

## 160 "Jamie Goen" (266718208)

## 00:51:54.570 --> 00:52:14.570

I appreciate your update on data collection in particular and you flagging concern over losing cooperative research funds. I think you said it well that those are important funds, they really build trust between industry on the science side. Another benefit I've seen recently given the.

161 "Jamie Goen" (266718208) 00:52:14.570 --> 00:52:41.630

The collapse of crab fisheries is those, that cooperative research has been critical for, being able to quickly get out on the water to do research. So to act nimbly in the face of climate change and changing ocean conditions, and doing that collaboratively between the government and industry. Do you have, do you see ways that affect could potentially help here or is this better to have a conversation with systems.

#### 162 "Jamie Goen" (266718208)

00:52:41.630 --> 00:52:48.527

A little later today. Just curious if you have thoughts on how we could help emphasize the importance of this.

#### 163 "Bob Beal" (470661632)

#### 00:52:48.527 --> 00:53:18.420

Well, I mean I think on this and it's good to see you again Jamie. It's been about a year now since we last had a presentation together. The, I, you know, MAFAC anything you can do to highlight the importance of cooperative research, either, you know, through these meetings when you're talking with Cisco or, you know, through some of the subcommittee work or whatever it might be, I think is really important. You know, we're, we're trying to do something similar to what you mentioned about the cooperative research.

## 164 "Bob Beal" (470661632)

## 00:53:18.420 --> 00:53:34.920

Capacity that can go out and quickly do research on the east coast. As I mentioned, the survey vessel in the Northeast has been down a lot in the recent, in recent years and we're trying to do some pilot studies where we use the commercial platforms to do, to try to pull the same gear basically that the federal boat.

#### 165 "Bob Beal" (470661632)

#### 00:53:34.920 --> 00:54:04.803

Uses in their surveys and if the federal vessel is down, we can call on some of these industry vessels to help out and, and cover some of these areas. It's, it's a little bit different because the industry boats aren't big enough to house the full scientific staff, so they can't work 24 h a day, but we can, something's better than nothing. So I think any opportunity of, of highlighting the importance of cooperative research is, is please take advantage of it. We'll do the same on our end.

## 166 "Jocelyn Runnebaum" (3849817600)

## 00:54:04.803 --> 00:54:21.550

Thank you Jamie Goen for raising that issue. Also, another very important topic, and one that I know is near and dear to Clay's heart. So Clay, maybe you have something else to say, but please go ahead. Yeah, thank you.

## 167 "Clay" (244098048)

## 00:54:21.550 --> 00:54:47.250

Jocelyn, yeah, again, toward the support of cooperative issues research out in the islands here especially for our tuna regional fisheries. We've been, our organization has been involved in over 13 years of survey sampling, working with NOAA, and I can't say enough about it. I mean if you look at even at COVID in 2020, we're only one of three surveys across the nations to be completed.

# 168 "Clay" (244098048)

00:54:47.250 --> 00:55:04.080

Because we work with individual fishing and individual vessels, following all the COVID protocols were able to complete it that year and I think that that speaks for itself in terms of data streaming and the, what can be done with the corporative fisheries research for us.

#### 169 "Clay" (244098048)

#### 00:55:04.080 --> 00:55:21.630

You know, our model has always been fishermen should be part of the solution, not the problem. And I think that is the evident in the work we've done and how we built our organization because really it's about the fishermen. If like one of our AP members had said no fishing, there is no management Council, there's no scientists.

## 170 "Clay" (244098048)

## 00:55:21.630 --> 00:55:37.440

There's nothing it evaporates so supporting officials really important out here and I just can't see enough, and with you know the news of from what Barry talking about expansion for them coming out here and he.

## 171 "Clay" (244098048)

#### 00:55:37.440 --> 00:55:54.690

Funding Hawaii in this, any effort to support management and get, you know, us on the right track. I mean, I think in addition to the list that he provided marine mammals or wind energy, we, we've overcome and we're, we're battling those issues. In addition to that.

## 172 "Clay" (244098048)

#### 00:55:54.690 --> 00:56:11.940

We have been battled by expansion and loss of our EEZ in terms of, you know, in term in terms of government issues with expansion of in which way he lost 75 % of its EEZ.

## 173 "Clay" (244098048)

## 00:56:11.940 --> 00:56:30.810

I mean, that's ridiculous. We, we, we've lost I think over 50 % of our fishing grounds, we lost our only commercial lobster fishery. Now we have we're facing access in terms of the remote island areas and with American so more and the possibility of.

## 174 "Clay" (244098048)

#### 00:56:30.810 --> 00:56:45.930

Them expanding that they're easy to close their grounds which would close one of the only canneries in in the US and in that area. And so, yeah, really, really need support and help in, in the islands. I mean.

175 "Clay" (244098048) 00:56:45.930 --> 00:57:13.625 You know, we support conservation, but it needs to be balanced. When you lose that much of your areas and potential areas to fish, it really hurts the, the people, the communities out here and hopefully, with upcoming and maybe future protocols, maybe some of that will be addressed, but thank you.

176 "Jocelyn Runnebaum" (3849817600)

00:57:13.625 --> 00:57:24.807

Thank you Clay. Barry, I don't know if you have any response that you wanted to offer, if you wish.

177 "Barry PSMFC" (1394210816)

00:57:24.807 --> 00:57:59.270

Yeah, I mean I can jump in. I know Clay makes a good point about the cooperative research and how to how to expand and how we can help and I think that is one of the benefits of why joining the Commission so we can get those issues on the table and be a better across the Pacific. Just highlighting too, I think on the cooperative research and the charter survey vessel issues, another piece to highlight which really gets to Jaime Diamond's issue as well is that we do have the capacity of pretty nimble capacity to get charter vessels in place and that's a way that you can.

178 "Barry PSMFC" (1394210816)

00:57:59.270 --> 00:58:18.629

Used to sort of expand that survey effort or sort of dual survey effort in near term if you have resources for it to help double up on the surveys and test out some of those components. So I think that's just another place to, to highlight the cooperative research and the charter survey vessel work and how important that is across the different areas.

179 "Jocelyn Runnebaum" (3849817600)00:58:18.629 --> 00:58:31.966Great, thanks. Ok, we have about 4 min left, so I'm gonna go to Brett for the last word.

180 "Brett Veerhusen" (1199368704)00:58:31.966 --> 00:58:48.300Great, thank you. My thought was maybe just to pick up for a few minutes where I got short changed yesterday, no offense. We had other big things going on, but.

181 "Brett Veerhusen" (1199368704) 00:58:48.300 --> 00:59:08.300 Just a little bit about the letter that the strategy\_stra

Just a little bit about the letter that the strategy, strategic planning and budget committee put together and I'm going to look at Heidi, especially and how I phrase this, but that.

182 "Brett Veerhusen" (1199368704) 00:59:08.300 --> 00:59:39.620 Letter is open to the public, and, can be used for educational purposes to whomever, and, personally, that was something, a tool that I was able to use, in a separate capacity from MAFAC to educate on the need, what's that stake for.

183 "Brett Veerhusen" (1199368704)
00:59:39.620 --> 00:59:59.130
Is nationwide and the people I talked with found it very helpful cause it's a little bit of a history guide, and then kind of clear direction on what we're seeking. So friendly plug.

184 "Brett Veerhusen" (1199368704)
00:59:59.130 --> 01:00:15.060
We might not need to wait for a year, though, it will be helpful for, the Commissions to put whatever their letter is coming, but yeah, just wanna.

185 "Brett Veerhusen" (1199368704)01:00:15.060 --> 01:00:32.402Offer that within the confines of a FACA. Did I Did I get that right, Heidi?

186 "Heidi Lovett, NOAA" (314564608)01:00:32.402 --> 01:00:40.367You didn't overstate anything, I guess, is the best way to put it? Great. Okay.

187 "Jocelyn Runnebaum" (3849817600)
01:00:40.367 --> 01:01:11.442
Maybe we can make sure that the new members get the letter that make that put together I think it was for November, that last November, requesting long term strategic planning for, surveys and I guess overall budget and highlighting the importance of the surveys to everything that NOAA Fisheries does.

188 "Brett Veerhusen" (1199368704)
01:01:11.442 --> 01:01:26.690
Yeah. Oh, on every side recreational fishing, commercial, subsistence, critical for all facets of MAFAC.

189 "Brett Veerhusen" (1199368704)
01:01:26.690 --> 01:01:44.970
We put a lot of time, a lot of intentional, intentional words, and in the work plan that we sent around, there is a hyperlink to the letter as well as the NAPA report.

190 "Brett Veerhusen" (1199368704)

01:01:44.970 --> 01:02:04.970

Happy to send those separately. I will say it's a little dense, it's a, it's a dense committee, but we are lucky to have Katie, now having a, a short detail at.

191 "Brett Veerhusen" (1199368704)

01:02:04.970 --> 01:02:38.821

OMB to teach us and just fill in the gaps, especially now that we don't have Stefani who helped lead a lot of that pretty high level bureaucratic work that I found very enjoying, enjoyable. So, anyway, it takes a village. We're learning, it's making its way up to the secretary and, I have used it in a separate capacity for other purposes of education.

192 "Jocelyn Runnebaum" (3849817600)

01:02:38.821 --> 01:02:55.800

Great, thanks Brett. Ok, I'm gonna close out this session and say thank you so much to Barry and Bob. These conversations are always super enjoyable and I think they're super important to.

193 "Jocelyn Runnebaum" (3849817600)

01:02:55.800 --> 01:03:22.214

Connecting state and federal activities, so I appreciate you being with us and sorry that we missed Dave today. So now I think we are going to Brian Pawlan, for our budget update and outlook. Brian I saw you come on. There you are. Hi, welcome.

194 "brian pawlak" (901270272) 01:03:22.214 --> 01:03:26.886 Hello, can you hear me alright? We can. Excellent.

195 "Jocelyn Runnebaum" (3849817600) 01:03:26.886 --> 01:03:35.110 This is one of my favorite conversations at every meeting, so I will let you take it away. Okay.

196 "brian pawlak" (901270272)

01:03:35.110 --> 01:03:53.040

Good. My favorite point of MAFAC as well. Or maybe my favorite one is right at the end when all the questions are done and hopefully we'll tried to answer them all. Well, appreciate the invitation to present again here and on budget. I was on most the last half hour or so, so I heard a lot of.

197 "brian pawlak" (901270272) 01:03:53.040 --> 01:04:11.250

Questions on budgets and specific things raised that I think a number of those things will, they might not get to the exact answers resolutions you'd like on, you know, kind of additional funding for surveys and, all of that, but there definitely I think some information here which at least will give some framing and context for.

198 "brian pawlak" (901270272) 01:04:11.250 --> 01:04:31.250 Component of the things I just heard in the last 30-40 min of you guys and concerns and, areas of discussion that you've just had, including survey mitigation for wind, but we'll talk about that a bit where we sit with some opportunity for new funds or requests for funds there to address that. So, so again.

## 199 "brian pawlak" (901270272)

## 01:04:31.250 --> 01:04:55.640

Quick invitation. What I plan to do here is kind of the big budget overview, kind of the one on one a bit where we are in FY24 and what FY25 Pres[ident] Bud[get] is looking like. And then I know from yesterday's conversation, I think several people had asked and that we touched on how does Salton-Kennedy Grant program work? So when I get through kind of the overview here, I assume there's time and I've got a couple.

# 200 "brian pawlak" (901270272)

# 01:04:55.640 --> 01:05:22.040

Those slides that we can walk through Salton-Kennedy and how that's resourced and where those funds come through and talk about that as well. And that's kind of just again another two tutorial, there's a lot of misconceptions how that that funding line works. So again, appreciate the invitation, and if we go on to slide two here, this is the next slide, yeah, there we go, thank you. I know I think there was a.

# 201 "brian pawlak" (901270272)

## 01:05:22.040 --> 01:05:46.580

Good number-eight, nine, or ten folks-that are brand new to the group. I don't know if that means they're brand new to federal budgeting, but I'll, I'll do a little bit of, pacing here to make sure folks understand how the federal budget process works and where we are in that process. And, and this is a slide that those who've been coming here for years have probably seen many times, but it just helps to outline where we sit in the federal budget timeline and the process for the federal budget. So.

# 202 "brian pawlak" (901270272)

## 01:05:46.580 --> 01:06:11.490

Looking by year here, the rows represent where we are in budget year. So FY 24, we're right here the kind of the big green flag there, the dollar signs. We have a budget, we're operating in FY24, we have an FY24 budget. Stepping back in that same FY24 row there, but you can see as we had a number of months.

# 203 "brian pawlak" (901270272)

## 01:06:11.490 --> 01:06:30.360

Almost the 1st full 1st two quarters under CRs-continuing resolutions-so that's where we do not have the budget enacted, NOAA budget in place, but we were going on past year's obligation levels, and so it leaves uncertainty. It leaves us a challenge in executing funds, and that.

204 "brian pawlak" (901270272)

#### 01:06:30.360 --> 01:06:49.890

Budget was passed though, you know March we got an active budget, but some of the detailed process for how federal dollars and budget gets executed, you know, even with that passing of the budget, you know, early spring, late winter, it, it takes us a good month if not two, to have dollars actually available.

#### 205 "brian pawlak" (901270272)

#### 01:06:49.890 --> 01:07:09.890

In the budget current budget year to spend. We have to put spend plans together, we have to get apportionments approvals from OMB, we have to get allotments. So I know as there's often discussion particularly with the Commissions, and the Regional Councils, and folks expecting grant awards from us, like, hey, where, where's the funding?

#### 206 "brian pawlak" (901270272)

#### 01:07:09.890 --> 01:07:33.890

You know, even without any challenges of technical issues or system changeovers, it, it can take us quite a while in any current budget year to get funding out the door. So quickly over kind of where we sit in any federal budget timeline, we're usually always dealing with three budget years at any given time. So you can see right where we are in the budget, big orange line FY24, we're executing.

#### 207 "brian pawlak" (901270272)

#### 01:07:33.890 --> 01:07:53.460

In an acted 24 budget. FY25, we're waiting for Congress to make a decision and get together on conference marks and hopefully pass or give us an indication of where the budget will sit this summer. So typically summertime of the calendar year you're in.

#### 208 "brian pawlak" (901270272)

#### 01:07:53.460 --> 01:08:13.460

You start getting feedback and information from where they are sitting based on the House earmarks and what they're thinking they might be doing for the next fiscal year. On the planning cycle, so thinking out here the FY26, the 3rd row down here, we are in the middle or the start really of but presence budget form.

# 209 "brian pawlak" (901270272)

# 01:08:13.460 --> 01:08:30.930

You know we have no direction, no guidance and starting to put together FY26 proposals. So it starts really early, maybe more early than those kind of not deep in the process might know. So we're, we're really three budgets all the time.

#### 210 "brian pawlak" (901270272)

#### 01:08:30.930 --> 01:08:50.930

And they're overlapping. I think can get confusing as folks talk about budget cuts, budget reductions. One of the 1st things I was doing, someone asked me a budget question or I hear

folks asking where does the budget stand and how's it looking? It really depends what year you're in and what phase of the budget you're in, right? Because the Pres Bud.

## 211 "brian pawlak" (901270272)

01:08:50.930 --> 01:09:13.070

It might be asking for large increases in here, but you might get an enacted budget that those doesn't reflect those increases. So you get a lot of people talking about budget numbers, I think the best way to anchor into what are they talking about and how that might impact me or where that is understanding where it is in the process. You know, are you talking about your budget planning number? Are you talking about a President's Budget request?

## 212 "brian pawlak" (901270272)

01:09:13.070 --> 01:09:28.200

Are you really talking a house earmark? Are you talking an enacted budget? I think just it's helpful for trying to keep track of where you are and in any planning scenario. If you go on to slide three.

## 213 "brian pawlak" (901270272)

## 01:09:28.200 --> 01:09:49.500

I really just same graphic here and we I've shared this I think back in the November meeting, just sharing again here for me, those are new and, you know, folks were just talking about engaging in the process and some of these letters that have been going around which we always appreciate support and acknowledgement of the benefit of our programs to all our constituents.

## 214 "brian pawlak" (901270272)

## 01:09:49.500 --> 01:10:09.500

But what's the best opportunities for engagement and when? So I think given the cycle I just laid out on the previous slide of where we sit in any budget process, here's just kind of a bit of a mapping of where's the best opportunities for FY26. So if you're, if you're working with NOAA, talking to us like we have been the last couple of meetings talking now, if you're.

## 215 "brian pawlak" (901270272)

## 01:10:09.500 --> 01:10:40.160

Talking FY 26, the best time for engagement was, was probably some of the stuff we did in November, right? So we can start putting into our planning. We're still in budget formulations so that's not over. But if you're gonna be, engaging with the Hill, that best time for engagement is really before they get to their house incentive marks. So if you're, if you're looking at engaging on FY 25, before the house incentive start meetings, start having their negotiations, start setting their budgetary caps within their committees.

216 "brian pawlak" (901270272) 01:10:40.160 --> 01:10:57.900 That's the best time. If you if you're, if you're, if you missed kind of the spring summer window, for engaging to the hill, you're really talking about them the next year, the next fiscal year. And then again presenting this as I think last couple of times I met with this group, it was like how to engage, what's the best point to engage?

## 217 "brian pawlak" (901270272)

#### 01:10:57.900 --> 01:11:17.900

Where do we get the information to people in a timely manner where it's you know kind of quote-unquote not too late or it's or it's at least prepping, prepping for the next year. Jump on to slide four so just where we sit with a 24, so I'll go over 24 here, so at 24, we'll talk about press budget and stuff, but.

## 218 "brian pawlak" (901270272)

#### 01:11:17.900 --> 01:11:39.770

But that's obviously come and gone, but I think you're using it here for just reflecting where we landed compared to where we landed with an active budget to where we, where our priorities were in asking for funds. So I know this group has talked about how do you influence budget? What are we looking at? So presenting some of this kind of bit side by side here, even though it's a bit overcome by the end.

#### 219 "brian pawlak" (901270272)

#### 01:11:39.770 --> 01:12:01.940

Enacted budget is just kind of outlining, what we, the administration has requested compared to what we got enacted and kind of you can kind of see the differences there and what happened. And then kind of that gives you I think a bit of an idea of kind of where Congress is thinking, maybe trying to get to why they're funding what they do or don't compared to what we've been asking for. So, a high level pictures.

## 220 "brian pawlak" (901270272)

#### 01:12:01.940 --> 01:12:27.420

Here what you can see in twenty three inactive to FY24 Pres Bud that very top line, we've asked for a slight increase, still over a billion dollar request, and in an active budget, we did better than the Pres Bud, with at \$1.23 billion inactive budget. I'll talk about what that increase means for us and what that increase is cause there's not a lot of discretion.

#### 221 "brian pawlak" (901270272)

#### 01:12:27.420 --> 01:12:47.420

Actually there's almost no discretion in that increase and we'll talk about that and how that gets a challenge to fund. Some of the things you're just talking about or fund our priorities. It also a key thing I think here to look at is we've talked about kind of, solidifying survey ability or data collection ability and just survive.

222 "brian pawlak" (901270272) 01:12:47.420 --> 01:13:07.650 The kind of surviving inflationary issues. You can, you can see on the slide here, our presence budget request in 24, we requested inflationary adjustments. In in the enactive budget, we did not get any inflationary adjustments. So we got program directed increases.

## 223 "brian pawlak" (901270272)

## 01:13:07.650 --> 01:13:24.930

And so any inflationary costs is stuff that we have to address within our base budget, so it's just one of the challenges that we have regularly kind of talked about with this group for a couple of years now. We readily talk with internally and we even we talk about this with appropriates like this is a challenge for us that that we.

# 224 "brian pawlak" (901270272)

## 01:13:24.930 --> 01:13:44.930

Just e.g. on this slide, you can see in our president budget we asked for \$23 million of new activity and inflationary adjustments. We actually got more money than we asked for, which is good. We're glad to accept that. We'll take progression direction, but no inflationary adjustments.

## 225 "brian pawlak" (901270272)

## 01:13:44.930 --> 01:14:07.340

And, and we got money in areas that we didn't necessarily ask for in the administration, they weren't necessarily our highest priority, so definitely our priority now as Congress has asked us to pursue those. We jump to slide five, if you hit slide five.

## 226 "brian pawlak" (901270272)

## 01:14:07.340 --> 01:14:24.960

Next slide. Thank you very much. Here's just a bit of a mapping of what does our budget look like. And by budget structure, we mean a budget line. What does it look like when you put it on a, you know, an Excel spreadsheet? Obviously this is not an Excel spreadsheet. But just kinda here just picture pictorial depiction of where our.

## 227 "brian pawlak" (901270272)

## 01:14:24.960 --> 01:14:44.960

Budget lines, which we often refer to in know as PPAs, which is, programs, projects and activities. That becomes important because it's where we get funding, where, where funding is placed within those budget lines restricts and drives how we can spend that money. I think, you know, that, that most folks in the budget role are quite aware of that, but not.

# 228 "brian pawlak" (901270272)

# 01:14:44.960 --> 01:15:03.330

Everyone, you know, we can't take money that was provided to us in Atlantic salmon budget line and use it for, you know, a different activity than outside of Atlantic salmon. So our budget lines are just reflected here, particularly for those maybe newer to the group or newer to the federal budget process and broken up and displayed here.

#### 229 "brian pawlak" (901270272)

01:15:03.330 --> 01:15:22.230

Just by our four major program areas. So in, in our protected resources area, we have four major budget lines listed there under the kind of the white blue bubble ring, mammals and sea turtles or the species, species recovery grants, Atlantic salmon, Pacific salmon. I won't read them all in fishery science and management, but that's our obviously biggest in most number of lines.

## 230 "brian pawlak" (901270272)

#### 01:15:22.230 --> 01:15:42.000

An enforcement is one budget line supporting the enforcement activity and habitat conservation restoration, one budget line, supporting that. And, and again, the reason I flagged that here is as you guys are interested in, how you track the budget, where do we have resourcing flexibility?

#### 231 "brian pawlak" (901270272)

#### 01:15:42.000 --> 01:16:01.470

Again your MAFAC letter described a lot of areas where interest of growing the budget or ensuring we sustain the budget, understanding where that might actually fit within the budget construct I think is important for us all to just kind of recognize that there is a construct where that might fit in other places where it may not.

#### 232 "brian pawlak" (901270272)

## 01:16:01.470 --> 01:16:21.470

So again it's the same thing here just outlining kind of, again, this is more kind of the tutorial you who may be new, to know if fisheries budget is outlined kind of by major programmatic area within fisheries where what our budget looks like and kind of the trend for the last three years here. We can kind of see on the last two years on protect.

#### 233 "brian pawlak" (901270272)

#### 01:16:21.470 --> 01:16:38.130

endangered resources, fish science management enforcement and habitat, largely flat budget for the last two years with some minor increases depicted in there. And then to the right is just the big reflection of kind of what what's the biggest.

## 234 "brian pawlak" (901270272)

#### 01:16:38.130 --> 01:16:56.130

Contribution of funding to our budget where the primary activity is, which is as you would expect is history science and management shortly falling behind that is protected resources and enforcement and habitat. So that those last two slides are just a bit of framing, what does our budget look like? How does it, how does it reflect programmatically in.

235 "brian pawlak" (901270272) 01:16:56.130 --> 01:17:16.050 Yeah, and the kind of execution of our mission and a little bit of scaling of just what type of scale we're talking about versus habitat versus informing. But if you jump to slide seven, here again, 24 is enacted, so it's a little bit.

#### 236 "brian pawlak" (901270272)

01:17:16.050 --> 01:17:31.170

Water under the bridge here, but conveying here, the point of conveying here, what we requested in 24 and what was enacted to kind of outline and highlight for you where we see importance and need for funding and the administration and how that's being received.

## 237 "brian pawlak" (901270272)

#### 01:17:31.170 --> 01:17:49.200

On the Hill. So you can see some places where I think Cisco talks about this later today are on our climate research and our climate and foreign fisheries assessments and management strategies. We've, we've been requesting money for their past few years in 24 or \$10 billion increase there.

#### 238 "brian pawlak" (901270272)

01:17:49.200 --> 01:18:09.200

We did not see, anything enacted there from our request. Offshore wind, still a big priority for us. We've thankfully received like 20 close to \$20 million in funding to deal with the sign side, the consultation side, all.

## 239 "brian pawlak" (901270272)

## 01:18:09.200 --> 01:18:28.590

Offshore wind primarily focused in the Northeast, but not exclusively to the northeast. But in 24, we, we requested you know 30 plus 30 million more in offshore wind support. And you can see the enacted, it is level, meaning it stays it stays as it was 23. So we, we got no increases.

## 240 "brian pawlak" (901270272)

01:18:28.590 --> 01:18:43.770

For our requests along offshore wind in 24. You will see in there that we, we are asking, I know the scientific survey mitigation question came up, we are asking for increased funding.

# 241 "brian pawlak" (901270272)

01:18:43.770 --> 01:19:03.770

Through the presence budget process force scientific survey mitigation to the exact scenario and description that Jaime laid out, but we're trying to get ahead of where, when farms might go in place and how that might shift a long standing sampling scenario, sampling design.

## 242 "brian pawlak" (901270272)

#### 01:19:03.770 --> 01:19:31.520

We do have some funding for that. We've received \$5.5 million in new funds for that, I believe in FY twenty three, and we're asking for, more again in FY25. But you can kind of see last year we

asked for that and, and, and we're not successful. Same thing on slide eight here, thank you. It's just again flagging where we've asked for increases and, and where we ended up with funding as compared to our request versus.

#### 243 "brian pawlak" (901270272)

#### 01:19:31.520 --> 01:19:47.400

From Congressional interest. And long story short of these slides here, every everything we asked for an increase from the administration side in the Pres budget, we did not receive an increase from Congress this year. All of our requests were either.

#### 244 "brian pawlak" (901270272)

#### 01:19:47.400 --> 01:20:02.430

Leveled from 23 and are any of our requests increases were not received slide nine, again, just reflecting some of the administration's priorities on environmental and justice and equity, variety of.

# 245 "brian pawlak" (901270272)

# 01:20:02.430 --> 01:20:20.400

Relatively small efforts on environmental justice and equity again a priority for the administration but not receiving traction on the hill. So if you go ahead and jump to slide ten, I think this gets to some of the kind of our, the discussion here of like how do we maintain.

#### 246 "brian pawlak" (901270272)

#### 01:20:20.400 --> 01:20:38.490

Current portfolio, how do we maintain current level of activity? We call this slide our tower of reality here. I used to call it a tower of tear, but we thought that was too negative, so now we went and changed it to the tower of reality. So what this slide depicts here is, is in 24 as we talked about.

#### 247 "brian pawlak" (901270272)

#### 01:20:38.490 --> 01:20:58.490

All the things we asked for budget increases for, which we did not get in those increases, but our total budget went up. So again, we're happy for the congressional direction, we're happy for the additional funds. We'll execute as Congress directs. But you can see here what this table is basically depicting although increasing budget.

#### 248 "brian pawlak" (901270272) 01:20:58.490 --> 01:21:15.330

It is the core, a good thing and a net increase of \$20 million in our base budget, not including kind of the earmarks, the congressional directed projects for specific projects, specific areas. But you can see how this adds up. It adds up.

249 "brian pawlak" (901270272) 01:21:15.330 --> 01:21:31.860 In these categories here, including, you know, the, the net increase of 20 million includes if you start from the bottom of the tower to the top, you know, includes the reduction in, in our habitat conservation and restoration programs. It includes a plus up of \$10 million.

## 250 "brian pawlak" (901270272)

## 01:21:31.860 --> 01:21:51.860

For infrastructure support to sustainable fisheries, we'll be working with the group to do that, includes a plus up for property of Institute work, Pacific salmon and green crab work. So you can see the list of things there, all important. I mean it's hard to argue that none of these are not important. It's not the same places we asked for increases. So when you look just kind of the top.

# 251 "brian pawlak" (901270272)

## 01:21:51.860 --> 01:22:12.770

Find budget, you can say wow, fisheries is doing great. We got budget increases, increases are already always better than decreases. But there's challenges in those budget because we get increases with direction, and we're not getting some of our ATBs or adjustments to base, sorry if that's vernacular. And so keeping up inflation, keeping up with core mission under this budget.

## 252 "brian pawlak" (901270272)

## 01:22:12.770 --> 01:22:31.470

Structure can be difficult. I'm glad to come back to all these questions here. I'll get through in a couple more slides I know it's hard to listen to budget appropriations just on video after probably several hours of being just on video with folks. So FY25, I just pointed this slide if you're interested in tracking where we are in 25 and then know a blue book.

## 253 "brian pawlak" (901270272)

## 01:22:31.470 --> 01:22:49.080

I think if I've outlined before, as folks are interested in talking to the Hill about NOAA's budget, it helps when you have alignment with the things the administration is putting forward. So if we're suggesting in the NOAA's presence budget that we think the most important thing.

## 254 "brian pawlak" (901270272)

01:22:49.080 --> 01:23:04.920

Is this and constituents also go to the hill and say, this is the most important thing, there's alignment there that that's helpful, and that's NO way me suggesting you should be searching just to align for our budget, your priorities are your priorities. But I'm saying where there is overlap, it's good to be able to note.

# 255 "brian pawlak" (901270272)

## 01:23:04.920 --> 01:23:20.430

To Congress and if you're talking to Congress where those things align in the President's Budget document with an alignment with the administration. Again, not suggesting you only speak to things that we're, we're promoting and we're, we're trying to receive funding for.

#### 256 "brian pawlak" (901270272)

01:23:20.430 --> 01:23:40.430

But it's a place where there is alignments it's good to note that and this is the kind of the first good easy place to go look for that alignment. So slide twelve, again, we're cruising across the budget years, we're now into FY25. So we've got the presence budget request that's out there. We are again just slightly above \$1 billion at \$1.2 billion dollars in discretionary counts.

#### 257 "brian pawlak" (901270272)

#### 01:23:40.430 --> 01:23:57.690

It is a tough budget environment for us as we are \$56 million below our 24 enacted budget. We do request ATBs again, sorry, inflation general adjustments here, but we also do have.

## 258 "brian pawlak" (901270272)

01:23:57.690 --> 01:24:17.690

Some significant program changes where we're having a net reduction in our budget across the various programs at \$74 million. And a number of that reduction includes pretty much a convention and budgeting of when Congress gives us something more than we asked for or it's kind of clearly the old fashioned earmark. We.

#### 259 "brian pawlak" (901270272)

#### 01:24:17.690 --> 01:24:40.710

Tend to back that out of the budget, we don't necessarily retain that in the next year's ask. But there are some significant reductions in here that I think others were just already mentioning and I'll walk through those in 1 sec, but if you go to slide 13, thank you. This is basically where the administration has made a statement on our priority investments above base.

## 260 "brian pawlak" (901270272)

#### 01:24:40.710 --> 01:25:00.710

Again you see the theme here offshore wind. So in FY25, we're, we're looking to increase the base of recent increases for offshore wind support that that right now stands at the \$19.3 million, that first number there under twenty four. We have last two years received close to \$20 million for offshore wind support.

# 261 "brian pawlak" (901270272)

01:25:00.710 --> 01:25:20.940

We still see industry demand and need for fisheries engagement in the placements and sighting of these and the consultations around it and planning around those as a high importance force, we have a request in twenty five for additional \$24.6 million for offshore wind. And you can see here in the in the table.

262 "brian pawlak" (901270272) 01:25:20.940 --> 01:25:36.240 It's the breakout of what specifically specific activity is supported by that \$24.6 million, and I'll highlight again because it was just discussed here. You see we have, you know, a \$10 million requested increase for scientific survey mitigation, which is.

#### 263 "brian pawlak" (901270272)

#### 01:25:36.240 --> 01:25:54.810

Exactly as Jaime really described it. How do we plan to, to manage stitch together merge survey information that that might be being now data and information collected out of, you know, kind of track lines that we used to be able to use before the placement and of structures in the water for, for wind?

#### 264 "brian pawlak" (901270272)

01:25:54.810 --> 01:26:11.340

The other priority investment area in 25 is a \$10 million increase for Mitchell Act hatcheries. This is I think most people know. Salmon hatcheries and salmon population enhancement on the west coast. \$10 million here in this Mitchell Act hatcheries is really.

#### 265 "brian pawlak" (901270272)

#### 01:26:11.340 --> 01:26:28.230

Core base operating funds for these hatcheries. It's been a long time since these Mitchell Act hatcheries have received any core increases in operating funds, and this is just to kind of keep them at the level they're going or a level they need to be.

## 266 "brian pawlak" (901270272)

## 01:26:28.230 --> 01:26:46.980

It is also paired as some people mentioned IRA funding. IRA funding, there is a significant pool of IRA funding \$60 million going to Mitchell Act hatcheries for capital improvements, so construction projects repair, that kind of thing where this funding is meant to then sustain the operations.

## 267 "brian pawlak" (901270272)

## 01:26:46.980 --> 01:27:02.490

With before the repairs and beyond those repairs. Slide 14, the slide that I wish I could just quickly go over and quickly move on, but we won't. This, this is, this, this reflects the tough choices. This is the places where we had to find.

#### 268 "brian pawlak" (901270272) 01:27:02.490 --> 01:27:21.930

Reductions in our budget to make sure we hit the ceilings and directors provided to us by the administration. Yeah, you can see here that the 1st set of things are largely external grant programs and that is where we made this choice of where we have to.

269 "brian pawlak" (901270272) 01:27:21.930 --> 01:27:43.130 Cut funding in order to meet the ceilings and priorities under given to us by OMB and administration. A lot of valued programs in there, a lot of important programs in there. And you can see Kennedy, the last one before the gray line, which we'll talk about a minute of how that that number even gets calculated. Rec reco.

## 270 "brian pawlak" (901270272)

#### 01:27:43.130 --> 01:28:03.270

Foundation of zeroing out the Salton-Kennedy program grants program as well. So those are tough, tough, tough choices to make. They're, they're often the love programs and activity, but it's it's it's the decisions that we've we've had to kind of manage where we are and that budget environment. Just flagging it then the.

#### 271 "brian pawlak" (901270272)

01:28:03.270 --> 01:28:18.570

Things shaded in gray here. These are the things that we did not request that are just kind of standard backing out of the budget when Congress put increases in here for us that we didn't request, we tend to back those out of the budget, so those are less, those are more kind of mathematical.

#### 272 "brian pawlak" (901270272)

01:28:18.570 --> 01:28:38.570

Reductions than the top, the top line items here are our programmatic choices. So almost done here. I so I think, you know, kind of what we, we see from the budget environment we're in is we're, we're preparing again to operate pretty much at flat budgets as best case scenario. We know for.

## 273 "brian pawlak" (901270272)

## 01:28:38.570 --> 01:28:54.780

The kind of the budget agreements that have been made and what they were, where folks were estimating non-defense spending to be our best case scenario is a flat budget slide 16, which has got me quickly, I'll quickly close out this.

## 274 "brian pawlak" (901270272)

01:28:54.780 --> 01:29:14.780

Section is folks who have been with for a while we're listening to us the last couple of discussions. We also referenced, a NAPA report where NAPA came in and did an evaluation of our budget structure and our allocation process. Not gonna go through that in great detail here. The reports there folks want to go back and read it and look at.

## 275 "brian pawlak" (901270272)

01:29:14.780 --> 01:29:35.400

But I think a key point here in following up with past conversations we had with is I think the key and most kind of exciting part that came out of the NAPA report is their recommendation that we

put together some program plans, so it's really this program management kind of top right corner component where we outline.

276 "brian pawlak" (901270272)

01:29:35.400 --> 01:29:51.870

Where we want to be with any program on our objectives, what we're trying to achieve with that, outline what budget level it takes to achieve that, so we can then speak kind of in out years to impacts if we don't.

## 277 "brian pawlak" (901270272)

#### 01:29:51.870 --> 01:30:09.030

Sustain budget at a certain level. It's not a budget document, even though I just mentioned a lot about budget. It's really kind of a plan that outlines what is your goals, what are you expected to achieve? What are you spending now to get there? And, and then then you're able to have conversations with.

# 278 "brian pawlak" (901270272)

#### 01:30:09.030 --> 01:30:29.030

Constituents on the Hill, however, if funding levels go up and down, how does that program plan change? What can you accomplish more with more money? What happens in reduction? It's, it's really, you know, an operating plan is maybe too detailed, but I know that's something, this group is interested in seeing. We are working on those. They're in in.

## 279 "brian pawlak" (901270272)

## 01:30:29.030 --> 01:30:58.614

Review now across the NOAA leadership and we're expecting fall, to hopefully make those portions of those public. And then the next slide is really up for questions, so I will pause there and turn to chair to either take questions now and then we could, we can step into SK maybe after some questions of the the kind of the the large budget overview, but I'll defer to kind of leadership and how we'd like me to proceed from.

#### 280 "Jocelyn Runnebaum" (3849817600)

## 01:30:58.614 --> 01:31:15.590

Heidi, I recognize that we have about 10 min left in this section, but this is also a super, important conversation that I think there was a lot of interest around the SK [grant]. And so I'm wondering if we can add a little bit of extra.

281 "Jocelyn Runnebaum" (3849817600)

01:31:15.590 --> 01:31:25.502

Your time and have Brian just go over some of the SK stuff and then we can open it up for question for a full discussion after that if that's ok.

282 "Heidi Lovett, NOAA" (314564608) 01:31:25.502 --> 01:31:41.914 Yeah. This is Heidi. I think we have the time. I can let Cisco and Melissa know we might start a few minutes late for their session, but I'm thinking we're not gonna take the full 10 min for public comment on the agenda, so I think we can shift.

283 "Jocelyn Runnebaum" (3849817600) 01:31:41.914 --> 01:31:48.211 Things a little bit. Okay, Brett, do you have a pressing question that you wanna?

284 "Heidi Lovett, NOAA" (314564608) 01:31:48.211 --> 01:31:50.181 Or do you.

285 "Jocelyn Runnebaum" (3849817600) 01:31:50.181 --> 01:31:58.511 Went down. Okay. Brian, do you mind going through the, the SK stuff that we requested yesterday.

286 "brian pawlak" (901270272) 01:31:58.511 --> 01:32:04.541 Sure and I and I don't know if it got. Yeah, yeah, I've got like.

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287 "Heidi Lovett, NOAA" (314564608)
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01:32:04.541 --> 01:32:15.940

Three or four slides we can go through there that would help if folks actually got those. I don't know if we got those out in time. Gabriela can bring them up in just a moment. I think she's switching between presentations. Alright, thank you.

288 "Jocelyn Runnebaum" (3849817600) 01:32:15.940 --> 01:32:19.780 Thanks for being so responsive.

289 "brian pawlak" (901270272) 01:32:19.780 --> 01:32:35.209 Nope, glad for the question and glad to try to resolve it. It is interesting that the we get this question multiple times for multiple entities, even sometimes I've been in the same offices of the same Congress folks.

290 "brian pawlak" (901270272) 01:32:35.209 --> 01:32:55.699

Using these kind of same slides, you know, one year to the next. So, so either it's really complicated or I'm not really good at explaining it, I'm not sure which because the questions keep coming back. You'll, you'll often find also newspaper articles, you know, constituents letters complaining that we're doing something wrong here. And I think it it's it's.

## 291 "brian pawlak" (901270272)

01:32:55.699 --> 01:33:26.459

Not overly complicated, I'll walk through it here, but it can get confusing, partly because the terminology is specific and we all tend to fall into kind of using, this vernacular terminology on SK versus what you're gonna hear about here in a second, promote and development funds or promote and development account. So let me outline how that works. So, 1st slide here is, is, is reflecting how do we get money into, and again, I'm not I'm specifically not gonna say SK. I'm gonna say to a promote and development account because that's where SK starts. So.

## 292 "brian pawlak" (901270272)

## 01:33:26.459 --> 01:33:46.459

Duties and collected on imports of marine products are collected by the Department of agriculture. So you can see here, big green bubble, duties collected from imports, I think this is all seafood products, I think this is even products that you might not think of seafood, you know, kind of dry sea.

# 293 "brian pawlak" (901270272)

#### 01:33:46.459 --> 01:34:07.349

Food or products are containing seafood, that kind of thing. So it's it's a it's a big influx of products that have this tariff on it collected by US department of agriculture. As you can see it's the the across the top line there. This is like one point to \$3 billion worth of, of, of collections that get into the USDA.

## 294 "brian pawlak" (901270272)

01:34:07.349 --> 01:34:22.529

Comes comes through USDA. What, what the promote and development fund is built from is USDA then transfers kind of the right side of the slide deck here. They transfer 30 % of that.

295 "brian pawlak" (901270272)

01:34:22.529 --> 01:34:39.479

Terrorism taxes are from the imports to NOAA, and so if you go to the next slide, so that transfer to NOAA from the overall.

# 296 "brian pawlak" (901270272)

01:34:39.479 --> 01:34:59.479

30 % of the overall tariffs and tax is collected from seafood imports, becomes what we refer to as P and D versus the promote and develop fisheries products account. So it's a separate account, separate fund, it's not yet quite SK. So I think that's also can throw people off. So.

# 297 "brian pawlak" (901270272)

## 01:34:59.479 --> 01:35:17.069

From the promote and develop fisheries products account P and D vernacular, which we kind of all tend to use at least in fisheries in the hill, we'll start using that. Congress then makes a

choice, so this in the appropriation's progress pro process. Congress looks at this promote and development account.

298 "brian pawlak" (901270272)

01:35:17.069 --> 01:35:37.069

And they decide, and again it's a congressional decision, not a NOAA Fisheries decision, we, we don't provide, we usually don't provide a recommendation for this. Obviously this president's budget that we did. Congress decides then from that account, you know, this account that now has, you know, \$370 million in it, whatever, what have you.

#### 299 "brian pawlak" (901270272)

#### 01:35:37.069 --> 01:35:57.269

Congress decides how much of that account to offset our base budget with or our NOAA budget, which is operations research and facilities. So Congress comes in and says I have this account, it's it's non tax generated account, it's a tariff account. And they're saying gee, I can offset NOAA Fisheries budget I mean I don't have to use.

#### 300 "brian pawlak" (901270272)

#### 01:35:57.269 --> 01:36:13.679

Congress I don't have to use their ceiling. They don't have to use their, their, their kind of receipts from taxes. They can offset NOAA Fisheries account to whatever level they want using the P DP and D account. So they shift that funding in their appropriation process.

## 301 "brian pawlak" (901270272)

## 01:36:13.679 --> 01:36:33.679

To fund a number of things. It basically kind of supplements the appropriate dollar received from tax receipts. It supplants it to an appropriated dollar from the P and D account. So it largely goes to our fisheries data collections surveys and assessments that shows the kind of the light green box there of where that funding gets spread to. It actually goes to observer program.

## 302 "brian pawlak" (901270272)

## 01:36:33.679 --> 01:36:50.909

Programs now it goes to some of the fisheries management programs now. And so whatever they don't take from that account, what is remaining in the P and D account, as you can see to the right, kind of the blue box there, what, what, what the balance remaining that doesn't get shifted to an offset becomes the Salton Kennedy or SK.

## 303 "brian pawlak" (901270272)

## 01:36:50.909 --> 01:37:09.989

Grant program, so, where, where folks often get confused and we often get, you know, kind of angry constituent letters is, is folks will be writing to us saying, what did NOAA Fisheries do with this \$375 mllion you got for SK, you know? So we, we, we never get that kind of money for SK. So.

## 304 "brian pawlak" (901270272)

01:37:09.989 --> 01:37:27.149

I know i've giving a lot of detail maybe going too slow for you here, but long story short, tariffs from, imports on seafood, those 30 % of those tariffs collected by moved to NOAA. Of that pool of funding then available Congress gets to decide if that.

#### 305 "brian pawlak" (901270272)

#### 01:37:27.149 --> 01:37:44.849

Promote and development account, how much gets moved to offset the budget and if there's a balance remaining in that offset, that becomes SK. So SK over the years, I mean some years there's been zero funding because Congress doesn't move or has moved all of it over. Some years SK has been, you know.

#### 306 "brian pawlak" (901270272)

#### 01:37:44.849 --> 01:38:03.569

Three \$400000. Other years SK has been high as, you know, 16 million, 2020 \$5 million. But if you go to the next slide, this is not really so much the next slide isn't so much really how SK works. It's just showing that offset goes into these funds. So these budget lines.

#### 307 "brian pawlak" (901270272)

#### 01:38:03.569 --> 01:38:20.999

Within NIAA Fisheries. And if you just go to the next slide, it just just just highlights where we ended up in 22 FY22 and FY23. We're roughly, you know, \$12 million and \$11 million in 22.

#### 308 "brian pawlak" (901270272)

#### 01:38:20.999 --> 01:38:37.229

In in 23, in FY 24, we're only at about \$7 million with probably, you know, a little less than half of the number of boards than going out last year. But again, congressionally driven, driven by how much tariffs are collected and driven by how much Congress is willing to move and offset.

## 309 "brian pawlak" (901270272)

#### 01:38:37.229 --> 01:38:53.819

From this this account vernacular kind of referred to this P and D hope that gets the explanation but glad to answer any questions about that. And just, you know, to be for full transparency, what we're asking in this year's bud budget rather than take.

# 310 "brian pawlak" (901270272)

#### 01:38:53.819 --> 01:39:21.846

Directed hits to our core programs, we're asking in this year's presence budget, we're saying Congress, please move all of P and D to the offset to prevent re reductions in some other area of programmatic activity within fisheries. So I'll pause there and maybe if you go back to slide two if folks have questions cause I think that's the best pict-, pictorial of kind of how it works but glad to answer any questions here or on the former presentation.

311 "Jocelyn Runnebaum" (3849817600)

01:39:21.846 --> 01:39:44.909

Okay, great. Thank you Brian so much. I see we have a couple of hands up already. So if folks have questions, please jump in and Heidi, did you wanna look at you have something on your mind. Okay, I might take the liberty of asking the 1st question.

312 "Jocelyn Runnebaum" (3849817600)

#### 01:39:44.909 --> 01:40:11.043

Because it's a process question for you. So you mentioned FY 26 budget and I think, I guess I'm curious, is the agency, developing the FY 26 budget based on the FY 24 enactive level or what you guys are seeing in the FY 25 proposed?

## 313 "brian pawlak" (901270272)

01:40:11.043 --> 01:40:38.339

President's budget. Yeah, good question. That can vary year to year depending on what OMB guidance asks us and directs us to do. We typically work off the enacted budget, but that is not, so it would be 24. But, but that is not to say, you know, it's like you you're blind to what was happening in in in 25 and what you requested, right? So we, we kind of start with enacted.

## 314 "brian pawlak" (901270272)

01:40:38.339 --> 01:41:06.655

And in reference from there, but there are definitely considerations of what, what we put forward in 25. And again, that could very, you know, own the instruction can come back different together and say, you know, based your budget off this or that, but I, but I it's hard to, you know, not, you know, programmatically consider where, where you are at least for the stage and make a kind of strategic budget strategy on what's in the presence budget now versus what got enacted and that that there's a bit of a, you know, a an evaluation that goes on that, but we.

315 "Jocelyn Runnebaum" (3849817600)01:41:06.655 --> 01:41:10.396You typically start and build off of enacted. Great, thank you. Okay Brett, please go ahead.

316 "Brett Veerhusen" (1199368704)
01:41:10.396 --> 01:41:25.739
Brian, thank you for your candor and walking us through this and the last, meeting was grueling, but helpful.

317 "Brett Veerhusen" (1199368704) 01:41:25.739 --> 01:41:44.309

In those in in those, side conference rooms. So, I guess this is just a little bit of a plug for anybody, we need, well we don't need, but it would be lovely to have additional members.

318 "Brett Veerhusen" (1199368704) 01:41:44.309 --> 01:42:00.449 In this subcommittee, and it it if it's confusing sounding, then, I think you're on the right track. It is confusing all the different steps of when.

319 "Brett Veerhusen" (1199368704)
01:42:00.449 --> 01:42:15.569
When the President's Budget, when NOAA can make asks, how NOAA can make asks, how other agencies can make asks, we're learning kind of in real time.

320 "Brett Veerhusen" (1199368704)
01:42:15.569 --> 01:42:34.799
But I do think that there is a really good opportunity for, the committee to be helpful, whether that's as the subcommittee or as outside participants in advocating for NOAA's budget because.

321 "Brett Veerhusen" (1199368704) 01:42:34.799 --> 01:42:49.829 Basically, and Brian, correct me if I'm wrong, you know, status quo is, is, is not good enough right now, in fact, with inflation costs.

322 "Brett Veerhusen" (1199368704)

01:42:49.829 --> 01:43:09.829

Proof you know status quo we'll take it but we need more than that and we're here to help. So, that's just sort of a long winded kinda mild history lesson of what we have been grappling with for a year.

323 "Brett Veerhusen" (1199368704)
01:43:09.829 --> 01:43:26.369
I find it really fascinating. It's big, it's big levers in the government, it's like OMB, President's blue book, it's complicated, but super necessary, and I really appreciate Brian's just.

324 "Brett Veerhusen" (1199368704)

01:43:26.369 --> 01:43:47.334

Willingness to talk with us and explain, his process, but I guess that wasn't the question of Madam chair, just more of like, the, the process that was entertaining maybe a little grueling but necessary back.

325 "Jocelyn Runnebaum" (3849817600) 01:43:47.334 --> 01:44:06.658

Our last meeting, so, yeah, I appreciate Brian's partnership with and all the education he's given us and thank you for your leadership on that committee. Pat, maybe you have a question and I'm getting some dogs in the background.

327 "Jocelyn Runnebaum" (3849817600) 01:44:10.400 --> 01:44:13.339 We might need to make sure folks are muted. Okay, perfect, go ahead.

#### 328 "Patrick Sullivan" (3843324672)

01:44:13.339 --> 01:44:35.849

Great, Thanks, thanks Brian again for presentation Pat Sullivan here and I'm from Cornell, but I am on a number of different science committees that advises national Fishery Service nationally, so I am also on this strategic planning and budget committee that Brett mentions.

#### 329 "Patrick Sullivan" (3843324672)

01:44:35.849 --> 01:44:53.039

And I have a specific question for you, and that is, last year, we, we sort of all made ourselves aware of the 70 % coverage of the surveys in our system and our.

330 "Patrick Sullivan" (3843324672)

01:44:53.039 --> 01:45:12.269

Greatly appreciated hearing about how the white boats are being refurbished and so forth and other positive things moving forward for, for coverage. But, as Brett mentioned and was mentioned in different contexts by different people in our earlier discussions with.

331 "Patrick Sullivan" (3843324672)

01:45:12.269 --> 01:45:32.269

With, Bob and Barry. Can you, well, one last contextual thing is I'm appreciating the transparency with which we're seeing all of the different categories and of course that's something the committee asked.

## 332 "Patrick Sullivan" (3843324672)

01:45:32.269 --> 01:45:54.689

For two because it helps us of course cannot lobby on its own, but the individuals can and work through in terms of like an educational sense of where the money's going and what potentially will not get done. Can you, can you comment a little bit on the.

333 "Patrick Sullivan" (3843324672)

01:45:54.689 --> 01:46:11.520

24, 25, and 26 fiscal years in terms of the actual survey coverage itself, not just the mitigation for the, for the winter mines but setting fields but the coverage of the base data as well. Thanks.

334 "brian pawlak" (901270272)

01:46:11.520 --> 01:46:29.819

Yeah, no, thanks to the question and it's a question that we often talk about in fisheries, but I am probably not the best one to outline and understand kind of where the NOAA OMAO fleet coverage over overlaps in their lines with kind of our charter.

335 "brian pawlak" (901270272) 01:46:29.819 --> 01:46:45.509 Vessels. I think I think Cisco might have some of that planned for his discussion and his talk. We have a a group that regularly manages fleet allocation time and what have you. I don't sit on those groups. So I Sorry I think that's deferred maybe to the science.

#### 336 "brian pawlak" (901270272)

#### 01:46:45.509 --> 01:47:07.522

Discussion other than, you know, flagging and outlining, you know, where, where we have flat budget rising costs, those get a challenge to, to keep, keep the same type of, of, of coverage aligned and, and, and going. But I I don't I don't know the number days of sea in my head, that kind of thing and and how much, how that compares from year to year. If, if, if ok, if we can defer that to a science conversation.

## 338 "Patrick Sullivan" (3843324672)

01:47:10.499 --> 01:47:30.557

Yeah, I I hear that. I I just one last comment on that is is this these kinds of things are so important it really needs to be recognized at a higher level. And I think the conversation that we had last time, really, really brought it up. So I appreciate your, you discussing it. So thank you.

## 339 "brian pawlak" (901270272)

#### 01:47:30.557 --> 01:47:49.265

Yeah, no, I think the agency's fine to discuss kind of where we stand there. I just I I gets pretty technical and complicated on kind of days that seem provided by NOAA versus the charter, that kind of thing and I and I I think Cisco will be primed to kind of share where that stands.

#### 340 "Patrick Sullivan" (3843324672)

01:47:49.265 --> 01:48:03.031

Yeah, thanks Pat. I've also been curious about the interaction with OMAO's budget. So thanks for raising that. Meredith's and then.

## 341 "Meredith Moore" (1411130368)

01:48:03.031 --> 01:48:20.310

Brett, it looks like you have another question too. I've mentioned a couple of times my keen interest in helping to identify or suggest other programs within, NOAA Fisheries or NOAA that could also use a project plan that you are all putting together, I think that's what you called.

342 "brian pawlak" (901270272) 01:48:20.310 --> 01:48:22.289 Program plan.

343 "Meredith Moore" (1411130368)

01:48:22.289 --> 01:48:43.219

Program plan, thank you, program plan. And my question is what's a program? Cause they seem sort of like an assorted assemblage of priorities, and I can't figure out how they align specifically either with like the line items or the budget or anything like that. And so, how, what.

#### 344 "Meredith Moore" (1411130368)

01:48:43.219 --> 01:48:55.450

What guidance can you provide us if we were to look at what NOAA Fisheries is doing and suggest places that we thought were programs that could also use such a plan? How do we provide that advice in a way that.

#### 345 "brian pawlak" (901270272)

01:48:55.450 --> 01:49:11.579

I know, great question for sure and some of those are questions we've wrestled with internally a bit. So I I think one thing a program plan will do is define that program. So it's somewhat, you know, sounds circular there.

## 346 "brian pawlak" (901270272)

01:49:11.579 --> 01:49:28.739

But as we're looking at, building out the program plans, right, one of the 1st steps is what are you trying to manage? Because it's how you manage a program, right? So are you managing every dollar? That's I'm just making something up there. You can manage every dollar that manages the, you know, the bluefish.

## 347 "brian pawlak" (901270272)

01:49:28.739 --> 01:49:48.479

Are you managing just the management side of that or just the research side of this? So, so part of the program plan is to actually outline what we define by program, what are the interconnectedness among different Noah activities, not just even fisheries, but what support and fisheries and again I.

## 348 "brian pawlak" (901270272)

## 01:49:48.479 --> 01:50:08.479

Well, we've got the slides pulled down. But as you saw we had, you know, protective resource fishery science and management fishery science is a huge, you know, it's like a \$750 million of activity in fishery science and management. So whatever particular, whether you're gonna do it by species space or by activity based where we're, you know, we're talking about doing a surveys program plan.

# 349 "brian pawlak" (901270272)

01:50:08.479 --> 01:50:26.999

It's then trying to find where all the connections are, where all the nexus points, so when you're managing the program, you know where all those are. You know if you're, if you're pulling a thread in one area, how that might impact the total program, and what are the inter interdependencies and dependencies in the program, so.

350 "brian pawlak" (901270272) 01:50:26.999 --> 01:50:46.999 Part of that question I think Meredith has answered in in what we defined the program as we start doing that, right? It's it's I think it's definitely too big in the kind of the slides I showed earlier we had to protected resources, fisheries, enforcement, and habitat, you know, we call those program areas, but that's definitely too, too large of a space to kind of call each one of those programs.

#### 351 "brian pawlak" (901270272)

#### 01:50:46.999 --> 01:51:14.729

I, I'd also offer, you know, we're just starting this, and one reason, we wanted to step into the program plans is kind of to Brad's point, the budget details and how the budget process works, it can be really messy and if you're not like you're in a federal budget office, it can sound kind of ridiculous and crazy, which it is. But I think if you have a, if you have a long standing story and message on what you want to.

#### 352 "brian pawlak" (901270272)

#### 01:51:14.729 --> 01:51:34.729

Achieve or where you're going, you don't have to naturally time the cycle so perfectly, you don't have to naturally fit into the, you know, oh, we just missed the congressional window for commenting or the presence budget cycle. If you have a standard and a blocked out set of program strategies, program design, you can fit those in over multiple years any place, and then the mess.

#### 353 "brian pawlak" (901270272)

#### 01:51:34.729 --> 01:51:54.239

This of the budget process is somewhat not as important if you got a long kind of a long lead time or a long time before engagement. So I, so I just also say in, in recommending new program plans to do, you know, we're not even quite totally finished with the subs that we've tried to figure out yet.

354 "brian pawlak" (901270272)

01:51:54.239 --> 01:52:12.103

We want to see how these are worked and received by constituents in congress. And so I'll leave it there and I don't know if, others in the from fishes want to weigh in there at all on kind of what we're thinking about programs plans I'll offer if anyone my fishes colleagues wants to chime in either.

355 "Meredith Moore" (1411130368) 01:52:12.103 --> 01:52:35.329

Yeah in the absence of them chiming in I'll say that was a helpful answer. I still remain very enthusiastic about the program plans, and that I hope that we can help identify those areas that need that sort of longer term view to help better articulate the additional services that the agency could provide at different, you know, levels of capacity. So really looking forward to that.

356 "Meredith Moore" (1411130368)

#### 01:52:35.329 --> 01:52:44.099

And I would say like may fact I'm looking forward to continuing to speak with you all about this cause I think this is a great opportunity for us to help clarify. Say what some of the priority work could look like. Thank you.

357 "brian pawlak" (901270272) 01:52:44.099 --> 01:52:48.039 Yeah, no.

358 "Jocelyn Runnebaum" (3849817600) 01:52:48.039 --> 01:53:04.837

And we'll appreciate that input too when we're ready to send that out. Yeah, great. Okay, I am finding myself losing focus. So Brett I'm gonna let you make your comment and then we're gonna take a break and then hopefully Cisco will.

#### 359 "Brett Veerhusen" (1199368704)

01:53:04.837 --> 01:53:36.689

To be able to answer Pat's question, when we get to the next session? Great, yeah. Real quick, we, in the letter that we wrote, we took a lot of recommendations from the NAPA report, and we noticed that in some of the public communication from the agency releasing the report and the recommendations that the report made, there was no mention of a communications plan of how to.

360 "Brett Veerhusen" (1199368704)

01:53:36.689 --> 01:53:55.258

Communicate what the agency is gonna do, how it's gonna do it, and just curious if you might know of any work being done or soon to be work being done on one of those major recommendations and the.

361 "brian pawlak" (901270272) 01:53:55.258 --> 01:54:12.149

NAPA report. Yeah, NO, good question. Well, I I think you're the bulk of the NAPA report we took as, internal, right? It's internal how we operate, how we function on so.

362 "brian pawlak" (901270272) 01:54:12.149 --> 01:54:30.209

I think the, the most visible or in planned communication will be probably through what we come out with the program plans, right? What what's in there and how that looks and sharing components of that. A lot of the other NAPA component recommendations were.

363 "brian pawlak" (901270272) 01:54:30.209 --> 01:54:46.439 You know, we have to make sure we build the, you know, a stronger understanding of our facilities cost and needs. Not necessarily, you know, exciting newspaper fodder, but we are communicating those needs, you know, e.g., to the hill and kind of sharing what we need in that.

364 "brian pawlak" (901270272)

01:54:46.439 --> 01:54:52.020

In our strategic planning pro, not our process, but you know we had some internal process pieces on.

# 365 "brian pawlak" (0)

01:54:52.000 --> 01:55:20.442

Strategic planning, that were recommendations. So we're not really communicating like how we responded, but we are definitely making a point of, you know, e.g., on our strategic planning, make sure that document's public, trying to get that document out to, to, to people to be able to maybe align and understand what we're working on. So you I I think you're, right. We haven't had kind of a big splashy rollout in response to now. I think some of the things are kind of very internally driven and and we will on them, keep the program plan side be seeing some of that.

366 "Brett Veerhusen" (1199368704)

01:55:20.442 --> 01:55:39.940

, ok, that would be great. I will definitely commit to anytime whatever's helpful, providing any feedback within a communications strategy than tactics within your plans.

367 "Brett Veerhusen" (1199368704)

01:55:39.940 --> 01:55:58.476

If it's not gonna be one kind of big, big comms plan, but it's gonna be more integrated into, the program plans, I think that would be a certainly a, a valid exercise and, more than happy to volunteer that time to help.

369 "Jocelyn Runnebaum" (3849817600)

01:55:59.921 --> 01:56:25.401

All right, thank you. Great, thanks. Maybe Katie we can indicate the communications plan within the, that subcommittee if it's helpful to work through that. I'm gonna I'm gonna let Cisco answer the question for Pat, if he's ready, otherwise, my brain could use a little bit of a rest, but I would, it's up to you, Cisco.

370 "Cisco Werner" (311644160)

01:56:25.401 --> 01:56:40.298

Actually, I've been taking copious notes about a number of things, but Pat's question was one that I was actually on the phone, sorry I and I missed Pat's question. So if you tell me now, maybe we can go on break and then I can come back to it. What was Pat's question again, please? Yeah, go ahead Pat, go ahead and sure.

372 "Patrick Sullivan" (3843324672)

01:56:41.965 --> 01:57:02.260

Hi Cisco, thanks. No, I was asking Brian since we raised it last time during the budget discussion, the fact that we were, we were getting like 70 % coverage from the survey standard surveys.

373 "Patrick Sullivan" (3843324672)

01:57:02.260 --> 01:57:19.020

Was that where we was administration aware of that at the highest level and is anything being done about that in the 24 or 25 or 26 management plans.

374 "Cisco Werner" (311644160) 01:57:19.020 --> 01:57:32.839

Yes, and I can I I will cover that. I mean there's a short answer and a longer answer, but, but it is part of what I was gonna talk about. And I think what you're talking about is the completed days of sea at that 70 % coverage, right? That's what you're referring to?

375 "Patrick Sullivan" (3843324672) 01:57:32.839 --> 01:57:34.860 That's right. Yeah I am, that's correct.

376 "Cisco Werner" (311644160) 01:57:34.860 --> 01:57:43.119 Yeah. I will discuss it then, yeah, I have it as part of what I'd like to discuss with.

377 "Patrick Sullivan" (3843324672)

01:57:43.119 --> 01:57:54.320

If it's ok we can come back after the break. Yeah. Okay. Yeah, that's super. It was raised last year and actually in the discussions with Barry and Bob, it was raised in different capacities by different people as well, so I thought just to raise that so we can hear what he said.

380 "Jocelyn Runnebaum" (3849817600) 01:57:58.264 --> 01:58:08.599 Thank you very much. Yeah, ok, thanks. Thank you. Okay, let's Heidi, are you and Cisco and.

381 "Cisco Werner" (311644160) 01:58:08.599 --> 01:58:10.100 Yeah.

382 "Jocelyn Runnebaum" (3849817600) 01:58:10.100 --> 01:58:13.362 Gotten the next person that's coming on.

383 "Jocelyn Runnebaum" (3849817600) 01:58:15.062 --> 01:58:16.560 They were.

384 "Heidi Lovett, NOAA" (314564608) 01:58:16.560 --> 01:58:29.162 Supposed to start at 02:30 and we were supposed to have a 15 min break before that. Let's say a 12 min break so that we know everybody can be back in their seat as close to 02:45.

385 "Jocelyn Runnebaum" (3849817600)01:58:29.162 --> 01:58:36.879Five as possible to get started. Perfect. Thank you. Let's get some rest. Thanks.

386 "Heidi Lovett, NOAA" (314564608) 01:58:36.879 --> 01:58:40.839 Okay Jocelyn.

387 "Jocelyn Runnebaum" (3849817600) 01:58:40.839 --> 01:58:43.322 Hey.

388 "Heidi Lovett, NOAA" (314564608) 01:58:43.322 --> 01:58:50.733 I'm here, just real, just, I'm gonna say.

389 "Jocelyn Runnebaum" (3849817600) 01:58:50.733 --> 01:59:09.180 Send you a chat. I just want you to read it. Okay, great.

390 "Jocelyn Runnebaum" (3849817600) 01:59:09.180 --> 01:59:29.180 Okay, uh.

391 "Jocelyn Runnebaum" (3849817600) 01:59:29.180 --> 01:59:49.180 Okay, uh.

392 "Jocelyn Runnebaum" (3849817600) 01:59:49.180 --> 02:00:09.180 Okay, uh.

393 "Jocelyn Runnebaum" (3849817600) 02:00:09.180 --> 02:00:29.180 Okay, uh.

394 "Jocelyn Runnebaum" (3849817600)

02:00:29.180 --> 02:00:49.180 Okay, uh.

395 "Jocelyn Runnebaum" (3849817600) 02:00:49.180 --> 02:01:09.180 Okay, uh.

396 "Jocelyn Runnebaum" (3849817600) 02:01:09.180 --> 02:01:32.076 Okay, uh.

397 "Heidi Lovett, NOAA" (314564608)02:01:32.076 --> 02:01:41.035Okay Katie, can you hear me? I don't know if you're on right now.

398 "Melissa" (150252288) 02:01:41.035 --> 02:01:43.014 Melissa.

399 "Heidi Lovett, NOAA" (314564608) 02:01:43.014 --> 02:02:18.496

Yeah. I'm just gonna let you know, I apologize that we're running a little late and I'm getting pinged by email, by chat, and trying to listen to the conversation. So I meant to try to send you something to note. We're just about ten-ish minutes late, so apologies, but we have time, we we will just, we'll be cutting into what's on the calendar as a public comment time because we don't anticipate too many public comments although there's been a couple of folks listening in that I don't know, so there are a few attendees, but.

400 "Melissa" (150252288) 02:02:18.496 --> 02:02:20.232 I still feel like we have enough time at the end.

401 "Heidi Lovett, NOAA" (314564608) 02:02:20.232 --> 02:02:40.791 In there, but apologies for running late. No worries. And, so I'm hoping, I assume Cisco's going 1st. Yeah. So we're gonna make sure he stays on track cause sometimes he can run a little long, but, we said sort of about 45 min for each of you, which was to include time for questions and discussion.

402 "Melissa" (150252288) 02:02:40.791 --> 02:02:42.118 Hello.

403 "Heidi Lovett, NOAA" (314564608)

02:02:42.118 --> 02:02:59.649

I thought you gave me 3. Yeah, I know you did. I was gonna go knock on your door in a minute. Anyway, I'm just prepping here and if Jenny\i is not Jenni, if Katie is on, before you start Cisco I'm gonna let.

404 "Heidi Lovett, NOAA" (314564608)

02:02:59.649 --> 02:03:22.215

Jocelyn, just know Russ Dunn has been listening in and he's been in an attendee mode, not on screen. So I'm gonna let him introduce himself just super quick because he has been at the other meeting this week that we spoke of yesterday, the sport fishing and voting partnership group and he would just like to introduce himself and usually he is at most of our meetings. So I'll just be a quick moment ahead of your presentation.

405 "Melissa" (150252288) 02:03:22.215 --> 02:03:25.736 I was trying to figure out how to like blur my background.

406 "Heidi Lovett, NOAA" (314564608) 02:03:25.736 --> 02:03:29.151 Are you doing it through the web or do you have Webex?

407 "Melissa" (150252288) 02:03:29.151 --> 02:03:34.014 No, I'm doing it through the web.

408 "Heidi Lovett, NOAA" (314564608) 02:03:34.014 --> 02:04:02.799

Yeah, I'm afraid that there's NO way that I know how to fix that unless Davon is listening in our IT, collaborator, who can help us with that. But Brian had the same question. You can blur and add photos when you are using the Webex program. Okay. It feels like there's limitations when you're working through the internet, in internet.

409 "Melissa" (150252288) 02:04:02.799 --> 02:04:10.214 Well, I can always go off video or people can tell me anything about it there. Yeah.

410 "Heidi Lovett, NOAA" (314564608) 02:04:10.214 --> 02:04:20.235 So I don't know if Russ just heard what I said.

411 "Katie Zanowicz" (2127667200) 02:04:20.235 --> 02:04:21.954 I gotta ping Kate. 412 "Heidi Lovett, NOAA" (314564608) 02:04:21.954 --> 02:04:25.212 Are you talking to me through?

413 "Katie Zanowicz" (2127667200) 02:04:25.212 --> 02:04:26.496 Yeah.

414 "Heidi Lovett, NOAA" (314564608) 02:04:26.496 --> 02:04:37.987 Katie, can you move Russ up to participant. Oh yeah. We'll let him, as he noted, just let him introduce himself. He's been attending the other meeting and he just wanted to sort of give a shout out and hello, especially for the new rec fish members.

415 "Katie Zanowicz" (2127667200) 02:04:37.987 --> 02:04:47.494 Yep. Yep. Russ, you have been upgraded to a panelist.

416 "Heidi Lovett, NOAA" (314564608) 02:04:47.494 --> 02:04:49.956 You should be able to turn your camera on.

417 "Katie Zanowicz" (2127667200) 02:04:49.956 --> 02:04:52.935 Now we can see you.

418 "Heidi Lovett, NOAA" (314564608) 02:04:52.935 --> 02:04:57.273 I'm gonna run.

419 "Russell Dunn" (2096156416)
02:04:57.273 --> 02:05:04.517
I'll be right back. I'll turn off my fan so it's less distracting. I have recently realized how distracting a thing it is to watch other people's fans in the background.

420 "Katie Zanowicz" (2127667200) 02:05:04.517 --> 02:05:06.799 I was kind of relaxing honestly.

421 "Russell Dunn" (2096156416) 02:05:06.799 --> 02:05:19.388 Alright, alright, in that case, we'll, we'll leave it going.

423 "Tom Fote" (1036044288)

02:05:35.939 --> 02:05:38.215 What time are we coming back here?

422 "Katie Zanowicz" (2127667200) 02:05:19.388 --> 02:05:35.939 We're coming back here, I think around 03:41 or two. It was a 12 min break, so I got a little, I think it was 3:43.

423 "Tom Fote" (1036044288) 02:05:35.939 --> 02:05:38.215 3:43 were coming back?

424 "Katie Zanowicz" (2127667200) 02:05:38.215 --> 02:05:41.097 2:43. No, 02:42 for real.

425 "Russell Dunn" (2096156416) 02:05:41.097 --> 02:05:44.095 Gonna say wow, ok, I can knock some stuff out.

426 "Katie Zanowicz" (2127667200) 02:05:44.095 --> 02:05:47.337 2:42, sorry.

427 "Russell Dunn" (2096156416)
02:05:47.337 --> 02:05:58.217
I just had to say goodbye to one of my babies who just was walking out the door to go be camped counselor for the summer teaching water skiing, but I won't see them all summer.

428 "Katie Zanowicz" (2127667200) 02:05:58.217 --> 02:06:02.316 Wow! Is it like a. It's a full on like away from home summer camp thing?

429 "Russell Dunn" (2096156416) 02:06:02.316 --> 02:06:23.115 Yeah, yeah. So the girls go over the last couple of summers gone up to Maine, to camps and by chance they were teaching, you know, water skiing driving the boats, whatever on, on the same lake but for different camps, so they would see each other on the lake and go.

430 "Katie Zanowicz" (2127667200) 02:06:23.115 --> 02:06:27.133 That's, that's fun. Are they the same age?

431 "Russell Dunn" (2096156416)

02:06:27.133 --> 02:06:30.596 Yeah, they are twins.

432 "Katie Zanowicz" (2127667200) 02:06:30.596 --> 02:06:33.594 That's right, that's right. Okay. And they did wanna go to the same camp and teach?

433 "Russell Dunn" (2096156416) 02:06:33.594 --> 02:06:41.595 No, so they, it was just total random chance they ended up at this time.

434 "Katie Zanowicz" (2127667200) 02:06:41.595 --> 02:06:48.353 Twin thing, it must be the twin thing. It just brought down to the same.

435 "Russell Dunn" (2096156416) 02:06:48.353 --> 02:07:05.256 That's really funny. And their brother, as the proud papa, I have to say, their brother just graduated college last weekend and has started in essentially his dream job, which is he's going to Montana to teach fly fishing at like a food ranch.

436 "Katie Zanowicz" (2127667200) 02:07:05.256 --> 02:07:07.878 Wow, that sounds awesome.

437 "Russell Dunn" (2096156416) 02:07:07.878 --> 02:07:13.789 So he's just like, yes. I did it. I'm out of here, so.

438 "Katie Zanowicz" (2127667200) 02:07:13.789 --> 02:07:16.476 And now you have a fun place to go visit.

439 "Russell Dunn" (2096156416) 02:07:16.476 --> 02:07:20.132 That's right.

440 "Katie Zanowicz" (2127667200) 02:07:20.132 --> 02:07:22.815 Except I can't afford to go to the food ranch, it's too expensive.

441 "Russell Dunn" (2096156416) 02:07:22.815 --> 02:07:34.853 I mean, you should get like, you know, a discount. Do we need the family and friends discount? There you go. There you go. You're muted Jaime.

442 "Tom Fote" (1036044288) 02:07:34.853 --> 02:07:40.035 I think. So I want to short to clay.

443 "Katie Zanowicz" (2127667200) 02:07:40.035 --> 02:07:45.572 I don't know. We can hear you now hear you.

444 "Tom Fote" (1036044288) 02:07:45.572 --> 02:07:53.628 Before. Okay, but it was, it was, it's I survived the Hawaii holistic missile attack.

445 "Russell Dunn" (2096156416) 02:07:53.628 --> 02:07:56.486 Yeah.

446 "Jaime Diamond" (640132096) 02:07:56.486 --> 02:08:08.442 So Russ, there is a, a food range that's doing, like a cattle drive and you can be an intern.

447 "Russell Dunn" (2096156416) 02:08:08.442 --> 02:08:12.067 You can intern a cattle drive.

448 "Jaime Diamond" (640132096)02:08:12.067 --> 02:08:19.649Nice. Nice. I, some I found it and sent it to some friends and they were like sign up.

449 "Russell Dunn" (2096156416) 02:08:19.649 --> 02:08:23.606 It's all up. They can take people and go.

450 "Katie Zanowicz" (2127667200) 02:08:23.606 --> 02:08:28.921 Yeah, like you're riding a forest to herd the cattle?

451 "Jaime Diamond" (640132096) 02:08:28.921 --> 02:08:44.967 Yep. For like, hundreds of miles. Wow, Sounds great. It really does. Things might be complicated. 452 "Tom Fote" (1036044288)

02:08:44.967 --> 02:09:03.589

Yeah, yeah. My age it doesn't sound interesting. At my age it doesn't sound interesting to spend that many days in the saddle. Yeah. Roger I think that was blazing saddles?

453 "Heidi Lovett, NOAA" (314564608) 02:09:03.589 --> 02:09:09.664 Okay. Tom, you used to spend a lot of time in a bike.

454 "Tom Fote" (1036044288) 02:09:09.664 --> 02:09:17.509 That was when I was a lot younger.

455 "Heidi Lovett, NOAA" (314564608) 02:09:17.509 --> 02:09:19.746 And tomorrow I turned 77.

456 "Jaime Diamond" (640132096) 02:09:19.746 --> 02:09:21.984 Happy birthday. Yeah. It's birthday and anniversaries, right?

457 "Tom Fote" (1036044288)
02:09:21.984 --> 02:09:42.837
Yeah anniversary too, and my wife's birthday. Yeah tomorrow. Happy happy happy. Thank you.
Yep, There's things you learn as you get older you could do back then that you can't do now.

458 "Russell Dunn" (2096156416) 02:09:42.837 --> 02:09:56.377 Okay, so for the rec folks, just a quick touch on one conversation from the Sportfishing and Boating Partnership Council yesterday.

459 "Heidi Lovett, NOAA" (314564608) 02:09:56.377 --> 02:09:59.258 So do you wanna just wait?

460 "Russell Dunn" (2096156416) 02:09:59.258 --> 02:10:06.495 So we're, is that for just them or for the whole group? It doesn't matter. I I've already related to Chris. It's, it's just.

461 "Russell Dunn" (2096156416) 02:10:07.934 --> 02:10:11.954 I'm sorry? 462 "Heidi Lovett, NOAA" (314564608) 02:10:11.954 --> 02:10:19.352 Just about the information exchange between the two. Yeah. And we had Sam talked about that a little bit yesterday.

463 "Russell Dunn" (2096156416)
02:10:19.352 --> 02:10:34.675
Okay or yeah yesterday before you long story short, their chairman Chris Horton with a Congressional Sportsmen's Foundation is gonna reach out to Pat in his capacity as their current subcommittee chair to discuss. The potential mechanism and timing for coordinating, that's all.

464 "Heidi Lovett, NOAA" (314564608) 02:10:34.675 --> 02:10:44.094 Again, that's a sort of committee matter, so I was just gonna suggest you wait and share that when we officially convene.

465 "Russell Dunn" (2096156416) 02:10:44.094 --> 02:10:47.796 No informal information will be relayed.

466 "Heidi Lovett, NOAA" (314564608) 02:10:47.796 --> 02:10:53.533 Okay.

467 "Jocelyn Runnebaum" (3849817600) 02:10:53.533 --> 02:10:55.475 Welcome Russ. Thank you. We're heading up to Maine soon. You are when?

468 "Russell Dunn" (2096156416)
02:10:55.475 --> 02:11:14.557
We'll be up there 1st week of June passing right through, going on the way up to Canyon Rockland for a little bit. For a week.

469 "Jocelyn Runnebaum" (3849817600) 02:11:14.557 --> 02:11:19.358 Well, you'll drive right by my house so you should stop and say hello.

470 "Russell Dunn" (2096156416) 02:11:19.358 --> 02:11:21.876 Right?

471 "Jocelyn Runnebaum" (3849817600) 02:11:21.876 --> 02:11:27.440 Oh, no, it's still under construction.

472 "Jaime Diamond" (640132096) 02:11:27.440 --> 02:11:33.303 Oh. So Jocelyn funny story.

473 "Jaime Diamond" (640132096) 02:11:33.997 --> 02:11:34.982 I went to Hyde high school.

474 "Jocelyn Runnebaum" (3849817600) 02:11:34.982 --> 02:11:37.781 Good school.

475 "Jaime Diamond" (640132096) 02:11:37.781 --> 02:11:44.878 No, NO NO, not at orse. Campus.

476 "Jocelyn Runnebaum" (3849817600) 02:11:44.878 --> 02:11:48.292 Hyde. Yeah. High school at hyde.

477 "Russell Dunn" (2096156416) 02:11:48.292 --> 02:11:50.477 In Maine?

478 "Jaime Diamond" (640132096) 02:11:50.477 --> 02:11:53.614 Yeah.

479 "Russell Dunn" (2096156416) 02:11:53.614 --> 02:11:58.113 Like yes, where you currently are, yes? How did you answer.

480 "Jaime Diamond" (640132096) 02:11:58.113 --> 02:12:04.653 I grew up in Brunsmic Ray next door. Oh, how funny? Wow, that's a long story.

481 "Russell Dunn" (2096156416) 02:12:04.653 --> 02:12:07.276 Okay. And if you know anything about the school, you can.

482 "Jaime Diamond" (640132096) 02:12:07.276 --> 02:12:10.578 Take a guess. Yes, I do.

483 "Russell Dunn" (2096156416) 02:12:10.578 --> 02:12:11.559 But yeah.

484 "Jaime Diamond" (640132096) 02:12:11.559 --> 02:12:15.339 A yeah.

485 "Jocelyn Runnebaum" (3849817600) 02:12:15.339 --> 02:12:17.200 Young lady from San Francisco and getting up in Bathe, Maine. Amazing. So go ahead, Heidi

486 "Heidi Lovett, NOAA" (314564608)
02:12:17.200 --> 02:12:32.503
People are clicking on, we're at 02:45 and you saw the note I sent you so I think if we reconvene we can do that in one introduction. Okay, and then pass the torch to Cisco.

487 "Jocelyn Runnebaum" (3849817600)

02:12:32.503 --> 02:12:50.365

Great, so we have Russ done with us and we're gonna get a quick introduction from him and sounds like a committee update. Subcommittee update from Pat.

#### 488 "Russell Dunn" (2096156416)

02:12:50.365 --> 02:13:24.699

Thanks. No, not really, not really an update. So for those of you who I have not had a chance to meet yet, my name's Russ Dunn. I am the national policy advisor for recreational fisheries here at, at NOAA fisheries, and I am usually in attendance at the MAFAC meetings. I apologize for missing day one. There is a newly re-established sister federal advisory committee within the Department of Interior which has been expanded.

#### 489 "Russell Dunn" (2096156416)

02:13:24.699 --> 02:13:44.699

By congressional mandate to now also be advisory to the Secretary of Commerce. That's the sport fishing and boating partnership council. I would think of it as your cousin or sister agency. They have a much more narrow focus than you all, which is really to the, the development and promotion of sustainable recreational.

490 "Russell Dunn" (2096156416)

02:13:44.699 --> 02:14:04.699

Loading and fishing. It was our 1st gathering as a re-established and expanded committee, so I was over there in person for that. I know Tim Sartwell, who is my deputy was here with you all at

least for part of the day yesterday, but he was also balancing his time with the federal interagency committee.

491 "Russell Dunn" (2096156416)

02:14:04.699 --> 02:14:22.209

On outdoor recreation. So they also had a meeting yesterday so it's just been a crazy week. But I just wanted to say hello, welcome all of the new members in including of course the new members of the representative recreational and, commercial.

492 "Russell Dunn" (2096156416) 02:14:22.209 --> 02:14:37.663

Fishing, constituencies and, let you know I'm looking forward to working with all of you as we go into the future. If you have any questions, you need to reach out to me directly or through Heidi or any of the other.

493 "Jocelyn Runnebaum" (3849817600)
02:14:37.663 --> 02:14:55.030
So, thanks. Thanks Russ. It's always a pleasure to see you and it's I'm thankful for your partnership for me facts, so thanks for admitting to joining. Cisco, are you?

494 "Cisco Werner" (311644160) 02:14:55.030 --> 02:14:56.652 And Melissa.

495 "Jocelyn Runnebaum" (3849817600) 02:14:56.652 --> 02:15:00.047 Wonderful, we are rejuvenated and ready to rock and roll.

496 "Cisco Werner" (311644160) 02:15:00.047 --> 02:15:04.527 We we we we yes, we have not missed a beat.

497 "Jocelyn Runnebaum" (3849817600) 02:15:04.527 --> 02:15:10.930 We're ready to go. It must just be me with the tired brain, so.

498 "Cisco Werner" (311644160) 02:15:10.930 --> 02:15:34.499

Take it away. Yeah, no, thanks very much. And, before we jump into the slides, I was gonna say a couple of things in terms of how we're gonna present today and and so I I will start off giving a little bit of an update on the climate ready fisheries, you know, given that that there are some new members on the, on the committee of both Melissa and I will.

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499 "Cisco Werner" (311644160)
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#### 02:15:34.499 --> 02:15:56.949

Go a little bit slow in terms of maybe a little bit of a recap as well as updates. And, what I'm gonna, what I'm gonna cover is a little bit on the operational side in terms of the surveys and and such that we're doing and that there's there's several questions that came up during the, you know, in the previous.

500 "Cisco Werner" (311644160)

#### 02:15:56.949 --> 02:16:16.949

Discussion earlier today and yesterday that hopefully I will cover in these 1st four or five slides. Then I think I'll probably stop there and then, you know, clarify those or any additional things that I may have missed. And then I I'll cover a review of the CEFI summit, the climate ecosystem and fisheries.

#### 501 "Cisco Werner" (311644160)

#### 02:16:16.949 --> 02:16:36.309

Initiative that we, the summit that we had last week, which we'll talk about how we're looking forward, you know, and, you know, to, to projections, forecasts et cetera, of ocean and fisheries conditions as we, as we, you know, adapt to climate induced changes.

#### 502 "Cisco Werner" (311644160)

#### 02:16:36.309 --> 02:16:56.309

And then Melissa will talk about how we're actually taking some of that climate informed, it climate informed information, some of that climate information into, into some of the assessments and such that we do. So it's kind of a three part presentation, if you will, and I'll take the 1st two. So, if we could go to the next slide.

503 "Cisco Werner" (311644160) 02:16:56.309 --> 02:17:01.673 Slide please. This is a1l presented I think last time. Am am I driving this or is somebody else driving it in terms of the next slide?

504 "Heidi Lovett, NOAA" (314564608) 02:17:01.673 --> 02:17:06.398 Gabi is doing that.

505 "Cisco Werner" (311644160) 02:17:06.398 --> 02:17:08.537 Okay. And, it's.

506 "Heidi Lovett, NOAA" (314564608) 02:17:08.537 --> 02:17:12.435 All right.

# 507 "Cisco Werner" (311644160)

02:17:12.435 --> 02:17:33.269

Yeah just keep talking, there's a slight delay occasionally. Okay, yeah. All right. Thanks. Thanks. No problem. So this is a bit of a I think I showed this last time it's it's part of that recap I mentioned. So under the IRA, the Inflation Reduction Act, part of that funding is going to what we refer to as the climate ready fisheries and Meredith spoke a little bit to what.

## 508 "Cisco Werner" (311644160)

## 02:17:33.269 --> 02:17:56.099

What we mean by climate ready fisheries yesterday, you know, there's a a very healthy amount of support that we've received and I'll talk about the parts that, you know, this investment like it says on the on the left side of the screen is that we really hope to develop and build a dynamically managed fishery system that will incorporate climate and ecosystem.

# 509 "Cisco Werner" (311644160)

# 02:17:56.099 --> 02:18:17.609

Environmental data to provide this real time advice and long range projections, which is really perhaps the really, you know, a transformational part of how we provide advices is is this long range look ahead and preparation for, you know, what, what maybe happening and, and, and in the environment and and the resources that we, that we manage. And ultimately to support.

# 510 "Cisco Werner" (311644160)

# 02:18:17.609 --> 02:18:43.349

Management decisions for affected sectors and community. And the three parts that, that, you know, we, we, you know, that, that's three of the parts that fall under the climate ready fisheries are the data acquisition part, and I'll talk a little bit about that. I'll talk about climate ecosystem fisheries, the CEFI, and I'll I'll touch a little bit less on the data modernization and management, but the question did come up yesterday, so I'll talk a little bit about it.

# 511 "Cisco Werner" (311644160)

# 02:18:43.349 --> 02:18:59.169

And there's other components of climate and already fisheries which have to do with the North Atlantic right whale, the red snapper, the Pacific Salmon, Arctic and and others, and I, and I won't touch on those today. Cause I think they've already also been touched upon before. So if we go.

512 "Cisco Werner" (311644160)

02:18:59.169 --> 02:19:17.499

To the next slide, and talking about the data collection and the and the data modernization then, it does take a while, doesn't it? Okay thank you odd delay. Thanks. So the survey and, and you see I put underneath there.

513 "Cisco Werner" (311644160) 02:19:17.499 --> 02:19:37.499 In, in parentheses, a data acquisition vision for the future cause we really are evolving our thinking, it's it in the end it's it yes, the surveys are an essential component, but it's about how we collect the data and how do we have the data that we need more than how do we collect it? Do we have the data that we need in order to provide the advice that.

## 514 "Cisco Werner" (311644160)

## 02:19:37.499 --> 02:19:56.739

That that that's required. And so if you think about it, there's three, one way to think about it is three parts. We need to sustain our, our core strengths while we build the additional capacity to grow in challenges of climate change and we have in there, you know, mitigating funds in terms of being able to go out.

## 515 "Cisco Werner" (311644160)

02:19:56.739 --> 02:20:15.339

Underwater and conduct the surveys, and I'll talk a little bit about that. There's what we refer to as a mitigation fund, if you will, and this is also augmented by support that we, that we receive from Congress in additional to the IRA support. We need to modernize, and so we know that we need to be.

## 516 "Cisco Werner" (311644160)

## 02:20:15.339 --> 02:20:35.339

In more places, more quickly, we also need to measure things that perhaps we didn't measure before. So populations can be shifting geographically, and so we need to be in places that we didn't go before or at times that we didn't go before, but they're also changing internally. There are changes to the ecosystem structure, the.

## 517 "Cisco Werner" (311644160)

## 02:20:35.339 --> 02:20:59.879

Composition of the species and such, so we also need to understand how that is changing and I'll talk a little bit about that in the context of of an example that comes up. So it's not just shifts in geography, but it's also shifts into in terms of the actual ecosystems and such. And then what was talked a couple of times already in terms of the, the, the national survey program or now we're evolving it to something like the fisheries independent data acquisition.

# 518 "Cisco Werner" (311644160)

## 02:20:59.879 --> 02:21:28.799

Program because as I mentioned, to be more comprehensive than just surveys, we need to, as, as so many things are happening, we are evolving how we think about the surveys, how we plan, how do we prioritize, how we manage the surveys, and, and the recommendation from from NAPA is actually quite timely in terms of having us think about how we do this in a, in a di under a different structure given, given everything that's happening.

519 "Cisco Werner" (311644160) 02:21:28.799 --> 02:22:00.719 As well as, so I think a question that Brett asked about how do, how are we communicating this? And one of the things that I think Brian answered the question well is that while this is an internal adjustments that we're doing now, Napa was actually quite clear at least in the survey program to make sure that what we do is communicated to our, you know, at the beginning of the year or something publicly to say, how did we prioritize the surveys? Where are, what, which surveys are we gonna conduct and and eventually also.

#### 520 "Cisco Werner" (311644160)

#### 02:22:00.719 --> 02:22:24.389

You know the costs involved, so this is a very public facing effort that we're doing. We're looking to complete the 1st prioritization and and report on the structure this year and and then this will be you know a a a standing activity that we do at the beginning of every year is publicize those surveys and and how we, how we got to those how we how we how.

## 521 "Cisco Werner" (311644160)

## 02:22:24.389 --> 02:22:42.429

We came to those prioritizations. So if I could go to the next slide, please, in terms of the advanced technologies and the modernization, we, we have six what we're calling strategic initiatives, and these are.

## 522 "Cisco Werner" (311644160)

## 02:22:42.429 --> 02:23:02.349

The development of uncrewed systems so they can be gliders, surface gliders, underwater gliders, they can also be, aerial vehicles that we're, that we're using. I talked I think in the past about molecular approaches such as genomics, including eDNA, the environmental DNA.

# 523 "Cisco Werner" (311644160)

## 02:23:02.349 --> 02:23:19.719

Techniques, optical systems, acoustic systems, whether they're active, in other words, are we actively pinging, listening, you know, trying to see what's there or are we just listening in the sense of passive acoustics and remote sensing? And through all of these, there's also.

## 524 "Cisco Werner" (311644160)

02:23:19.719 --> 02:23:37.749

Efforts that we're undertaking with artificial intelligence and machine learning because there's just so much data that's coming in that and and and the that that we need in different approaches in terms of analyze all of that and so also our methods of analysis are something that falls under in the advanced technology side.

# 525 "Cisco Werner" (311644160)

## 02:23:37.749 --> 02:23:57.749

And, these are being developed, you know, by various groups across the country. There's leads, various leads across the country, and the question came up yesterday about, well, how are we anticipating what we do after the, you know, the three years of, of IRA support or or or.

#### 526 "Cisco Werner" (311644160) 02:23:57.749 --> 02:24:27.539

Completed. And the answer is that they will be continued to work. I mean we are we can and already think about how to perhaps redirect some funds internally that we can sunset some things that we're also providing to this data collection and data gathering and information gathering to ensure that the work that was successful under the development of the strategic initiatives continue. So admittedly, you know, there, there are adjustments and things that we will have to think about after three years.

#### 527 "Cisco Werner" (311644160)

#### 02:24:27.539 --> 02:24:52.949

In terms of how do we continue this, it will depend on how these individual components evolve. But, the aim is to have, you know, some of these components near operational so that we can then take them in perhaps as I said, either augment or substitute some of the work that that we were doing perhaps with legacy methods. I'll just call them that. Clearly also there's an over.

#### 528 "Cisco Werner" (311644160)

#### 02:24:52.949 --> 02:25:14.849

Overlap in terms of having to calibrate as we go from one way of doing things to another and that's something that that we keep very much in mind in terms of how to ensure that we we we understand what the new methods are giving us and ensure that we get either at at least as good as if not better results than than what we had before. It's it's it's it's not an easy.

#### 529 "Cisco Werner" (311644160)

#### 02:25:14.849 --> 02:25:36.059

Task, but I'm, we have a a series of folks, a number of folks that, that, that, that are really you know producing some very, very interesting and very promising results even today, which we're in some ways just getting out of the gate. The next slide, again, as part of the support from the IRA, we'll talk about survey mitigation.

#### 530 "Cisco Werner" (311644160)

## 02:25:36.059 --> 02:25:52.149

And again, I I talked about this a little bit last time and and the survey mitigation in, in part is developing new, new approaches, modernizing how we collect data, e.g., or how do we make it more efficient?

531 "Cisco Werner" (311644160)

## 02:25:52.149 --> 02:26:07.869

I have an example off the West Coast here, and Jamie you might be familiar with this, you know, we talked about the importance of getting near shore and such. You know, this is an example where the Northwest Center and the Southwest Center are integrating.

532 "Cisco Werner" (311644160)

#### 02:26:07.869 --> 02:26:25.749

What normally would be two separate surveys, the hake survey and the or the coastal pelagic survey into a single vessel, and the the the the the the evolution here is how to come up with a single net system that can look at species that are.

#### 533 "Cisco Werner" (311644160)

#### 02:26:25.749 --> 02:26:45.749

Near surface or water column pelagic surface, logic pelagic species with mid mid to deeper water species such as the hake. And so this is something that over the next two years, we already have the nets. I think it's already installed on the [R/V] Armada and the next one is gonna be installed on the Lastker and.

### 534 "Cisco Werner" (311644160)

#### 02:26:45.749 --> 02:27:10.319

And and the idea is that either one, either, either vessel or both can conduct you know the surveys which will either, which will which can which can make the whole survey process very efficient. This is in part accelerated because as you know, there's this, the midlife repairs that I think I talked about that each one of our fishery survey vessels or FSB or white ships, each one of our.

### 535 "Cisco Werner" (311644160)

#### 02:27:10.319 --> 02:27:33.269

Five white ships are gonna undergo. And so we're essentially gonna be down a ship every other year, so to speak while that ship undergoes midlife repair. And so very quickly, and I apologies for a little bit of detail here, we're gonna have to send when the Dyson, which is the Alaska vessel goes into its midlife repair, which is.

#### 536 "Cisco Werner" (311644160)

#### 02:27:33.269 --> 02:28:04.109

Scheduled for 26th will send the Armada up to Alaska to conduct the Dyson work and basically the Alaska is gonna have to conduct the, the combined west Coast survey while the Armada provides support to to the Alaska surveys. And so that, that, that's an example of what we're able to do both for data gap mitigation but also modernization again through support from MYRAD. There's other support that data mitigation is doing or is, is contributing to, which.

#### 537 "Cisco Werner" (311644160)

#### 02:28:04.109 --> 02:28:28.619

Which is Pat you brought up a little bit about the mitigating loss days at sea, you know, while ships go, you know, through the mechanical and and other other other issues that, that, that, that need to be addressed. And e.g., one of the things that we're looking at is chartering vessels to be able to conduct some of our protected species or Pacific marine mammal surveys. And this is something that really is between the Pacific islands, you know, the, the.

538 "Cisco Werner" (311644160)

#### 02:28:28.619 --> 02:28:53.099

How how to operate and how to use charters to conduct work in Pacific Islands and West Coast and and the Alaska regions. And so these are, this is, this allows us to do, to do that, you know, to, to, to ensure that we can conduct that work as well. And then we have just recently newly allocated \$1 million for survey contingency fund. Again, greatly appreciated support from Congress that allows us to, to.

#### 539 "Cisco Werner" (311644160)

#### 02:28:53.099 --> 02:29:11.709

And to to make adjustments within, within year unexpected challenges that happen. And so those are just examples of how we're using this, this, the IRA funds to, to, to mitigate as well as help transition and modernize some of our surveys.

### 540 "Cisco Werner" (311644160)

#### 02:29:11.709 --> 02:29:30.159

I go to the next slide, please. And, the question from Pat again came up in terms of, you know, how are we doing with, you know, the, the percent days at C completed. Days at C is a measure of, of, of, of, you know.

#### 541 "Cisco Werner" (311644160)

#### 02:29:30.159 --> 02:29:50.159

Completing completing our surveys out there. What we normally do is we, and again this answers past question in terms of we communicate every quarter or every 2nd quarter when we have meetings with with our with the with the appropriators in terms of how we were doing, how we did in the previous quarters.

### 542 "Cisco Werner" (311644160)

02:29:50.159 --> 02:30:10.709

Operation and execution of surveys. This is an example of how we present you know the results or or the status, and in this case, we would be reporting and this is, this is this is what we will be reporting at our next meeting talking about quarter one quarter two. So basically from October until.

#### 543 "Cisco Werner" (311644160)

02:30:10.709 --> 02:30:28.989

April one roughly that of the, it was it was a remarkably successful two quarters of the in terms of the in terms of no surveys were canceled or postponed. We did have some losses of days at sea and I'll talk about that in a little bit.

### 544 "Cisco Werner" (311644160)

#### 02:30:28.989 --> 02:30:47.799

And, you know, in terms of the, in terms of the count, within those two quarters, there's only one that we had to, I guess this in this in this in this slide deck what what it shows is that there's one

that we had to cancel but it really was postponed till next year for various reasons. But what we do is.

### 545 "Cisco Werner" (311644160)

02:30:47.799 --> 02:31:07.799

Is, we report out on how we do on our yellow ships, our chartered vessels or or academic fleet, the gulf fleet, as well as our small boat operations. And quarter one quarter two, the, the histogram on the right, you know, shows that those are relatively quiet quarters in the sense that.

### 546 "Cisco Werner" (311644160)

### 02:31:07.799 --> 02:31:39.549

You know it's a winter and and and and the early spring, but it really is gonna pick up starting now is when, is when really you know we'll see that, that uptick in surveys and and and we'll see hopefully things will continue in terms of maybe not cancellations and also perhaps minimal losses of data to see for for as I said crewing or mechanical reasons. The number of about 75 %, Pat, which is what you asked asked seems to be a somewhat steady number over the last.

### 547 "Cisco Werner" (311644160)

### 02:31:39.549 --> 02:31:59.549

Two three years, it does require some juggling then to make sure that you know if we have to adjust station distributions station locations and such, and still, you know, you know, achieve the coverage that we need to provide the information that we need. But it is something obviously that we continue to work with our colleagues.

#### 548 "Cisco Werner" (311644160)

### 02:31:59.549 --> 02:32:28.799

And other places to try to minimize. So we do, we do report out, you know, the status of of execution. And I'll go one more slide and then I'll stop, at least for this part. And this last slide is just one highlight that we completed the the high sea survey, the Hawaiian islands citation and ecosystem assessment survey. This is a survey that happens roughly every seven years or so, I think. And it's a, it's a very complicated survey.

### 549 "Cisco Werner" (311644160)

#### 02:32:28.799 --> 02:32:51.359

Survey with with with two vessels, the city based in in in Pacific Islands and the Lastker around the west coast. And, you know, provided very large large scale multi species survey for Whales, dolphins, and seabirds, so it's that broader ecosystem in the Pacific that we need to do. And and so this is just, I just wanted to highlight, you know, that this was a, a major effort.

### 550 "Cisco Werner" (311644160)

### 02:32:51.359 --> 02:33:19.093

Multi lineup multi so not multi line office multi multi center multi ship et cetera, and our folks were able to pull it off. There were some losses in day at C, but, I think we we try to make up for

it as much as we could. So, before I jump into the I'm gonna stop here cause I know that there might be questions on this part before I move forward. So, I'll stop here for any questions.

551 "Jocelyn Runnebaum" (3849817600) 02:33:19.093 --> 02:33:25.557 Thanks Cisco.

552 "Cisco Werner" (311644160) 02:33:25.557 --> 02:33:31.632 Let me. Oh.

553 "Cisco Werner" (311644160) 02:33:31.632 --> 02:33:48.570

I have one more thing that I think. Brett was asking about, you know, the various costs and such, and let me I'll I'll just say very briefly, in terms of how we think about, you know, our, the, the cost involved in conducting surveys, there's sort of the.

554 "Cisco Werner" (311644160)

02:33:48.570 --> 02:34:11.910

Short term year to year costs that we need to do and and are we able to anticipate you know whether we're gonna need more charters or or, you know, what not you know adjustments to base that, that, that Brian talked about. So that's one level of costs. I think, you know, there's another level of cost that we're thinking that, that is more on a tenure.

### 555 "Cisco Werner" (311644160)

02:34:11.910 --> 02:34:29.770

Time scale, and that has to do with, as I mentioned earlier, the midlife repairs. So each one of those shifts, the Dyson, the, the Bigelow, the Pisces, et cetera, are gonna go are gonna be in midlife repair for anywhere from twelve to 14 months.

### 556 "Cisco Werner" (311644160)

#### 02:34:29.770 --> 02:34:47.830

The cost of each one of those midlife repairs is on the order of \$85 million, and it's a it's a really in depth look at, you know, they actually like take it apart ship and make sure that everything is good so they can last another 20 years. As the name says midlife, they're all gonna be about 20 years old.

557 "Cisco Werner" (311644160)

02:34:47.830 --> 02:35:07.830

When they undergo this midlife repair and this hopefully extends in their longevity for another 20 years. So if you think about it, five shifts at about 85 \$90 million, you're close to half a billion dollars in terms of, in terms of that. And then the other cost that you can think about is, is the is the is the overall fleet recap.

# 558 "Cisco Werner" (311644160)

02:35:07.830 --> 02:35:30.790

And by that, it's like replacing the vessels that, you know, are gonna reach their end of service life. And for fisheries we have at least three such vessels, the Oregon two, the setting and the gunter. I talked about the setting actually it's on the screen right now. That one is gonna reach its end of service life probably in 2028 or so.

### 559 "Cisco Werner" (311644160)

02:35:30.790 --> 02:35:49.960

And, the question about how to replace those ships. And so there's discussion now and planning actually the analysis of alternatives has been completed for what's referred to as class C as in Charlie, vessels that are gonna be smaller, nimbler, and can cover areas that, that.

## 560 "Cisco Werner" (311644160)

02:35:49.960 --> 02:36:10.576

That again, you know, given all the changes that we're seeing, we need, we need that flexibility. And that's probably also on the order of, of another half a billion dollars. So over the next ten years, there's, there's planning and and discussion and dissection over over how to, how to maintain the fleet while balancing also.

## 561 "Brett Veerhusen" (1199368704)

02:36:10.576 --> 02:36:28.470

You know, these, these advanced technologies that I that I talked about. So now thanks Cisco, that that's helpful. The just last little thing I am remembering from Dr. Spinrad when he came and visited us.

562 "Brett Veerhusen" (1199368704)

02:36:28.470 --> 02:36:56.315

Was kind of framing, your arguments, right? Where you sort of reach high and say, you know, the this is what we're wanting and this is what it's needed for safety, weather, research, whatever, and, you know, if you're saying you don't want to fund that, you're saying that you are giving up these opportunities. He, he had a better way of saying. Doing it, but it stuck with me as a, a smart way to frame things.

563 "Cisco Werner" (311644160) 02:36:56.315 --> 02:37:04.695 When you say giving up.

564 "Brett Veerhusen" (1199368704)

02:37:04.695 --> 02:37:28.530

So, so say that again they're not wanting to fund it but not giving up the opportunity I mean yeah basically being like you you know shoot for, the two or 3 million, give the reasons why because it will increase, you know, safety of sea, research capacity, a number of things.

565 "Brett Veerhusen" (1199368704) 02:37:28.530 --> 02:37:55.694

And then if the response back from, say, an appropriator or another decision maker is luke warm, you then turn the argument back at them and you say like, ok, so you're saying that safety, at sea, research, you know, weather, whatever, that is then not as important to you. He had a better way of saying it. I'm not a little bit of a cold south.

566 "Cisco Werner" (311644160) 02:37:55.694 --> 02:37:57.938 Excuse me I'm not firing on all cylinders.

567 "Jocelyn Runnebaum" (3849817600) 02:37:57.938 --> 02:38:07.993 But I liked how I put it. Okay. Yeah, thanks. Thanks Brett. All right. Thank you both for that. I have two hands, Cisco. So Kellie and then Pat, so we'll go to Kelly 1st.

568 "kellie ralston" (948801792) 02:38:07.993 --> 02:38:11.908 Thanks.

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570 "kellie ralston" (948801792)
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02:38:13.977 --> 02:38:38.650

Hey Cisco, how are you? Hi, how are you Kelly? Good. Appreciate the presentation and the the budget focus is very helpful. Two, I have two questions. One, how much of kind of our survey efforts are focused on South Atlantic fisheries? And I asked that one specifically because I know we have.

571 "kellie ralston" (948801792) 02:38:38.650 --> 02:39:03.835

Many data poor species in that region, that, you know, even the current surveys that we have appear to be insufficient for, just to provide management advice, and so I'm curious kind of what percentage of all of our survey efforts are focused there. And then secondly, if you could give kind of a brief update of kind of the MRIP/state. Deep engagement efforts both in the Gulf and the South Atlantic.

573 "Cisco Werner" (311644160) 02:39:09.370 --> 02:39:27.790

Oh Boy I wish Evan were here for the question. It it it it I might have to get back to you on that to see exactly where it is. So, so let me think about that for a 2nd. But in terms of the effort in the Southeast.

574 "Cisco Werner" (311644160) 02:39:27.790 --> 02:39:47.790 I want to say that in terms of the number of days at sea, the southeast, is I think is almost the, you know, they're they're, they're the largest chunk in terms of of days at sea. Now, you know, they have that and that's a combination of, you know, the, the, the white ships, you know, whether it's a Pisces and or, you know, a number.

### 575 "Cisco Werner" (311644160)

### 02:39:47.790 --> 02:40:15.010

The small vessels and and charters that, that they use. So the the coverage for the southeast, and the reef fish and such, I I like always, you know, you could always use more and you could always have more, but right now I think they're it's it's in a relatively good place. They're also investing in leading, you know, some of the work with the, with the optical systems and the the artificial intelligence. So some of the.

### 576 "Cisco Werner" (311644160)

### 02:40:15.010 --> 02:40:35.010

Some of the, these, these really exciting advanced technologies are are being implemented and developed in the southeast, and this is gonna help enormously as well. So as I said, you know, there's always more information that that could be collected, particularly if you, if you go into areas, like you said, you know, data limited places like in the Caribbean and such.

### 577 "Cisco Werner" (311644160)

### 02:40:35.010 --> 02:41:09.870

That those are areas that, that, that we would like to invest more in and and hopefully we will be able to. But I think between the combination of actual vessels going out in the water and the advanced technologies and I I can't underscore enough, you know, how, how the advanced technologies are gonna be able to help because, you know, some of these things you can actually run off smaller vessels as was proven off the Pacific Islands during the COVID years when when the white shifts couldn't go out, we were able to deploy those cameras, you know, with basically fishing vessels. And that, that information.

### 578 "Cisco Werner" (311644160)

### 02:41:09.870 --> 02:41:33.940

Was, was, was critical in order for the, for the Pacific islands stock assessments and such to go on. So I I I recently visited with Clay, and the the report-outs are are actually quite quite encouraging and and I think over the next two, three years, hopefully we'll stabilize whatever, whatever fluctuations there were in terms of observations in the past.

### 579 "Cisco Werner" (311644160)

### 02:41:33.940 --> 02:41:53.680

With regard to MRIP, you know, it's it's it continues you know I know that there's been a number of iterations with the states, and I'm not sure if there's, oh, too, too bad that Dave Donaldson is not on here cause he would be able to help a little bit. But there's been a number of iterations with the states in terms of.

580 "Cisco Werner" (311644160) 02:41:53.680 --> 02:42:09.520

You know shifting some of the ports the support to the states for the data collection and, and also, you know, there's been quite a bit of work that I think has been quite successful in terms of allowing the states to lead some of the efforts that.

581 "Cisco Werner" (311644160)

02:42:09.520 --> 02:42:30.274

You know, I think will help in terms of how to harmonize and and and and bring some of the challenges that we've had in the past again into into a better place. So I I I wish again, let me get back to you on the details of this, but there's no red flag right now in my mind that that that I would bring up. In terms of not being able to move forward on, on MRIP in a positive way.

582 "kellie ralston" (948801792) 02:42:30.274 --> 02:42:36.567 Okay. Great.

583 "Cisco Werner" (311644160)02:42:36.567 --> 02:42:39.508Right, yeah, and I asked those two questions kind of together specific.

584 "kellie ralston" (948801792)

02:42:39.508 --> 02:42:49.780

Specific to the South Atlantic because many of the stocks that are data for, are, are heavily recreational or at least, you know, a mixed.

585 "kellie ralston" (948801792)

02:42:49.780 --> 02:43:06.910

Use fishery, and so the recreational data in particular is extremely important there. And so if we can't supplement it on the M rep side and so that's Florida up to North Carolina, and I know the council's been looking at ways that they can help.

## 586 "kellie ralston" (948801792)

02:43:06.910 --> 02:43:35.668

Get, you know, better recreational surveys there, but I think they really need kind of some active support from the agency. But if we can't get the the recreational data component, then that makes the independent monitoring all that much more important. And so the fact that, that we're, we, we have so many stocks in the South Atlantic that are overfished or undergoing overfishing, is concerning and and I I would love to see some focus on that. So maybe you and I can get together after the meeting. I know we've been talking about that for a while to sit down and put our heads together.

587 "Cisco Werner" (311644160)

02:43:35.668 --> 02:43:38.708 Yep, sounds good. Sounds good Kelly.

588 "Jocelyn Runnebaum" (3849817600)

02:43:38.708 --> 02:44:06.108

Yeah, thank you. Great, thanks. Thank you both. So I think we have about 20 ish more minutes with, Cisco, so, I want to get I want to get Pat and Jim their questions, but just recognizing that, yeah, we trying to make space for everybody, I guess. So Pat, go ahead. Yes.

589 "Patrick Sullivan" (3843324672)

02:44:06.108 --> 02:44:30.310

Great, thanks. Thanks Jocelyn for allowing me to get jump back in here and thanks Cisco for the presentation and all you do with the limited funds that you have. Really appreciated hearing about the refurbishment of the white shifts and then all of the other technologies that you're, you're viewing.

590 "Patrick Sullivan" (3843324672) 02:44:30.310 --> 02:44:50.310

What caught me, in reference to what I was asking Brian earlier is you were talking about the 70 %, you know, days at sea and, you know, part of that maybe organizational, part of it maybe, can we replace it with other things and so on and so forth. But part of it still seems to be.

#### 591 "Patrick Sullivan" (3843324672)

02:44:50.310 --> 02:45:12.580

Needing to have funding and a sort of acknowledged at the higher level. And, and, I just want to highlight that because in our note to you and and the letter that we put together, this can be accomplished in a couple of different ways. One is by constituents sort of.

592 "Patrick Sullivan" (3843324672)

02:45:12.580 --> 02:45:31.600

Guiding, their people in terms of like where this money come needs to come from and why it's so important to have this sort of baseline set of data. And so, making sure that it's transparent.

#### 593 "Patrick Sullivan" (3843324672)

02:45:31.600 --> 02:45:47.890

Which program it's in and what it what's allocated to it and how it's sort of falling short, might be useful. And of course, we don't want one to necessarily ask for money that would come from, you know.

594 "Patrick Sullivan" (3843324672)

#### 02:45:47.890 --> 02:46:17.953

Taken from some other source that's also needed. But, the, it is the baseline information as Kelly is also pointing out to this and so if we can make sure that that what is needed there is clearly voiced at some level, that would help us, I think in terms of facilitating the

communication. If, do you believe that that is, is in fact central as we're, we're kind of putting forward?.

595 "Cisco Werner" (311644160)

02:46:17.953 --> 02:46:43.200

Yeah, thanks Pat and and great question and and you know, as I as I mentioned, you know, when when I'm gonna try to try to tie a couple of things together here, you know, we'll be down ships coming up, whether it's because it's scheduled in terms of those midlife repairs or because they're gonna reach their.

### 596 "Cisco Werner" (311644160)

### 02:46:43.200 --> 02:47:04.710

In the service life, we're gonna have to make up those somehow in the sense of, you know, charters and so we will need to, we will need to find support to be our, you know, ways of of finding ways, finding ways to to make sure that we're still on the water while while we while we address while we bridge those those moments of, of, of being down vessels.

### 597 "Cisco Werner" (311644160)

### 02:47:04.710 --> 02:47:24.870

And, as part of the midlife repair period strategy or roadmap, we are working towards identifying budgetary needs to get through this ten year period. It is a ten year period that we're trying to get through. And if a ship goes down off the east coast, it might bring a different set of challenges that off the west coast.

## 598 "Cisco Werner" (311644160)

## 02:47:24.870 --> 02:47:48.940

You know how do you shuffle things and so on. So I think you know this is something that we need to, and we are working on coming up with actual a realistic budget of what it's gonna take not just to do the midlife repairs, you know, but actually how to sustain the observe the the all all of the data collection efforts that we do, you know, in the meantime with, with these other approaches, and I'll and I'll mention.

## 599 "Cisco Werner" (311644160)

## 02:47:48.940 --> 02:48:06.550

Cooperative research that came up also in earlier conversations, that would be a hugely important component in terms of being able to mitigate some of the shortfalls that we might have otherwise. So I think that, you know, working with cooperative research, working with the charters, et cetera, is, is gonna be.

## 600 "Cisco Werner" (311644160)

## 02:48:06.550 --> 02:48:35.824

At least in my view a clear component, a clear solution, a component to the solution to how we, how we get through this, this next decade in terms of observations in addition to the development of the advanced technologies and so on. So, that perhaps speaks a little bit to the,

to where we will, you know, where the kind of the the kind of, you know, how the operations that we will need to make sure that we can continue. Through, as I said, these other. These other, these other mechanisms.

601 "Patrick Sullivan" (3843324672) 02:48:35.824 --> 02:48:38.911 Thank you then thank you for that. I

602 "Jocelyn Runnebaum" (3849817600) 02:48:38.911 --> 02:49:05.913

I'm feeling a lot of anxiety about the survey situation and so I think it might be worth trying to figure out how many if that can continue to be supportive in this effort cause it feels like it's almost beyond a funding issue. There's a lot of, a lot of things at stake here. Jim I'm gonna give you the last word for this section and then let Cisco continue on.

603 "Jim Green" (1810777856) 02:49:05.913 --> 02:49:11.560 Alright, thank you and thank you Cisco for being here again.

604 "Jim Green" (1810777856)

02:49:11.560 --> 02:49:31.560

Our Gulf Fisheries Research Foundation is working with LGL and we're actually doing EBM projects and we're running the, the data through an AI program for identification and discards and stuff like that, so we're actually part of that process.

605 "Jim Green" (1810777856)

02:49:31.560 --> 02:49:55.380

So she was speaking of earlier with AI, but when it comes to, you know, the data mitigating data gaps and stuff like that and the money that's there for data acquisition and modernization, are we leaning, is the agency leaning hard heavy on an untapped resource and something they've tried to tie into, which is getting more buy in from the recreational fisherman is there.

### 606 "Jim Green" (1810777856)

02:49:55.380 --> 02:50:14.232

Is this, is there a prioritization of trying to get more recreational fishermen involved in this process so that we aren't so heavily dependent just on survey data and whenever we do have a ship go down or we do have gaps in that data that we untapped, that we tap into some, then to to a presence that's always out on the water to begin with. I think the short answer is yes and I'm gonna flag.

607 "Cisco Werner" (311644160) 02:50:14.232 --> 02:50:23.632 Russ, are you still on cause I, I know that Russ Dunn, are you still on or did you have to hop off? 608 "Russell Dunn" (2096156416) 02:50:23.632 --> 02:50:25.470 Yeah, now I'm here.

609 "Cisco Werner" (311644160)

02:50:25.470 --> 02:50:32.670

Can you speak to to this cause I know that this is something that you and Evan and others have been looking at.

610 "Russell Dunn" (2096156416) 02:50:32.670 --> 02:50:41.500 Yeah just I mean just sort of peripherally cause it.

611 "Russell Dunn" (2096156416)

02:50:41.500 --> 02:51:01.500

So what Cisco is referring to is, is, the fact that as an agency, we are, we have engaged our partners, meaning the our our management science partners, the states, interstate commissions and the Councils, and we are at the hour.

612 "Russell Dunn" (2096156416)

02:51:01.500 --> 02:51:21.500

Set of an effort to sort of holistically re envision our state federal recreational data collection partnership. We are having a, webinars at the end of this month on the 29th and 30th and actually the I forwarded an email to the, to the subcommittee.

613 "Russell Dunn" (2096156416)

02:51:21.500 --> 02:51:48.690

Our members and we can send it to the entire MAFAC for whoever's interested about how to best engage and integrate the, I'll call it for lack of a better term, the, the, the fishing public, the interested public in this effort. Where do they fit in? How do they fit fit in? What is the the vision of both the rec community itself as well as the, the, the sort of man.

## 614 "Russell Dunn" (2096156416)

02:51:48.690 --> 02:52:11.301

And so, I, I can't answer the direct, the question directly in terms of the office scientist technologies efforts to, prepare and integrate data from the rec community outside of that effort, but within that effort that.

615 "Cisco Werner" (311644160)

02:52:11.301 --> 02:52:26.560

That that is sort of a part of the larger discussion, if that makes sense. And, and, and I think Jim, you're also getting at, you know, the, you know, whether it's the the apps and, and, and others and other things, I think those are all.

### 616 "Cisco Werner" (311644160)

02:52:26.560 --> 02:52:44.080

On the table, and they have been on the table for a while. I And, and I know Russ, you you've looked at them yourself and I don't know exactly right now if, if they've been able to take that step of using that. I think part of some of them are being actively used, but, but I don't know if, if there's a broad use yet.

617 "Jim Green" (1810777856)

02:52:44.080 --> 02:53:01.740

There might be in some cases where, where it happens. I think my biggest thing is that I would like, you know, the recreational fishing especially in the southeast, as you said, we have the largest per unit of effort down here.

### 618 "Jim Green" (1810777856)

### 02:53:01.740 --> 02:53:23.010

And that I think the stewards that there needs to be a heavier amount of stewardship placed on that access on the, you know, they're accessing natural resources that's owned by the nation, and we have so much issues with budgets and capacity of vessels and research and all that stuff that they should take, if not the big, if not a bigger role.

### 619 "Jim Green" (1810777856)

02:53:23.010 --> 02:53:32.016

Biggest role in providing data and help mitigate some of these budget seasaws that we go through trying to.

620 "Cisco Werner" (311644160)

02:53:32.016 --> 02:53:48.510

Provide information to manage our fisheries, so that's where I was really getting to it. Thank you all very much. Yeah, thanks Jim. Thank you. So if if you wish I'll jump into the CFI and I'm gonna zoom through these, not because.

### 621 "Cisco Werner" (311644160)

02:53:48.510 --> 02:54:10.870

I don't think I'm gonna shortchange them, but I think some of them, I can't I can actually zoom through them if, if, if you're ok. Is that alright Jocelyn? Thank you. Yes, please. Thank you. Okay, so next slide, the CFI, the climate ecosystems and fisheries initiative, I, you know, there's there's what I want to cover real quickly is, is, you know, you know.

## 622 "Cisco Werner" (311644160)

02:54:10.870 --> 02:54:30.870

We need to, we realize that we need to fulfill our mandates into changing climate and we need to provide climate informed decision making. I'll talk very quickly, quickly what it is, what is the

CFI and also where we are in next steps and and Meredith was able to join us so, hopefully anything I drop out or or mistake, you know.

623 "Cisco Werner" (311644160)

02:54:30.870 --> 02:54:54.730

But Meredith, please help me out. So the next three slides are gonna be real quick. Next slide, we know things are happening everywhere. I don't think that, you know, it's any, you know, we all know that whether you're on land, whether you're in the oceans or ice or whatnot, you know, climate change is affecting our oceans in many ways. And the next slide, you know, also says, of course, you know, that's also impacting.

### 624 "Cisco Werner" (311644160)

02:54:54.730 --> 02:55:13.030

You know, the habitats, the species, the abundances, as well as, you know, how we use the ocean. So climate change is very real in terms of what it's doing. Next slide talks then of course on the impacts, so these impacts are real and they affect, you know, our living our living room resources, our blue economy.

### 625 "Cisco Werner" (311644160)

#### 02:55:13.030 --> 02:55:31.810

You know, our heritage cultural heritage as well as EEJ that was talked about yesterday in terms of how these are impacted. So while this is happening, the next slide gets a little bit into the into the a little bit into the technical side of things and that's the nature of the change, right? And how we have managed and how we will need to manage.

#### 626 "Cisco Werner" (311644160)

#### 02:55:31.810 --> 02:55:48.520

So and if you look on the left, you know, we, the way that we have managed it, we've assumed that there were averages. We've assumed maybe that yes, there's random variations between year and year, and we've also assumed that there were what is referred to as prevailing environmental conditions. That is.

### 627 "Cisco Werner" (311644160)

#### 02:55:48.520 --> 02:56:08.520

You know, that's that those are fair assumptions under what's referred to as stationarity, but as we move into this non stationary system, you know, we see that the green lines no longer hold because now we have actually trends, now no averages. We have variations both in terms of when they, when things occur as well as how frequent, so extreme.

### 628 "Cisco Werner" (311644160)

### 02:56:08.520 --> 02:56:32.740

Events, you know, are things happening more frequently in time or are they more powerful in in in in their strength and their impact? So it's a different way of thinking about it. It's almost a different approach entirely in terms of how we then try to provide advice under, under stationary

versus non stationary conditions. Next slide, if you if you-This is a little bit of a complicated slide, but it I.

## 629 "Cisco Werner" (311644160)

### 02:56:32.740 --> 02:56:52.740

Can't get rid of it, no matter how I try to get rid of it, it just keeps appearing in my slides. So, you know, you see the little frogs there and one frog tells the other relaxed pot temperatures have been going up and down for centuries. And that was true. There was, you know, there were centuries when things were relatively flat, so you knew that you were always gonna grow a corn or wheat or whatever and you didn't have to worry.

### 630 "Cisco Werner" (311644160)

### 02:56:52.740 --> 02:57:26.400

About that and you knew the fish were gonna be in certain places, you know, under normal conditions or under average conditions. And, what you, what we see here is a number of lines. One is sort of long term changes and lines et cetera etc. Then you have storms and then you have this, this underlying long term secular change, the climate change, which is slowly creeping in, and then you add them all together, and then you get that black line, and that black line is the sum of the three above it. And what you see then in those area that that ellipse then is that we're getting into places where.

### 631 "Cisco Werner" (311644160)

### 02:57:26.400 --> 02:57:46.410

All of a sudden it's it, you know, we're affecting populations in terms of not necessarily extinction in terms of the species becoming extent but they may not be available commercially or such. So we're reaching these points, we're hitting these thresholds that it's just some of these three some of these, some of these were not, it's not just climate change.

### 632 "Cisco Werner" (311644160)

## 02:57:46.410 --> 02:58:05.680

But also if you look at that bottom right, it's the extreme events and the frequency of extreme events. In this case marine heat waves off the West Coast of the United States and Alaska and so on. And so we've really evolved from a time when it was nice to know that these things happen to now a time when we need to know that these things are happening.

## 633 "Cisco Werner" (311644160)

### 02:58:05.680 --> 02:58:25.680

So the next slide is one that, of course Jamie, you know, you're quite familiar with, you know, which, which talks about the, the snow crab, the bering snow crab collapse, and it it just shows that in 2018, you know, the red, the red dots or the red squares show, you know, the, the, the large abundance of snow crab that we had and then [20]20.

634 "Cisco Werner" (311644160) 02:58:25.680 --> 02:58:53.670 [20]21 essentially the crash, right? And it was it was basically a loss of an order of magnitude in 21 versus 20. And, and the the reason you know in a in in two sentences is that yes, heat was a factor, but it wasn't really the factor that caused these, the collapse and the crabs. It was actually that it there was also not enough food. And so this brings up the ecosystem part of things, right? This is it's not just understanding how many.

### 635 "Cisco Werner" (311644160)

### 02:58:53.670 --> 02:59:14.010

How many of the population are where, or, you know, just measuring, you know, what the ocean conditions are, but we also actually need to understand the ecosystem, and this is the part about how we need to rethink our surveys that we're not just quote, estimating abundance of things, but we actually have to look at the food web and the energetics that supports it.

### 636 "Cisco Werner" (311644160)

### 02:59:14.010 --> 02:59:34.390

And so, combination of factors of of heat, but not enough to actually stress the organism so they die. It was the heat and the fact that there was not enough food to offset the heat that caused the collapse of the crowd. That's, that's a very simplified way of saying it. But the question really is, could we have foreseen it?

### 637 "Cisco Werner" (311644160)

### 02:59:34.390 --> 02:59:50.950

And the analysis of this very nice paper by Cody Solosky and others is that they really, there was NO way to to have foreseen it because these were conditions that were not understood before, they were not witnessed before. So we have this challenge of are there gonna be other cases when we don't see.

### 638 "Cisco Werner" (311644160)

### 02:59:50.950 --> 03:00:06.700

Or we haven't seen things and yet we need to try to predict or at least anticipate maybe if we more than predict anticipate. So the next slide just basically says what I just said, you know, we need to, we need to have climate informed advice.

### 639 "Cisco Werner" (311644160)

### 03:00:06.700 --> 03:00:22.390

What is likely to happen and how is it gonna impact the fisheries or the aquaculture or protected places resources or the obviously in the end the communities that depend on it. How much can we think ahead? So the next two slides will be even quicker.

## 640 "Cisco Werner" (311644160)

### 03:00:22.390 --> 03:00:41.320

The next slide just says the CEFI, the climate Ecosystem and Fisheries initiative, is something that we've been working on for over 30 years, maybe even 60 years in some ways if you think

about Cal[ifornia] Current Ecosystems program off the California current. So that we've known for a long time back when it was under the Nice to know, if you will.

641 "Cisco Werner" (311644160)

03:00:41.320 --> 03:00:57.100

A Condition where we knew that physics and and other things are affecting our populations and there's a whole suite of of activities that, that, that led us to where we are now in CEFI. And the next slide says we've also received a lot of input.

642 "Cisco Werner" (311644160)

03:00:57.100 --> 03:01:12.310

Internally externally from the public in terms of, you know, how to implement how to develop CEFI. And that finally has led us to the slide of what is CEFI? So this next slide finally says, what is it?

643 "Cisco Werner" (311644160)

### 03:01:12.310 --> 03:01:32.310

And, it is a cross NOAA, and it really is every single line office involved effort to provide climate informed advice, it builds on past NOAA investments, research technology and modeling, and what we want to do is to have this end to end decision support system, and I'll walk through real quickly or run through real quickly.

## 644 "Cisco Werner" (311644160)

### 03:01:32.310 --> 03:01:54.300

What these components are, that provide things that we didn't have, you know, reliable delivery of robust ocean forecasts, you know, we didn't really weren't in the need to provide forecasts because things on average were, there was gonna be an average, an operational production of of this advice, increased capacity for generating this information and also additional research.

## 645 "Cisco Werner" (311644160)

03:01:54.300 --> 03:02:15.720

And observations. So the next slide, says, you know, we had a summit last week in La Jolla and it's the slide's not coming up. It's coming up any moment. Okay, there we are. There were about a hundred and 40 of us, you know, from, from.

## 646 "Cisco Werner" (311644160)

### 03:02:15.720 --> 03:02:35.720

All all the line office actually weather service could not make it at the last minute, they were on the list but they couldn't, but we have all the line offices and a number of of of of age or you know units within the various line offices, and it brought all of these worker bees, if you will, in terms of how we're gonna do this. And that's what I wanna walk you through.

647 "Cisco Werner" (311644160) 03:02:35.720 --> 03:02:55.090 Through next. So the next slide says there are four components, if you will. We need to develop the modeling part. That's a lot of it that ocean modeling is OAR. The information hub is OAR, it's like, ok, now that the models have been run and we have these ocean forecasts of two to ten years.

### 648 "Cisco Werner" (311644160)

### 03:02:55.090 --> 03:03:12.430

What do we do with them? How do we make this publicly accessible? And this, this information will be publicly accessible. That's ingested by regional decision support teams that generate the climate informed advice that then goes to the decision makers to then do the climate informed action. And then underneath is that.

### 649 "Cisco Werner" (311644160)

03:03:12.430 --> 03:03:32.430

Support you know through research and observations that bottom rectangle down there. So now going through real quickly on on the next slide please. The regional ocean modeling, actually NO that this slide what what this slide says is that that structure is gonna be actually working nationally. So.

### 650 "Cisco Werner" (311644160)

### 03:03:32.430 --> 03:03:55.800

The little blue boxes we're gonna have teams of anywhere from four to ten folks or such, some new hires, some already there that will work in the different areas where the little blue areas are. The red lines or the red acronyms there are places where they're already pilot programs, and the maps at the bottom are these downscale global ocean models.

# 651 "Cisco Werner" (311644160)

### 03:03:55.800 --> 03:04:21.810

That are gonna be implemented locally cause while climate change is global, its manifestation is, is regional. So in each one of these little blue things, what's gonna happen then is the next slide yeah so there will be what we refer to as decision support team. So the modeling teams will generate this model output, you know, looking at the ocean and ecosystems and such.

### 652 "Cisco Werner" (311644160)

03:04:21.810 --> 03:04:47.770

As I said, anywhere from up to two to ten years depending on on the situation, then the next one, the next slide, oh go in the right direction. There we go. And this is just to give you a sense of a schedule. So we hope over the next three years, which is roughly the timeline of IRA, we will have already in some ways operations for the east coast, west Coast, and Arctic.

### 653 "Cisco Werner" (311644160)

### 03:04:47.770 --> 03:05:07.770

As well as the great Lakes and Pacific islands. So we've worked through at the summit on a schedule to make sure that we can deliver this. And the next slide then talks about, you know,

the, the information hub, which is which is led co led by OAR and some of the other line offices where again, how do we make.

654 "Cisco Werner" (311644160)

03:05:07.770 --> 03:05:27.730

This accessible for everybody. So that this the 1st step was a huge effort, haven't done. Now, how do we make this accessible, not just to us but to the public? So that's this information hub. Next slide. The regional decision support teams take this information and incorporate it into their stock assessments or.

655 "Cisco Werner" (311644160)

03:05:27.730 --> 03:05:45.880

Management strategy evaluations or whatnot and generate these scenarios, e.g., in terms of what, what, what are likely things to happen, which then goes into the next slide, which then goes to the decision makers who make, who make those.

656 "Cisco Werner" (311644160)

03:05:45.880 --> 03:06:04.030

You know decisions about quotas or permits or whatnot. If you go to the next slide, kind of already talked through this. Keep going, next slide more.

### 657 "Cisco Werner" (311644160)

03:06:04.030 --> 03:06:25.300

Yeah, so, and one more. Do you might as well complete this it what this says is what I said in the in the previous slide that what we worked on at the summit and now we have sort of a three year blueprint to work on is how all these different components from.

658 "Cisco Werner" (311644160)

03:06:25.300 --> 03:06:45.300

The the far top left which which talks about the generation of the model all the way to the advice to decision makers is actually connected. So we will have on the order of, as I said, six to eight people per team. So we have nationally a group of about 50 people that are not Yes, they're dealing with problems.

659 "Cisco Werner" (311644160) 03:06:45.300 --> 03:06:57.160 Locally but they are actually integrated to to provide this new way of providing climate informed advice. Next slide, please.

660 "Cisco Werner" (311644160)

03:06:57.160 --> 03:07:17.160

So the present status is that we we completed this under the hood detailed view and and prioritization. IRA funding, we have \$40 million through 26. It's largely led by by fisheries. We have \$20 million OAR has 16 million NOS and national ocean survey.

### 661 "Cisco Werner" (311644160)

03:07:17.160 --> 03:07:38.430

Says four and the details here are that, you know, we're, we're, we're, we're building these grids establishing the model, the regional the regional ocean modeling teams as well as the decision support teams, and and honestly we're off to the races. I mean this is something that Melissa in the next slide will be able to get a little bit more in terms of how we're gonna be using.

### 662 "Cisco Werner" (311644160)

03:07:38.430 --> 03:08:02.380

Using some of this information. So I think that was my last slide and hopefully what you got out of this was that we have a pretty strongly integrated system that builds on a number of years of input from a lot of folks that's really gonna provide something, necessary, that answer to the need to know.

### 663 "Cisco Werner" (311644160)

### 03:08:02.380 --> 03:08:19.450

And it's something that, you know, I think we're gonna be ready to deliver, begin to deliver sooner than later. This is something that was talked about a fair bit at at the meeting about the making sure that we can message the outcomes.

### 664 "Cisco Werner" (311644160)

03:08:19.450 --> 03:08:45.633

And the impact of this so that you know we can talk to appropriators, the constituents and so on to say to so that they can see that, that the products of this climate informed delivery or climate informed advice are actually resulting in actionable, inactionable products. So I'll stop there if there's any questions or maybe leave them to the end and allowing Melissa to go. Jocelyn back off to you and see how you how you would like to proceed.

665 "Jocelyn Runnebaum" (3849817600)

03:08:45.633 --> 03:09:11.595

It looks like Amy has a question and, you had prompted Meredith so I was gonna see if she had, a comment to add to the summit and then I think there was a hope for a short break. No, Heidi throwing me your eyes. Okay Amy, why don't you start and thank you for that that was really interesting.

666 "Amy Green UMD" (270744320) 03:09:11.595 --> 03:09:30.430 I'm from the University of Maryland and I work in education and outreach related to sustainability and I was actually.

667 "Amy Green UMD" (270744320) 03:09:30.430 --> 03:09:50.271 I'm really excited to learn about hear about the snow crab collapse case study that I think I'm gonna use in my climate change course next spring. But anyway, I was wondering if you could tell, talk a little bit more about the information hub that you mentioned. Is that something that currently exists? And or I don't know, just could you tell, talk a little bit about it?

### 669 "Cisco Werner" (311644160)

#### 03:09:55.450 --> 03:10:14.380

Yeah, it's it's it's it's where it's it's gonna be sort of the, the gathering point, if you will, of, of, of the model output that's coming out. How do we actually, you know, dig through the model output? How do we extract the information? So it's not just gonna be a place where.

### 670 "Cisco Werner" (311644160)

03:10:14.380 --> 03:10:30.070

You know, we extract the data that we need, but it's also a place where people come together and perhaps contribute to products that are being, that are being developed that will then be used for the assessments and so on. So it's, is it, is it already in place? I think there's probably a.

### 671 "Cisco Werner" (311644160)

03:10:30.070 --> 03:10:50.070

Skeleton of it right now, but the intent is that it is gonna be a public publicly facing, portal where all of this information will be accessible to anybody. So it's gonna be a wide open portal, you know, there's gonna be some github components, you know, to actually model the models themselves will also be.

672 "Cisco Werner" (311644160) 03:10:50.070 --> 03:10:52.794 Be there as well. So anybody can go. And contribute to, to, to the effort, you know, through that portal.

673 "Amy Green UMD" (270744320) 03:10:52.794 --> 03:11:02.529 It sounds like a an excellent, a productive tool for you.

674 "Cisco Werner" (311644160) 03:11:02.529 --> 03:11:05.389 In the education context, but, I.

675 "Amy Green UMD" (270744320) 03:11:05.389 --> 03:11:08.830 Do there a timeline? Do you know? Did you share that already timeline? When is it expected to be like robustly ready?

676 "Cisco Werner" (311644160)

03:11:08.830 --> 03:11:26.260

Roger Griffis, are you on? Roger, are you on the call? I don't know if Roger is on the call. He's on, but we might be in like.

#### 677 "Cisco Werner" (311644160)

03:11:26.260 --> 03:11:57.055

You might be in in listen mode. Okay, so I think that the the timeline is is this this calendar year. I mean this this has to be out there because we're, we're, we we we we need to start producing ASAP. And so what I can do is, make sure that that you know we keep everybody informed and and and actually what I should just do is contact the the the folks running the portal and and seeing how do you get access to it and then, you know, you might go in and and find a real. The skeleton thing and then maybe two weeks later it'll be more fleshed out. But yeah, I'll I'll do that and get back to everybody.

678 "Jocelyn Runnebaum" (3849817600)

03:11:57.055 --> 03:12:10.076

I think Roger is brought up to the parts that panelist, so if he has anything to add. And maybe introduce yourself Roger, if you...

### 679 "Roger Griffis" (1074044416)

03:12:10.076 --> 03:12:38.700

Hi folks Roger Griffis. Oops, climate change coordinator for NMFS in the Office of Science and technology. I'm also the, I guess the lead circus leader Wrangler for the CEFI, the system we're trying to build that Cisco just described. So happy to provide more information. I tried to drop the link into the chat and the answer is just exactly as Cisco said. They, they.

### 680 "Roger Griffis" (1074044416)

03:12:38.700 --> 03:13:00.900

Portal is a work in progress. It's breaking the link somehow I'll have to redo it. Work in progress, it's designed particularly to be a site for, I'll call them practitioners cause it's gonna have these runs of these large scale models providing forecasts and projections of ocean conditions from seasonal to inter annual out decades.

### 681 "Roger Griffis" (1074044416)

03:13:00.900 --> 03:13:16.983

So it's, we're still wrestling with whether or not how kind of public user friendly it is for a school groups, e.g., that's kind of, it's not currently in the plan, but I think we'll have other sites that'll provide that kind of information, particularly as we develop the products from the system.

682 "Cisco Werner" (311644160) 03:13:16.983 --> 03:13:19.918 But I'm happy to talk with you more, Amy.

683 "Jocelyn Runnebaum" (3849817600)

03:13:19.918 --> 03:13:37.930 Thank you. Thanks Roger. Yeah, great. I'm. Okay.

684 "Jocelyn Runnebaum" (3849817600)

03:13:37.930 --> 03:13:57.930

Jamie I see that you have your hand up. Tom, I see you have your hand up and Meredith, I know that you want to say something. I'm being advised to give us a quick pause and maybe hold off on these questions for and comments for after we come back and.

685 "Jocelyn Runnebaum" (3849817600) 03:13:57.930 --> 03:14:16.840 Maybe let Melissa give her presentation. So let's do just a quick 5 min bio break stretch, it's been a long haul. Thank you all for your patience and understanding, and, we'll come back with Melissa.

686 "Jocelyn Runnebaum" (3849817600) 03:14:16.840 --> 03:14:36.840 Here at 03:52.

687 "Jocelyn Runnebaum" (3849817600) 03:14:36.840 --> 03:14:56.840 Okay, uh.

688 "Jocelyn Runnebaum" (3849817600) 03:14:56.840 --> 03:15:24.475 Okay, uh.

689 "Heidi Lovett, NOAA" (314564608) 03:15:24.475 --> 03:15:29.952 Okay. Melissa, you controlling your own slides?

690 "Melissa" (150252288) 03:15:29.952 --> 03:15:31.952 Yes, yeah, I was just testing it out.

692 "Heidi Lovett, NOAA" (314564608) 03:15:36.460 --> 03:15:56.460 I thought you were. I just wanted to check. Thanks. Yep.

693 "Heidi Lovett, NOAA" (314564608) 03:15:56.460 --> 03:16:16.460 Okay, uh.

694 "Heidi Lovett, NOAA" (314564608)

03:16:16.460 --> 03:16:36.460 Okay, uh.

695 "Heidi Lovett, NOAA" (314564608) 03:16:36.460 --> 03:16:56.460 Okay, uh.

696 "Heidi Lovett, NOAA" (314564608) 03:16:56.460 --> 03:17:16.460 Okay, uh.

697 "Heidi Lovett, NOAA" (314564608) 03:17:16.460 --> 03:17:36.460 Okay, uh.

698 "Heidi Lovett, NOAA" (314564608) 03:17:36.460 --> 03:17:56.460 Okay, uh.

699 "Heidi Lovett, NOAA" (314564608) 03:17:56.460 --> 03:18:16.460 Okay, uh.

700 "Heidi Lovett, NOAA" (314564608) 03:18:16.460 --> 03:18:36.460 Okay, uh.

701 "Heidi Lovett, NOAA" (314564608) 03:18:36.460 --> 03:18:59.133 Okay, uh.

702 "Jocelyn Runnebaum" (3849817600) 03:18:59.133 --> 03:19:16.890 How's everybody doing? Do we have folks coming back? Melissa, are you Are you around?

703 "Melissa" (150252288) Yep, I'm here.

704 "Jocelyn Runnebaum" (3849817600) 03:19:16.890 --> 03:19:38.196 Great, so I think we'll let Melissa go and then we'll, go back to questions for both Melissa and Cisco if they still exist. So Melissa, take it away.

704 "Melissa" (150252288)

#### 03:19:38.196 --> 03:19:59.530

Yeah, thanks for inviting me to speak with you all today. I'm gonna be walking through some of our current approaches, challenges, and some promising future directions for kind of moving climate and ecosystem information into management.

#### 705 "Melissa" (150252288)

#### 03:19:59.530 --> 03:20:18.640

And. Okay, so just a brief outline here. I'm gonna very briefly go through an introduction I think most of that was covered in, Cisco's sides, but a very brief introduction to the issue. Then I'm gonna go over some current pathways and tools that, you know, NOAA Fisheries and our partners are using now.

#### 706 "Melissa" (150252288)

03:20:18.640 --> 03:20:34.690

To bring climate and ecosystem information into kind of a stock assessment and managing process and then I'll go over some of the key kind of challenges and then again briefly discuss those exciting opportunities that will help us advance ability to integrate this information moving forward.

#### 707 "Melissa" (150252288)

#### 03:20:34.690 --> 03:20:53.110

So, 1st, why do we need to incorporate and account for environmental dynamics in fisheries management process? As Cisco mentioned in this presentation, we know that ecosystems are not static, that they've been kind of well-established that changes in ocean and environmental conditions affect marine species.

#### 708 "Melissa" (150252288)

#### 03:20:53.110 --> 03:21:12.670

And we see these changes in our population, in our physical processes through, you know, changing space distributions, variability and recruitment, and growth, changes in circulation and temperature fluctuations, as well as in our socio-economic arena through, you know, changing market demands, fishery behavior, and new ocean uses.

#### 709 "Melissa" (150252288)

#### 03:21:12.670 --> 03:21:30.520

And all of these changes impact our stock assessment processed through changing the precision and the accuracy of our stock assessment models and they can adversely affect our biological reference points and our heart control rules, and they can also impact the effectiveness of some of our current management approaches to deal with these changing conditions.

710 "Melissa" (150252288) 03:21:30.520 --> 03:21:47.230 So the potential for numerous stakeholders to be affected by these environmentally driven changes in our local living room resources really warrants incorporating climate and ecosystem considerations into our science policy and management.

#### 711 "Melissa" (150252288)

### 03:21:47.230 --> 03:22:07.230

So there are many different, you know, types of on ramps for getting climate and environmental data from the science into nation process. And I'm gonna briefly go over kind of a couple of these on ramps or tools and how they're currently being used. I've, you know, roughly organized these tools or pathways by whether they're focused on kind of identifying appropriate.

### 712 "Melissa" (150252288)

### 03:22:07.230 --> 03:22:30.850

Get catch limits, so they kind of enter into the process through providing or informing kind of the harvest setting process versus those that are more tools to inform broader management priority setting within a region. So one of the main pathways we have to kind of directly get this information into kind of harvest setting is through these climate informed.

### 713 "Melissa" (150252288)

### 03:22:30.850 --> 03:22:48.790

Stock assessments. So climate informed stock assessments are where you kind of within the assessment process, the environments or climate effects are accounted for kind of within the stock assessment itself through conditioning your data inputs so the way that your fishery dependent independent indices are calculated.

#### 714 "Melissa" (150252288)

### 03:22:48.790 --> 03:23:08.790

Or directly through effects on key population parameters within the model, so they can be directly linked to catchability, recruitment, productivity, growth, and mortality within the stock assistant model. And results from tools such as ecosystem, socioeconomic profiles, which I'm gonna discuss in a few slides, can aid in the identification.

### 715 "Melissa" (150252288)

03:23:08.790 --> 03:23:15.220

And kind of evaluating the environmental indicators that you would incorporate into your assessment models.

### 716 "Melissa" (150252288)

### 03:23:15.220 --> 03:23:35.220

Now the Office of science and technology, particularly the national Stock assessment program is currently tracking the number of stock assessments that incorporate climate or environmental information in the assessment process, and we're we're kind of categorizing them based on these ecosystem linkage levels defined within the next generation stock assessment improvement plan that came out of.

#### 717 "Melissa" (150252288)

### 03:23:35.220 --> 03:23:52.330

2018. And this table here just highlights a few of the examples that we have of how the environmental information is being brought into the assessments. I note here that the bolded stocks are cases where there's a direct linkage between a stock assessment parameter.

#### 718 "Melissa" (150252288)

### 03:23:52.330 --> 03:24:12.330

And, the environmental impact. We also have a bunch of examples of exploratory model runs within the assessment that were kind of presented but weren't used in the operational assessment, and then also some that have been explored through the research track assessment process and they'll hopefully make its way into management through that process.

### 719 "Melissa" (150252288)

### 03:24:12.330 --> 03:24:29.530

Also just noting that there are additionally examples of ways that information's been more implicitly accounted for within the stock assessment through using time blocks or estimation of random deviations or time bearing parameters.

### 720 "Melissa" (150252288)

### 03:24:29.530 --> 03:24:45.250

So just kind of to go through one example case study here of a direct linkage between an environmental indicator and a socio-econ parameter. I'm gonna talk about the yellowfin soul in the eastern Bering sea, which had a temperature catchability relationship to help account for.

#### 721 "Melissa" (150252288)

#### 03:24:45.250 --> 03:25:00.640

Change of distributions and phenology. So 1st just to orient you here, the graph on the right showing the black dots are showing the observed biomass from the bottom trial survey, and then the black line is the model fit to that data.

#### 722 "Melissa" (150252288)

#### 03:25:00.640 --> 03:25:19.300

And in the 2017 stock assessment, they saw a 48 % increase in the survey bio estimates in 2015 and 2016. This corresponds to that henry heatway view in that area, and this is indicated on the graph with that circle, the red circle on the graph.

#### 723 "Melissa" (150252288)

### 03:25:19.300 --> 03:25:39.300

And this increase was not captured by that, you know, standard assessment model. So they kind of looked at hypotheses to why this might be occurring. And they hypothesized that that spike was due to an impact in temperature that was affecting the timing of the spawning immigration of the yellowfin sole, they were migrating near shore earlier in the warmer year.

#### 724 "Melissa" (150252288)

### 03:25:39.300 --> 03:26:00.880

So they were done spawning, back offshore, and were actually being more available to the survey when the survey was being conducted. So they found that including temperature and the survey start date as, within the catchability model improved the overall fit to the the model and better captured that the variability in the survey biomass.

### 725 "Melissa" (150252288)

### 03:26:00.880 --> 03:26:20.880

So, but as you can see, as you can see kind of in that table of our climate affected species as an example, we we don't have that many yet that have directly linked a climate indicator to assessment parameter, but there are several other avenues for getting the climate and environmental information to the councils to aid and.

### 726 "Melissa" (150252288)

### 03:26:20.880 --> 03:26:44.130

Setting the catch advice and, you know, other decision making needs. One of those tools is our ecosystem status reports [(ESR)]. You know, we have these world class fisheries, you know, science enterprise, we collect a lot of data, ecosystem information, but ESR really helps to compile that information into one area, highlighting trends in both, you know, physical, chemical, biological, and socioeconomic indicators.

#### 727 "Melissa" (150252288)

### 03:26:44.130 --> 03:27:03.189

And these reports are provided are available in eight ecosystems. There's some for the Northeast, Southeast, the Gulf of Mexico, California current, West Hawaii, Gulf of Alaska, Eastern. So we have eight ecosystems with these types of sizer ports or state of the ecosystem ports in the Northeast.

#### 728 "Melissa" (150252288)

#### 03:27:03.189 --> 03:27:24.359

And many of the regions provide these annually to councils kind of along with the stock assessment so that they inform, kind of provide contextual information that's relevant for, you know, setting your ABCs. Additionally in some regions, this information is helping to foster, you know, broader discussions of what type of climate information.

### 729 "Melissa" (150252288)

### 03:27:24.359 --> 03:27:41.769

And might be needed by the councils and managers. However, since these are compiling a lot of information for the whole kind of ecosystem level, it can be difficult sometimes to understand kind of how this information translates to a stock specific situation.

730 "Melissa" (150252288)

#### 03:27:41.769 --> 03:27:58.509

For setting your catch advice. So, to kind of respond to that challenge, a, a more stock specific product has been developed in a couple of regions called the Ecosystem and Socioeconomic profiles or ESPs. And ESPs are.

#### 731 "Melissa" (150252288)

#### 03:27:58.509 --> 03:28:14.619

A standard kind of standardized framework that facilitates the integration of ecosystem and socioeconomic factors within the stock assessment process and it can act as a proving ground for kind of how you can use this information and management device, how you can kind of incorporate into stock assessments.

#### 732 "Melissa" (150252288)

03:28:14.619 --> 03:28:34.619

And it's a kind of a commitment to this process that can allow for creating a more proactive strategy to respond to change. The key objectives of ESPs are kind of listed on this slide here. They are, you know, looking to leverage existing information and knowledge pathways so they kind of work with ESRs to kind of pull this info.

#### 733 "Melissa" (150252288)

#### 03:28:34.619 --> 03:28:56.109

These indicators together, they facilitate interpretation and uses information into the fisheries management process and they're using the standardized framework which improves transparency, reproducibility, and efficiency. They help to identify kind of additional on ramps to fill knowledge gaps and and work towards operational operationalizing EBFM.

#### 734 "Melissa" (150252288)

#### 03:28:56.109 --> 03:29:14.469

And as more of these ESPs are developed, they can be used to kind of track changes in the system over time. So the information from ESPs can feed into several areas over stock assessment processed. Decisions from ESP reports have occurred, how long.

#### 735 "Melissa" (150252288)

#### 03:29:14.469 --> 03:29:30.009

Two main categories so they can kind of feed into the process more qualitatively, providing kind of additional context that can feed into like your risk tables, inform your building plans, your allowable catch discussions that can help inform survey planning or research priorities, so kind of these.

#### 736 "Melissa" (150252288)

#### 03:29:30.009 --> 03:29:49.029

More qualitative context kind of decisions, but they can also feed more directly into the assessment model through informing kind of model assumptions, they can inform mechanistic

linkages, they can inform choices in terms of data conditioning and what time blocks you might use in your assessment, and then they potentially can also contribute.

#### 737 "Melissa" (150252288)

#### 03:29:49.029 --> 03:30:05.289

To identifying and testing out how to incorporate more directly the environmental indicators as covariance within the stock assessment model itself. So just briefly, just kind of to show some kind of progress or where we are with ESPs nationally.

#### 738 "Melissa" (150252288)

#### 03:30:05.289 --> 03:30:21.219

They were 1st started in Alaska in 2014. They went through kind of phase development and improvements working with the North Pacific Fisheries Management Council. And then they developed their 1st ESP for Alaska sablefish in 2017. Since then, they've developed seven more.

#### 739 "Melissa" (150252288)

#### 03:30:21.219 --> 03:30:38.469

ESPs, and they're continuing to develop them and kind of iterate with the council. The Pacific Islands started, kind of conducting these fisher interviews for their UKU ESP in 2020 and then produced a ESP report for UKU in 2022.

#### 740 "Melissa" (150252288)

#### 03:30:38.469 --> 03:30:57.069

And the Northeast Center started ESPs on Bluefish and black Seabass in 2021 and several of them have are in progress and are planned and they're kind of working through their research track assessments. Additionally, in 2022, we established kind of this informal national ESP coordination team.

### 741 "Melissa" (150252288)

#### 03:30:57.069 --> 03:31:15.009

With the goal to help, help other regions kind of develop ESPs through hosting kind of share workshops and communication forums. So I mentioned the last slide that ESPs kind of can qualitatively inform management or one of the example pathways are through risk tables.

#### 742 "Melissa" (150252288)

#### 03:31:15.009 --> 03:31:32.799

So risk tables were 1st introduced in 2018 by Doran and Zadar in Alaska. They since kind of they're primarily still being used in the north Pacific history management council, but they've been explored for use in other regions such as the Pacific Fisheries Management Council and then Northeast and Mid Atlantic as well.

743 "Melissa" (150252288) 03:31:32.799 --> 03:31:48.849 And these tables evaluate whether there's either kind of additional uncertainty in the assessment and or additional risks or the probability of something bad going wrong, to the stock that are not adequately taken into account within the stock assessment model.

#### 744 "Melissa" (150252288)

#### 03:31:48.849 --> 03:32:03.849

For kind of the default precautionary setting process and the risk is kind of, provided under three or four main categories, so there's assessment related risk or considerations so those associated with increase in certainty of the stock.

### 745 "Melissa" (150252288)

### 03:32:03.849 --> 03:32:23.319

You know, kind of within the stock assessment, so concerns about model fit biases or any performance issues, population dynamics, which is risk that is, you know, considering additional risks to the stock based on population dynamic considerations which are not, you know, maybe typically included in the stock assessment or control rules, so if you're seeing kind of.

### 746 "Melissa" (150252288)

### 03:32:23.319 --> 03:32:43.319

Decreasing biomass trends or poor recruitment, inability to stock through your ability might have a higher risk for this category. Ecosystem considerations, so considers whether there's additional risk to stock based on environmental or ecosystem consider conditions that, you know, we couldn't include in the main stock assessment, and this is where kind of information from your ESPs and your.

### 747 "Melissa" (150252288)

#### 03:32:43.319 --> 03:32:59.919

ESRs can really kind of inform this particular category as well as the other ones, but it really kind of goes into the ecosystem conditions one. And then there's a new one that was added that's the fishery performance, which looks to see if there are any kind of fishery performance measures.

### 748 "Melissa" (150252288)

#### 03:32:59.919 --> 03:33:15.909

You know, issues that, assessment authors can't really account for. Then they kind of develop an overall risk level that is used by the SSCs to help support if there's any, you know, determination of whether they should further reduce.

### 749 "Melissa" (150252288)

### 03:33:15.909 --> 03:33:31.509

From the maximum ABC recommended via the ABC control rule. And these types of reductions have been relatively infrequent and they're really only prompted by extraordinary circumstances in an attempt to kind of respond to substantial unquantified risk.

# 750 "Melissa" (150252288)

### 03:33:31.509 --> 03:33:46.899

And these tables allow scientists and managers to be to be more responsive to a changing a novel condition within the environment and to account for any potential environmental impacts in the stock which they can't account for within the stock assessment model.

### 751 "Melissa" (150252288)

### 03:33:46.899 --> 03:34:03.129

So just quickly to summarize kind of those on ramps through the harvest quota setting process, this is kind of a very kind of skeleton flow of harvest quota setting process where you have your stock assessment, you get your maximum ABC.

### 752 "Melissa" (150252288)

### 03:34:03.129 --> 03:34:23.129

You know, SOC assessment recommend the ABC goes to a scientific physical physical committee represent recommends a final ABC council, and then you have your total allowable catch, and the ecosystem information can kind of put in this process directly into the SOC assessment model, which sometimes can be informed through your ESPs or.

### 753 "Melissa" (150252288)

### 03:34:23.129 --> 03:34:42.279

That can be provided as additional ecosystem context that allows the SSC to kind of make any necessary adjustments to account for these, ecosystem considerations and those can be provided through ESRs, ESPs, and your risk tables. Okay.

### 754 "Melissa" (150252288)

### 03:34:42.279 --> 03:35:00.819

So the next three tools I'm gonna discuss are are used to inform broader management decision making and strategic planning processes. And the 1st is risk assessments. So the risk assessment framework is pioneered by the Mid Atlantic fishery management Council as part of their ecosystem approach to the fishery management structure decision framework.

### 755 "Melissa" (150252288)

### 03:35:00.819 --> 03:35:20.819

As part of the risk assessment process, scientists identified the important management risk elements and associated objectives under three categories, looking at ecological, economic, and social risks. And they identified qualitative and quantitative indicators for each of these risk elements, which resulted in either, you know, low, medium, or high.

### 756 "Melissa" (150252288)

### 03:35:20.819 --> 03:35:41.229

High risk of not achieving the optimal yield, and the indicators were were based from information gathered through ecosystem staff reports and kind of vulnerability assessments. In the Mid-

Atlantic, these results are updated annually, and they're used to serve as a proactive kind of strategic planning tool to help the councils decide where they should focus limited resources.

#### 757 "Melissa" (150252288)

03:35:41.229 --> 03:36:01.229

To address priority ecosystem considerations in science and management programs. Another, kind of strategic planning tool is scenario planning, which provides a framework to support decisions under conditions that are uncertain uncontrollable. So it combines stakeholder input, qualitative methods and.

#### 758 "Melissa" (150252288)

#### 03:36:01.229 --> 03:36:26.159

Thinking to identify uncertainties, articulate plausible future scenarios, and then determine options that will meet the management goals across multiple plausible futures. And their, the kind of key benefits are that they again involve stakeholder participation, they enable flexibility to react quickly to a changing world. They facilitate identification of innovative ideas, help create alignment towards a common vision, and they can lead to more robust decisions.

#### 759 "Melissa" (150252288)

#### 03:36:26.159 --> 03:36:45.519

Plants. These activities have been completed for three east Coast issue management councils, the Pacific council as well as they are currently underway for the north Pacific. On the east coast, they conducted a multistep process over two years that ended in 2023.

#### 760 "Melissa" (150252288)

#### 03:36:45.519 --> 03:37:00.669

And they focus primarily on jurisdictional and governance issues related to climate change and shifting fishery stocks, and they produced many documents from that, one being an east Coast secanrio planning summit report as well as the potential action menu.

#### 761 "Melissa" (150252288)

#### 03:37:00.669 --> 03:37:20.669

And then they developed two new groups to help support the implementation of the scenario planning outcomes. The Pacific Council also conducted a multiyear scenario planning process, initiated in 2019, it was completed in 2022, and they focused on the issue of shifting stock availability across species F.

#### 762 "Melissa" (150252288)

#### 03:37:20.669 --> 03:37:38.439

And communities. And the process will help the Pacific Council identify and prioritize work to improve the climate resilience of federal fisheries. And then the North Pacific fisheries Management Council is in the process of their planning exercises and they're hosting a two day.

763 "Melissa" (150252288)

#### 03:37:38.439 --> 03:37:54.969

Climate seniors workshop on 5 June and 6th to explore ideas for improving climate resiliency and readiness and they are hoping to have a report from that, that workshop and later this year, sometime maybe around September.

#### 764 "Melissa" (150252288)

#### 03:37:54.969 --> 03:38:13.929

So, lastly here, you know, we've seen a lot of interest and concern about shifting distributions, been identified as a major concern for many resource management entities, and, NOAA's partners have developed a next generation portal building off of a previous project called OceanAdapt.

#### 765 "Melissa" (150252288)

#### 03:38:13.929 --> 03:38:29.859

To serve as a national online portal providing visualization analysis tools to allow users to both view, download, and dynamically interact with data to help understand both paths and projected future distributions of brain species.

#### 766 "Melissa" (150252288)

#### 03:38:29.859 --> 03:38:49.859

So this is our distribution mapping analysis portal or DisMap. Specifically DisMap provides an interactive portal for species distribution data. We have information on this portal for over 400 marine species button US waters. It allows users to view the kind of historical distribution changes of species and.

#### 767 "Melissa" (150252288)

#### 03:38:49.859 --> 03:39:16.349

We're hoping to in the future incorporate distribution models that show projected distribution changes as well. And you can also use the portal to conduct an analysis of changes and species distribution relative to an area of interest. And this tool can help set the baseline for discussions between scientists managers, and fishermen, other stakeholder groups with regard to the potential impacts of shifting stock distributions in their area. And again, we're planning to.

#### 768 "Melissa" (150252288)

#### 03:39:16.349 --> 03:39:41.549

To continue to expand on this portal and to continue to work with management partners to ensure it's meeting the management needs moving forward. Now I'm gonna go through some of the kind of key challenges and barriers that can hinder more frequent accounting or incorporation or uptake of climate information within the stock assessment and management process. I'm gonna note that these challenges are primarily focused on the the pathways that discussed.

769 "Melissa" (150252288) 03:39:41.549 --> 03:40:03.669 At the beginning that go towards informing catch advice. So just kind of keep that in mind as I go through the the challenges here. So the 1st one is data and model limitations, not all assessment model approaches are amenable to integrating environment looking considerations, and we have, we have stocks which are assessed using data limited or index based approaches, which.

### 770 "Melissa" (150252288)

### 03:40:03.669 --> 03:40:19.899

Can't really incorporate or account for environmental changes or variability using those approaches. Additionally, some of our more advanced methods such as dispatched age and length models still have difficulty estimating multiple time during parameters, so it requires assessment authors to kind of.

### 771 "Melissa" (150252288)

### 03:40:19.899 --> 03:40:39.899

Decide which parameter in the model they think is, you know, time varying and needs to have the ecosystem information incorporated. Another challenge is kind of determining the mechanistic relationship between the environmental driver and the population dynamics. You know, for many stocks we have limited understanding of that functional.

### 772 "Melissa" (150252288)

### 03:40:39.899 --> 03:41:14.319

Relationship, which really can hinder the ability of determining, you know, how do you build that impact or effect into the assessment model of projection. You know, we're often relying on correlative relationships, which we've seen, you know, several cases in the past where those relationships might break down. So this is a kind of a difficult part of incorporating that information with really kind of understanding, well, what is the causal link, what that mechanism between the environment and the population, and this way highlights the importance of process based laboratory and field studies that can validate relationships between species and the environment.

#### 773 "Melissa" (150252288)

### 03:41:14.319 --> 03:41:33.489

That we might be seeing in our kind of observational data. There's also need for more, you know, easily accessible use of high performance computing, and this is, you know, becoming more important as we start to work with large ocean high casts and re analysis products that being able to work with high performance computing would greatly.

#### 774 "Melissa" (150252288)

### 03:41:33.489 --> 03:41:49.959

Improve the efficiency of building them into our, you know, operational stock assessment process. Similarly, having better transparency of code and tools, so this is kind of just, you know, moving more towards open science can really help streamline and, and make working with these large model outputs more efficient.

#### 775 "Melissa" (150252288)

#### 03:41:49.959 --> 03:42:07.869

Yeah, we'll also issue with staff capacity and prioritization, you know, despite the growth in stock assessment capacity, the demand for stock assessments and scientific advice to incorporate more information, you know, such as climate and ecosystem dynamics can sometimes exceed capacity.

#### 776 "Melissa" (150252288)

#### 03:42:07.869 --> 03:42:27.869

To meet those demands, and, you know, I mentioned like identifying mechanistic relationships, like doing that and working to integrate those into stock assessments or ecosystem models, very time and resource intensive, intensive and you can't necessarily do this at that level for all stocks, so it really requires some, you know, comprehensive prioritization process to guide.

### 777 "Melissa" (150252288)

### 03:42:27.869 --> 03:42:48.239

I know assessments and address kind of where should we be focusing our efforts here to get kind of like the the greatest gain from including this information. Lastly, here, this kind of issue of a high bar for change. So, even when mechanisms maybe well understood.

### 778 "Melissa" (150252288)

#### 03:42:48.239 --> 03:43:07.779

The environmental relationship may still not be used and built into the model. You know, any changes to what we consider can in the conventional stock assessment model and their inputs, it can be met with, you know, lots of questioning, which is good, but there seems to be a kind of a high bar to demonstrate improvements for including environmental relationships and models, and this.

### 779 "Melissa" (150252288)

#### 03:43:07.779 --> 03:43:26.919

Kind of hesitant hesitancy to incorporate the information. And this makes them again from those past experiences where we've seen the environmental stock relationships break down or don't hold up over time. But as a community, we're still kind of developing best practices for determining what environmental data needs to be used and and where the bar for inclusion should be set.

#### 780 "Melissa" (150252288)

#### 03:43:26.919 --> 03:43:43.089

And lastly, our understanding of of kind of how to use climate informed advice to reduce risks and increase resilience kind of within the current science management system, particularly outside of the stock assessment process. It's still kind of evolving on how best to, to incorporate that information especially when we're thinking about using.

### 781 "Melissa" (150252288)

### 03:43:43.089 --> 03:43:58.389

Forecasts and and projections of, you know, how do we build that into the system and that's still kind of an evolving, process. So quickly here, what's on the horizon? So, you know, the environment's continually gonna be changing. We're gonna be seeing more of these challenges.

### 782 "Melissa" (150252288)

### 03:43:58.389 --> 03:44:18.389

Moving forward, but, just want to highlight here several of the new initiatives and promising kind of analytical approaches which I think could help kind of improve our ability to address these challenges as we move forward. So the 1st climate ecosystems and fisheries initiatives, Cisco provided a very detailed introduction to that. I'm not gonna go into too much detail here, but just to say.

### 783 "Melissa" (150252288)

### 03:44:18.389 --> 03:44:35.139

Say that he plans to provide these high resolution regional ocean model hinecasts, forecasts, and projections, both are, you know, our physical and our biological variables and that these regional ocean model hinecasts can help fill the data gaps in some key environmental data.

### 784 "Melissa" (150252288)

### 03:44:35.139 --> 03:44:51.729

Time series in many of our regions, which can help inform mechanistic understandings and the forecast and high cast, will also feed into many of our kind of advice pathways that I've already touched on as you can see in this schematic, we have our regional out ocean model outlooks.

#### 785 "Melissa" (150252288)

#### 03:44:51.729 --> 03:45:08.589

Decision support team developing various products and that feeds into those device pathways like you know stock assessments or socioeconomic profiles, risk assessments area planning, and then feeds into, you know, you know, operational management applications.

#### 786 "Melissa" (150252288)

#### 03:45:08.589 --> 03:45:28.589

And then lastly here we have some kind of analytical methods, just want to highlight here, so we have work on this woods hole assessment model being developed in the northeast, which is a state space assessment model, and it enables estimation of multiple time during parameters, so that kind of adjusts that challenge with some of our current system models that.

# 787 "Melissa" (150252288)

#### 03:45:28.589 --> 03:45:45.999

Can really only handle a few time brain parameters and wam's also able to link environmental indicators to your stock assessments and parameters, so it's being used currently in the

Northeast and a couple other regions to kind of explore, incorporating ecosystem information directly in the model.

### 788 "Melissa" (150252288)

#### 03:45:45.999 --> 03:46:05.999

We also have the fisheries integrated modeling system, which is the next generation framework of stock assessment models, which, when it's completed in a few years, will offer NOAA Fisheries an advanced set of stock assessment models which can be used to incorporate ecosystem and climate effects and other drivers into the stock assessments, and it's being developed as a team of experts within NOAA.

#### 789 "Melissa" (150252288)

#### 03:46:05.999 --> 03:46:29.519

Coordinated by the office science and technology. Mentioned here this new approach dynamic structural equation modeling, which is a statistical approach for causal modeling which can better estimate and understand relationships between environmental covariance and their impact on species. So it's being explored as part of the ESR and ESP process in Alaska to help identify important.

### 790 "Melissa" (150252288)

### 03:46:29.519 --> 03:46:46.779

Environmental indicators and better explain that kind of mechanistic relationship. And lastly here, I just want to mention kind of this open science framework. So we're seeing more of a move towards, you know, integrating more of the open science principles into our stock assessment work and and this really.

#### 791 "Melissa" (150252288)

#### 03:46:46.779 --> 03:47:02.829

Provides not only, you know, scientific benefits but also results in positive culture shifts, including expediting data workflows, improving quality of research outputs, elevating the community, building more collaborative environments and and all this can help us kind of better address climate change impacts.

#### 792 "Melissa" (150252288)

03:47:02.829 --> 03:47:19.389

And just to conclude here, now Wileyerson, you know, stock productivity distributions are influenced by not simply fishing pressure, but also environmental pressures. They have numerous research studies demonstrating the ability and the benefits of linking environmental drivers.

# 793 "Melissa" (150252288)

03:47:19.389 --> 03:47:38.769

Two premise and stock assessments, However, we only have a few examples of it being successfully transitioned to operations. So while we work towards expanding stock

assessments to include more consideration of ecosystem impacts, we must also recognize that for many stocks it it may not be, you know, possible to account for those changes within the assessment.

794 "Melissa" (150252288)

#### 03:47:38.769 --> 03:47:58.638

So we should also take advantage of the host of alternative tools and on ramps that are at a disposal, many of which are highlighted in this talk as we kind of develop management approaches that are robust to changing and uncertain conditions. And just highlighting here that, you know, we're working, you know, actively working to increase production delivery and use of climate information within fisheries management. So thank you.

795 "Jocelyn Runnebaum" (3849817600)

03:47:58.638 --> 03:48:27.879

Great, thank you Melissa. That was fantastic, to get so much background and thank you Cisco for your presentation as well. So I think that we have a couple of hands and I just want to, recognize that Jamie.

### 796 "Jocelyn Runnebaum" (3849817600)

03:48:27.879 --> 03:48:44.720

And Meredith also, had wanted to speak before, so, let's let's do questions 1st and, get any clarifying or get questions on that. All the way 1st. So, Tom, do you have a question?

# 797 "Tom Fote" (1036044288)

03:48:44.720 --> 03:49:04.569

No, I have more of a comment. I guess Clay will make some of the same comments I'm gonna make history. Clay keeps talking about the people from generations below.

798 "Tom Fote" (1036044288)

03:49:04.569 --> 03:49:21.489

Below him that basically know the history of the fisheries in Hawaii, and luckily because I've been going up and down the coast for many years, when I was a kid and talking to a lot of these people, we know the history of a lot of fisheries and the logbooks that these people contained that they actually wrote down what they caught.

799 "Tom Fote" (1036044288)

03:49:21.489 --> 03:49:37.629

And I I always think of this when it comes to bluefish. I mean cause I use bluefish as the climate indicator of what can happen when something goes little haywire with the temperature. I'm gonna keep trying to keep this real short.

800 "Tom Fote" (1036044288) 03:49:37.629 --> 03:49:44.020 In the 1990s, they were putting it in the eighties, they started talking about a ten fish bag full of our bluefish.

801 "Tom Fote" (0)

03:49:44.000 --> 03:49:59.719

And I want to know the reason why, because Bluefish is a very, back in the seventies and the sixties was very important to the recreational sector from name to actually North Carolina. Bluefish made up a huge part of the recreation of catch back then.

### 802 "Tom Fote" (0)

03:49:59.719 --> 03:50:15.350

So I went and talked to the Mid Atlantic Council, and I could ask the question, are the bluefish stocks in trouble? They go, No, it's just because you guys in Jersey thrown in fisheries dumpsters. We need to put a and you know you're wasting fish. I said, that's education, that's not fishery.

### 803 "Tom Fote" (0)

03:50:15.350 --> 03:50:31.280

Management and we got in this conversation. So I'll leave it there, but they heard a ten fish bang limit in and a restricted commercial quotas on bluefish. And then what happened? The bluefish stock started to collapse. And so I said, say we didn't put a ten fish blue.

### 804 "Tom Fote" (0)

03:50:31.280 --> 03:50:46.370

And a quarter of it and the stocks started collapsing. So what happened to make the stocks collapse? And when you're talking about Alaska and the food was disappearing, I'm thinking about what happened with bluefish. Bluefish were migrating up and down from Maine.

805 "Tom Fote" (0)

03:50:46.370 --> 03:51:02.450

Always in North Carolina on the coast. They spent a four month stop over it in the New York Bight area, eating Sandills and gorging themselves to where there was no blue fish and because the guys like Sam bloomed from Florida told me because he's the fish in New York Bight.

# 806 "Tom Fote" (0)

03:51:02.450 --> 03:51:17.510

Joined before World War two, they started coming back in the fifties, and what also happened with the sandills population grew dramatically. 1980 8II I live on the water, I lived in my house in 79.

807 "Tom Fote" (0) 03:51:17.510 --> 03:51:35.180 Ice to have temages of ice every year on my lagoon, had to chop through it. No ice in 1988 NO ice in 1989. And all of a sudden the bluefish, the sandill population collapsed. What happened? The bluefish that used to spend four months.

### 808 "Tom Fote" (0)

03:51:35.180 --> 03:51:58.573

North New Jersey and New York gorging themselves with Sandhills and going fat and weighing 30 pounds from North Carolina. We're now showing up nine pounds because there was NO four months where they could build up all that fat. And all of a sudden the stock started going downhill. Now we put all kinds of management proofs has had no effect on bluefish because the Sandhill population has never come back. I asked Bruce Freeman who was head NOAA Fisheries and it actually went to work with bureau school officially a long time ago.

809 "Jocelyn Runnebaum" (3849817600)

### 03:51:58.573 --> 03:52:09.514

I'll cut you off. Well, I'm sorry. I just am recognizing we have Melissa and Cisco for just a short amount of time. So if we have questions for them, I think we need to prioritize.

# 810 "Tom Fote" (1036044288)

### 03:52:09.514 --> 03:52:33.914

Okay, we need to go into the history and start need to look at some of the history going back to cause you're losing that history. I mean I'm in my ages, but the guys I used to talk to have gone 20 years ago and they had only information what was going on, especially their law book, and maybe we should look into that information. That shows what's what's going going on and what the climate change has really done over the last 75 years.

# 811 "Jocelyn Runnebaum" (3849817600)

# 03:52:33.914 --> 03:52:57.696

Thank you, Tom. I I also was recognizing collaboration with Fisherman to understand relationships could be helpful. So, I think you touched on that I'm gonna go. Jamie, did you want to jump in for a question with Cisco from your hand being raised last time?

# 812 "Jamie Goen" (266718208)

03:52:57.696 --> 03:53:26.480

Yeah, thanks Jocelyn. I actually have a couple of questions. I will try to keep them brief. 1st of all, I just wanna commend the agency on this CEFI work. I think it's incredible. Not only is it collaborative within Noa but across sorry within but across line offices and around the country.

# 813 "Jamie Goen" (266718208)

# 03:53:26.480 --> 03:53:46.480

I think it's a really incredible effort and good to see. With that though, I caution putting too many eggs in one basket and by that I mean too many eggs in the modeling basket, and making sure that it's ground truth with reality and what can be applied and used by managers, but it's.

# 814 "Jamie Goen" (266718208)

### 03:53:46.480 --> 03:54:15.229

Sounds like that's a work in progress and I really appreciated Melissa's comment about a high bar for change. That's exactly what I'm seeing with Bering Sea crab, is that given our collapse and the crisis we're in, there's this inertia against doing things differently and change that we're working to to change, but it's really hard. But one of my questions is how do we help decision makers and managers.

# 815 "Jamie Goen" (266718208)

# 03:54:15.229 --> 03:54:34.909

Start acting in the face of uncertainty, even with these models. For crab, for examples we saw that the models couldn't have predicted what happened. So how do you get them to start acting even with uncertainty? What we saw with crab, they added buffers, as the stock started to come down, they added bigger buffers cause they weren't sure what was happening.

# 816 "Jamie Goen" (266718208)

# 03:54:34.909 --> 03:54:54.909

But now in hindsight, knowing the warm waters caused a limit on food availability and the crab starved, there's one theory that we actually should have harvested them harder than, so that there were less crab essentially cold the population so that the ones there can survive and there's enough food for them. So how do we help managers start acting with this uncertain.

# 817 "Jamie Goen" (266718208)

# 03:54:54.909 --> 03:54:57.313

Did anybody have a... Because I realized that maybe a conversation for beers another day, but I thought I'd give you a chance to take a stab at it.

# 818 "Cisco Werner" (311644160)

# 03:54:57.313 --> 03:55:15.559

Alright, it could be a conversation for for for for a longer evening indeed. That that's a question actually that came up you know really good question that came up even at the CEFI summit, you know.

# 819 "Cisco Werner" (311644160)

# 03:55:15.559 --> 03:55:35.419

Would we have done exactly what you said if if we saw that, well, they're, they're not gonna make it or the, you know, do we, do we change, you know, how much we can harvest, but of course there's, you can't, you can't over harvest either, right? I mean so you you gotta y you have to also, you know, there's limits. There's, there's things that you can't do to make sure you don't overfish, and so I think I think those are the kinds of questions that.

820 "Cisco Werner" (311644160) 03:55:35.419 --> 03:55:55.249 That that are are are just as hard if not harder as understanding the climate part, you know, so yes, we give the advice, but then actually what do you, what, what, how do you act on that advice that that as a manager you receive, right? Or are there constraints that you have that allow you to do certain things or not allow you to do others?

# 821 "Cisco Werner" (311644160)

# 03:55:55.249 --> 03:56:10.579

I think that in some cases you might be able to change your harvest approaches. In other cases, I think we still need to talk. I I I wanna leave it there because I think this is a topic that that is that that deserves attention in of itself.

# 822 "Cisco Werner" (311644160)

03:56:10.579 --> 03:56:29.377

Maybe something that's gonna come up at the SCS meeting and at the Boston meeting coming up in August in terms of how do we respond to these ecosystem and climate changes from the management side. And I know maybe you know Meredith I don't I don't want to pick on you, but maybe there was some other discussions that that you were at that Summit that maybe took on some of these points that Jamie brought up.

823 "Jocelyn Runnebaum" (3849817600)

03:56:29.377 --> 03:56:31.132

I know this is something we discussed and I go ahead Meredith. Go ahead Meredith.

# 824 "Meredith Moore" (1411130368)

# 03:56:31.132 --> 03:56:53.949

I love being picked on. Yeah. So the 1st thing I'll say is Jamie I think to your question, that's exactly what our subcommittee is trying to figure out and provide advice on, is how do we get managers to act on this change? Cause I think that we recognize that that is the biggest challenge and it did come up over and over.

# 825 "Meredith Moore" (1411130368)

03:56:53.949 --> 03:57:10.069

Over again from, the amazing group of scientists that I got to hang out with. So thanks again for inviting me to that. But, you know, they, the, the work that all of those folks who came together for this CEFI.

826 "Meredith Moore" (1411130368)

03:57:10.069 --> 03:57:30.069

A workshop. All like it was amazing to see everyone there. It, there was so much enthusiasm and aspiration in the room for what they wanted to get done. And one of the key questions that kept coming up over and over again from this group of scientists is, ok, but how do we get it into management? How do we change? What can we do? How can we make this connections?

827 "Meredith Moore" (1411130368)

#### 03:57:30.069 --> 03:57:50.069

I think that remains the big challenge. I think the decision support teams are really focused on trying to figure that out, but we still know that there are barriers that we need to lower and how to to drive managers to act on this information more. So I would say, it, that is the heart of yesterday I went through a long presentation, but that is.

#### 828 "Meredith Moore" (1411130368)

#### 03:57:50.069 --> 03:58:07.999

The heart of what our subcommittee is attempting to try to explain and we want want to be in dialogue with the agency and and the councils on how to address that. So, it's the, it is the question I think of the day is to figure out how to get from business as usual to, to making those decisions in a.

829 "Meredith Moore" (1411130368)

#### 03:58:07.999 --> 03:58:27.999

A way that understands the uncertainty that we are in and establishes harvest control strategies that are resilient to those change and that that build resilience into our fisheries both from the stock and the community section. While I'm running my mouth, I will say a couple other things about CEFI and the.

#### 830 "Meredith Moore" (1411130368)

#### 03:58:27.999 --> 03:58:59.529

And the work there. It's very exciting to see something get established that's gonna produce regular production of this information. I think one of the challenges has been the, the approach of of building these systems has meant that they were only available in some places sometimes and not updated over time, which makes it harder to use them, the information ages, and so I think it's really inspiring to see the investment in that science side and I give so much credit to the folks who are building that and it.

#### 831 "Meredith Moore" (1411130368)

#### 03:58:59.529 --> 03:59:30.429

Envisioning that, so I'm really excited about that. I I did say that like getting it into management remains a big question. I will also say, I think there were questions about a lot of what the decision support teams are thinking about making are, a lot of those same products that Melissa summarized so well for us. You will notice she went through some of those, some of the connections to the socioeconomic aspects are less built out and I think that remains sort of a challenge to connect in.

#### 832 "Meredith Moore" (1411130368)

#### 03:59:30.429 --> 03:59:52.429

And still, in the management. One of the things that I talked about at the meeting was that need to like come up with finished or close to finished things that matter to communities in a short period of time so that we can actually make a case for continuing this level of investment or more cause we know how.

# 833 "Meredith Moore" (1411130368)

03:59:52.429 --> 04:00:12.429

What a risk our communities and fisheries are in right now and we do not want to end up in a situation where we just have cascading more disasters that we failed to sort of try to head off or plan for or react to or adapt to. The last thing that I will say in my comments.

# 834 "Meredith Moore" (1411130368)

04:00:12.429 --> 04:00:32.429

That really struck me is that when I had conversations with what I would consider mid to early career staff, the level of ambition and enthusiasm and aspiration that they were bringing to the work and the connection that they felt to this was like really high. And sometimes when I spoke to the higher up folks in the agency.

# 835 "Meredith Moore" (1411130368)

# 04:00:32.429 --> 04:01:05.941

The their aspiration was a little bit lower about what could be produced in the near term, and maybe that's experience, but I would say like with the challenge in front of us, I think everybody's gotta have that level of ambition, and so that's my polite nudge I'm not putting Cisco or Roger in that boat, but I will say I think we need to see a con consistent level of that enthusiasm in production as we move this forward. So those are some of my thoughts. I will say I have a million things used to debrief out of the CEFI conference and all these other things and I hope to do that on a subcommittee meeting soon.

836 "Jocelyn Runnebaum" (3849817600) 04:01:05.941 --> 04:01:13.458 Hey, thank you. Jamie, do you need your 2nd question answered?

837 "Jamie Goen" (266718208)

04:01:13.458 --> 04:01:31.019

Really quick, the regional team, the regional modeling teams, is there an input, well, do they have a social scientist on it and is there an input for local knowledge from Fisherman and traditional knowledge into that system?

838 "Cisco Werner" (311644160) 04:01:31.019 --> 04:01:50.539 Different teams have, have different levels of the socioeconomic representation. I know that the Southwest and Northwest do, I.

839 "Cisco Werner" (311644160)

04:01:50.539 --> 04:02:06.949

I believe Alaska does it well, and I don't know Roger, if you can, if you remember off the top of your head, but but I I'm gonna say most of them do have a socioeconomic team member built in, in terms of the local knowledge, I don't know.

840 "Cisco Werner" (311644160)

04:02:06.949 --> 04:02:26.949

I'm gonna have to check to see whether maybe some maybe maybe maybe maybe the people that that the new people that they're onboarding also bring that with them so I I would need to know exactly who was hired. But if Roger, if there's a quick answer to Jamie, that'd be great. But I if not Jamie I can get back to you with specifics. Some of them are.

841 "Cisco Werner" (311644160)

04:02:26.949 --> 04:02:36.244

Literally we're just being coming on board so I haven't had a chance to to meet them all. So I don't know I don't know the full range of skills that they bring, but socioeconomics is.

842 "Jocelyn Runnebaum" (3849817600)

04:02:36.244 --> 04:02:36.867

Right, is a key component in at least three of the regions at this point and maybe all of them eventually.

845 "Roger Griffis" (1203006464)

04:02:44.303 --> 04:03:09.339

Every region, there was a comment that just went in every region actually has been able to make that higher. Okay. Thanks Roger. Yeah, good question. The, these teams, these decision support teams are designed to go end to end from, you know, being able to take in those ocean projections, kind of physic physical oceanographer through ecosystem scientists all the way through the human dimensions, so that's part of the design of these teams have to be able to ultimately.

846 "Roger Griffis" (1203006464)

04:03:09.339 --> 04:03:33.752

They deliver the advice, which would be something like, what's the best management strategy under these expected future ocean conditions over multiple time scales? So the answer to your question is yes, the human dimension people are are part of the design of every team and and as Cisco said, the initial hires, we, we only have money to build out half the team, but the the-I think all the centers chose one of the four.

847 "Jocelyn Runnebaum" (3849817600)

04:03:33.752 --> 04:03:42.030

People that we're bringing on for this new team, as a, as a human dimension person, a social scientist. Thanks. Thanks Roger. So I'm gonna go Glay. Then, I think Marisa. Did you get your question answered?

848 "Marissa Merculieff" (1363329792)

04:03:42.030 --> 04:03:46.613

Jamie just asked it, so that was. That's the exact question I had. Thanks.

849 "Jocelyn Runnebaum" (3849817600) 04:03:46.613 --> 04:03:50.987 Great. Clay, thank you so much for your extreme patience.

850 "Clay" (244098048)

04:03:50.987 --> 04:04:13.999

No problem. Thank you, Jocelyn and team. Just commenting on part of top what Tom said and the risks that resonate from Jamie and going forward is that I think that in the Pacific especially Hawaii I think having that opportunity to.

#### 851 "Clay" (244098048)

04:04:13.999 --> 04:04:30.319

Work with the indigenous population and probably that of the other native groups along the coastal areas will be important in pacing this picture together. I mean, like I know at least for Hawaii, I've kind of been entrenched in some of the studies. I know.

#### 852 "Clay" (244098048)

04:04:30.319 --> 04:04:46.279

Practitioners that are still alive today that can reach and talk about the practice. I mean, we see, you know, all these different cycles in the fishery and species you got a 60 year cycle for longlines. We got five years.

#### 853 "Clay" (244098048)

#### 04:04:46.279 --> 04:05:01.279

Cycle for striped Marlin and I mean it it's pretty regular out here, and, you know, back, back in time we didn't have computers, we didn't have all the data gathering stuff, but all of it was collected through empirical knowledge, which.

#### 854 "Clay" (244098048)

04:05:01.279 --> 04:05:18.079

When I studied it, it was hard to find because a lot of it was not interpreted or written. A lot of it was verbal and a lot of it was practice and putting that forward and I think that knowledge and meeting halfway and putting the projections together, I mean.

#### 855 "Clay" (244098048)

#### 04:05:18.079 --> 04:05:36.769

It was great to see what Cisco and Melissa did and I think that putting that past these people or bringing them in might shed more light enough quicker, quicker rate and and I'm talking about not only the ocean signals, but also if you look at the entire ecosystem, I mean, I had a.

856 "Clay" (244098048) 04:05:36.769 --> 04:05:53.989 Interview with Brett, we talked about mussels, the mangrove blossoms and how how strong it indicated our how you run to be this year and this year has been a weird year. They bloomed out in winter, they fruited, they now we have trees with fruit and flowers. It's like it's a crazy year, but definitely the.

### 857 "Clay" (244098048)

### 04:05:53.989 --> 04:06:12.169

Terrestrial has has brought some light to what's actually happening in the overall climate. It's not just in the ocean. It's also terrestrial. I mean, we've seen it even, even with one of our, our practitioners, it tells me, whoa, with a catalog grazing and feeding, you may not see that with two days industrial meat production, but.

### 858 "Clay" (244098048)

### 04:06:12.169 --> 04:06:28.369

Definitely when they're feeding and grazing the fisher biting. There's a natural biological clock where you have this tie in to nature and it's very evident out here in the Pacific. And it's not only with the Hawaii guys, but it's also with some of the island areas and if you look at the Hawaiian.

### 859 "Clay" (244098048)

### 04:06:28.369 --> 04:06:44.429

Woman and the harvest calendar, you'll see where a lot of that information is basic information on, how they manage their resources sustainably back then with a probably sizable population what we have today. And so. You know, I think looking through the past and moving forward, so pointing that would be a good way to go but that's all I have, thank you.

# 860 "Cisco Werner" (311644160)

# 04:06:44.429 --> 04:07:15.091

No, that's a great point and you know I, I had a slide there where we said, you know, we can think back 30-60 years in terms of, you know, time series and with the local and the local knowledge probably goes back 600 years, you know, so there's, there's a lot more there that that we need to, that we need to bring in to help us out, so you make a very good point Clay and and I think that's spot on because we may not have seen it 60 years ago, but maybe 500 years. Years ago somebody saw it or that that knowledge is is in there so I think it's important to to bring in. Thank you.

# 861 "Jocelyn Runnebaum" (3849817600)

#### 04:07:15.091 --> 04:07:32.270

That's a very good point. Great, thank you. Jim, and then if anybody that hasn't chimed in today that feels like they wanna provide some perspective or questions or views. I would welcome that. So Jim, please go ahead.

862 "Jim Green" (1810777856) 04:07:32.270 --> 04:07:59.529 Thank you. And thank you Melissa, for joining us in your presentation. One thing I I know we're focusing a lot on, with the ESP and the ESR and all that and and trying to figure out ways to collect information that we are not already or things that surprise us like with the crab.

### 863 "Jim Green" (1810777856)

### 04:07:59.529 --> 04:08:32.319

But I was wondering if there was a thought in putting into when we are developing these and eventually I noticed the Gulf was at a deficit of these whenever I in my region was, things that we can actually see, like, and I thought I was gonna get out of, get through a whole fishery meeting without talking about a red snapper, but I guess I am. So, like in the last three years there has been a reduction in the long line trawl survey for red snapper. We have ports from.

### 864 "Jim Green" (1810777856)

04:08:32.319 --> 04:08:52.329

South Florida all the way around to Texas talking about localized depletion. States and the for higher, federal fishing and the state seasons and under sec state management are all extending their season and increasing their bag limits, and they're all doing this because of the fact that we are having.

### 865 "Jim Green" (1810777856)

#### 04:08:52.329 --> 04:09:21.079

A reduction in harvest in the time frame, we're having a reduction in fish size, so therefore we're extending our seasons out to get optimum you know the highest optimal yield. But is there discussion or thought of putting this in whenever, when we do start seeing these reductions in the trial survey when we do start seeing these reductions in in in a fish size, when we do start seeing us not meeting the mark on our estimated catch.

# 866 "Jim Green" (1810777856)

#### 04:09:21.079 --> 04:09:41.079

From the catch advice from the last couple of years of putting in some thresholds because I I dare, I dare not say this I don't want to, but, you know, we're I think we're heading towards in the next handful of years another snapper re red snapper rebuilding plan because we're applying so much effort and pressure on the fishery.

# 867 "Jim Green" (1810777856)

# 04:09:41.079 --> 04:10:02.149

And if we had some of these things in place, then we could mitigate having to do that. We, we, we had to rebuild the snappers in the eighties, we had to rebuild them in the early 2000s, and now it looks like and sometimes in the 2020s, if we keep on this track, we're gonna have to rebuild them again simply because we are applying so much pressure to them. So is there any thought or can.

868 "Jim Green" (1810777856) 04:10:02.149 --> 04:10:28.594 In this in this eco-ecosystem stuff that where we can put some kind of threshold on it when we start seeing this gradual reduction, and I'm not talking about a knee jerk reaction like up they went down, we should do something cause you know its cyclical life happens in cycles, but when we start seeing this gradual reduction and we're increasing our effort and that we're applying to the fishery, is there any talk about being able to apply that through this e com eco. Their system management and I know that's a pretty deep question, but,

### 869 "Melissa" (150252288)

04:10:28.594 --> 04:10:45.259

Yeah, so within the ESPs, that would take some some thought. We also, the South Atlantic and the Gulf.

# 870 "Melissa" (150252288)

04:10:45.259 --> 04:11:04.129

They're one of the reasons that wouldn't haven't fit all BSPs for yet, so we're in the process of working to try to build that up in that region. We're describing some kind of like empirical measures like assessments of like setting trigger points and and trends. But I could see that in like risk as like the risk tables where you have that population.

# 871 "Melissa" (150252288)

### 04:11:04.129 --> 04:11:19.639

The population dynamic risk, and that's where you kind of add in the consideration of you're seeing a declining abundance or they're not responding to management measures, you're not reading your rebuilding targets as you might expect, so that's kind of where that risk level would be.

# 872 "Melissa" (150252288)

# 04:11:19.639 --> 04:11:36.529

So I think some of these trends could be kind of brought in there if we can develop those types of risk tables for the Gulf and, and that region, to capture some of those, like you're seeing a decline in in biomasks so you're gonna elevate that risk and maybe want to adjust your catch accordingly.

# 873 "Melissa" (150252288)

04:11:36.529 --> 04:11:55.849

And then, for ESPs, we, we are kind of looking future looking for if we're gonna pull in, the ocean model outputs and the forecast from CEFI, that you can kind of sometimes if you know a threshold for the ecosystem of like if temperature gets below this, this temperature.

# 874 "Melissa" (150252288)

# 04:11:55.849 --> 04:12:19.315

We expect a crash to occur or something and you can kind of, you can identify those thresholds and provide that as part of the ESPs to kind of, you know, give a heads up potentially of like you might start, you know, seeing in the future these conditions occurring that might cause, you know, crashes to happen, be prepared for that and and that kind of stuff. And those are things that are still kind of in the works and how you would present.

### 875 "Jim Green" (1810777856)

#### 04:12:19.315 --> 04:12:46.149

On that and where you was at the thresholds, but I think those conversations are definitely could fit into the risk tables and ESPs in the future. And madam chair, if I could build on that one more question, what about, when it comes to like during the Obama administration we had Idol iron, which is, was the removal of derelict oil rigs and platforms and stuff and during that time there was a, a massive reduction in habitat, and they all.

### 876 "Jim Green" (1810777856)

### 04:12:46.149 --> 04:13:14.469

Also the methods in which they removed those oil rigs were quite violent to the fishery also and in these in these models and risk tables, is it also going to account for regulatory programs like that when when a regulatory program is brought forth? And I don't think anybody had the slightest inclination of how detrimental it was gonna be, but since Idol iron went into place and there was.

### 877 "Jim Green" (1810777856)

### 04:13:14.469 --> 04:13:34.469

This habitat removal, we've seen reductions in a lot of migratory species, the king mackerel, the cobia and the Gulf, also amberjack, which I know is a reef fish, but it's very much a migratory reef fish in all essence of the word. And are, are, is, is it gonna, is this ecosystem management gonna capture.

#### 878 "Jim Green" (1810777856)

#### 04:13:34.469 --> 04:13:50.912

For those types of things right off the bat too, whenever they start seeing these, I mean like it was known that we were moving, we were gonna remove habitat. Is that gonna play into the ecosystem management modeling also at some point, whether it's a risk table or ESP or ESR?

#### 879 "Melissa" (150252288)

#### 04:13:50.912 --> 04:14:13.154

That's a, that's a, that's a good question. I have to kind of think about that a little bit on where that would fit in. I don't think there's any none of the examples we have explored those sorts of regulatory and structural, like how to constructural changes like that. So we have to kind of think a little bit of how that would fit into the process.

# 880 "Jocelyn Runnebaum" (3849817600)

#### 04:14:13.154 --> 04:14:38.229

Sorry Melissa I'm gonna jump in here. I would love to invite you to our subcommittee of the climate and ecosystem subcommittee and the Northeast has a habitat vulnerability assessment that Emily Farded that brings up artificial habitats and the vulnerability of them. So there.

881 "Jocelyn Runnebaum" (3849817600)

04:14:38.229 --> 04:14:57.750

There's probably, an example of how we can, how that can be considered. And maybe if I bought you anytime, please feel free to respond. I didn't mean to totally cut you off. I also wanna, give Natasha the last word, and check in on public comment and then turn it over to Heidi for some stuff. So, Melissa I'm sorry.

882 "Jim Green" (1810777856) 04:14:57.750 --> 04:15:00.777 You don't have to be sorry, I was long winded madam chair.

883 "Jocelyn Runnebaum" (3849817600) 04:15:00.777 --> 04:15:10.366 That's ok Jim. I appreciate it. I appreciate it Captain Green. Melissa, did you wanna.

884 "Melissa" (150252288) 04:15:10.366 --> 04:15:16.928 Yeah, I think I think that when you mentioned we have a delivery assessment is probably a good, could be a good way to go for that.

885 "Jocelyn Runnebaum" (3849817600)

04:15:16.928 --> 04:15:28.073

Great. Okay, well, we'll look forward to having you on our subcommittee at some point. And Jim I'm assuming you'll be there. Natasha, give us the last word, please.

886 "Natasha M. Hayden" (3268169728)

04:15:28.073 --> 04:15:51.949

Thank you madam chair. I just was wanting to explore a little bit more about the social scientists that are coming on board in all of the regions. Well, 1st of all, those were very good presentations. I mean, and I definitely would encourage Melissa to come and kind of talk through those a little bit.

887 "Natasha M. Hayden" (3268169728) 04:15:51.949 --> 04:16:11.949

You know, at a little bit slower pace because there was a lot in that. That was really great. But the social scientist and and Jamie's question and that was Marissa's question as well was about, you know, indigenous and traditional knowledge being incorporated into how the process is being developed.

888 "Natasha M. Hayden" (3268169728)

04:16:11.949 --> 04:16:36.789

And one of the things that I always get struck by is that I in in our community and in the indigenous community and smaller community, just, you know, small rural vi villages in, in

Alaska is that, you know, something is talked about even even the EEJ initiative and then and it's and it's pretty much is, is done and now it's in its implementation phase.

889 "Natasha M. Hayden" (3268169728)

04:16:36.789 --> 04:17:04.239

Days, and in my community earlier this year, people were like, well, we haven't even heard about this, this, you know, until now and it's done. And similarly with the how the social scientists are getting on boarded, it, like, so what was, you know, what is that process and how, how were those individuals identified and and you know, how are they, how are they interface, you know, like how are how are they identified and how are they brought into the process is my 1st question because I'm not familiar with who would be doing that in the North Pacific.

### 891 "Cisco Werner" (311644160)

04:17:11.839 --> 04:17:36.194

The, there were ads public ads, you know, of open ads, you know, that people applied for, you know, so there was, there was, there were I don't know if the, if this was circulated, how it was circulated, how broadly it was. Roger, if you're still on, again, I'm gonna pick on you because I I in in terms of how the, the opportunities were advertised and so on, I believe these these were, does follow the the standard procedure for for for recruitment into, into positions like this. Roger, are you still on?

### 892 "Roger Griffis" (1203006464)

#### 04:17:36.194 --> 04:18:08.119

Yeah, I'm just go right on. So thanks for the question. These for the positions we're filling, they were all advertised through the normal process, you know, you jobs USA, the government way of doing that. So, yeah, there's actually I'd I'd love to talk to you more. There's actually, as you know, i'm quite a community, particularly when I'm working with indigenous communities that is a community of practi- practitioners working with indigenous communities in the.

# 893 "Roger Griffis" (1203006464)

#### 04:18:08.119 --> 04:18:28.119

Specific Northwest and Alaska and we've had a, a pilot project that's actually been focusing on this in the Gulf of Alaska and the bearing Sea that has pretty, pretty healthy human dimension components. So those two are pilots for this system that Cisco's been talking about, two pilot efforts that have been going. Well, A climb, the Alaska.

# 894 "Roger Griffis" (1203006464)

04:18:28.119 --> 04:18:44.119

Why that I I mentioned in the bearing C has been going for over six years. So, I'll put the try and drop the links for both of those pilot projects into the chat and would be happy to talk to you more about the, the work of both those pilot projects with indigenous communities.

895 "Roger Griffis" (1203006464) 04:18:44.119 --> 04:19:04.119 Over the past couple years and the coming three years cause we have funding to continue that work over the next three years. I I guess I'd also flag that there's an upcoming, effort by the North Pacific Fishery Management Council, to think about with with stakeholders.

### 896 "Roger Griffis" (1203006464)

# 04:19:04.119 --> 04:19:38.386

I believe future, what those future scenarios are that the particularly the bearing you see is heading into and the communities there. It's a scenario planning workshop to engage stakeholders and managers and thinking about the future conditions that we need to plan for and what approaches might be a win win or at least not lose lose strategies. It's a, it's a powerful technique to get multiple people involved in thinking about what's coming and what the best strategies might be as a scenario, I think if you google, I'll find the link scenario planning north Pacific Council, and I bet Grace Roskar already has the link somewhere. There it is. She already dropped it in. See we have a great team. Thanks

# 897 "Natasha M. Hayden" (3268169728)

### 04:19:38.386 --> 04:20:04.299

Thanks. And I live in Kodiak so I'm gonna be attending that workshop there at the beginning of June so I I do I am aware of that, that workshop. But one of the things that, and I I, I have my day job, which is not fishery specific stuff, and so I don't have I don't have as much time to.

# 898 "Natasha M. Hayden" (3268169728)

### 04:20:04.299 --> 04:20:26.869

Or I don't get to focus all of my time on the fishery stuff and the fisheries news and and what's going on. So, I know that it's been difficult to get, I mean Alaska is so big, like, you know, if you look at I'm sure like the Gulf of mass, all regions are very, very big.

# 899 "Natasha M. Hayden" (3268169728)

# 04:20:26.869 --> 04:20:46.869

You know, but Alaska, the different like you talked about the Gulf of Alaska and the Bering sea and the same breath, and, you know, we're very different from the Bering sea and the Gulf of Alaska and, you know, very different than from the Arctic and and out in the illusions and whatnot, and so, just such a huge task and I and I don't know if those initiatives and I'll look into that, the A climb if that.

# 900 "Natasha M. Hayden" (3268169728)

# 04:20:46.869 --> 04:21:09.277

It's got specific, or how, how indigenous, you know, indigenous input and knowledge and science is had been has been on ramped into that process specifically versus just the social science of communities in the human dimensions which because they're, they're two different things. Thanks. But thank you for that. And then my other, I had another question comment that and I just flew out of my head.

901 "Jocelyn Runnebaum" (3849817600)

04:21:09.277 --> 04:21:13.433 We can go to Marissa and then if you think of it, we can.

902 "Natasha M. Hayden" (3268169728) 04:21:13.433 --> 04:21:15.890 Yes, that would be great. Thanks.

903 "Marissa Merculieff" (1363329792)

04:21:15.890 --> 04:21:32.299

It might actually spark it just going off of what Natasha was saying about. So, as part of a fairly recognized tribe and a native community.

904 "Marissa Merculieff" (1363329792)

04:21:32.299 --> 04:21:52.299

It's very important to realize we're not stakeholders, we're right holders, and that maybe a different way of framing how you engage with our native communities and our indigenous communities. Very, very important difference for us and we don't like to just be clumped in with all the stakeholders, with all the same knowledge of the local knowledge, which was kind of what Natasha was getting at about the difference.

905 "Marissa Merculieff" (1363329792)

04:21:52.299 --> 04:22:17.593

Says between the indigenous knowledge and local knowledge, and that might just be a way of shifting that mindset of how you start engaging with our native communities across the whole country, not just Alaska, but I know Alaska is a lot harder because we have so many of them. But my other question was more of a process question maybe for Heidi. So Roger was saying you know we you follow up, we can talk more about this stuff. How, and maybe this is something you could email later, but I'm just wondering as a new member, how do we engage further discussions with, with people who join and present to us so and you can always answer that later, but I wanted to put it out there.

906 "Heidi Lovett, NOAA" (314564608)

04:22:17.593 --> 04:22:42.169

Yeah, sure. Thank you Marissa. So it's important to remember, and it probably has been, it's probably like way back in your memory now because it was already three days ago, or two days ago, but as a FACA committee.

907 "Heidi Lovett, NOAA" (314564608)

04:22:42.169 --> 04:23:02.169

When you're talking and doing the business of the committee, it needs to be at a meeting like this or at a subcommittee meeting and we always need to have a DFO present and a DFO means me or the other staff that are working representing the office policy and that, you know, interactive.

908 "Heidi Lovett, NOAA" (314564608) 04:23:02.169 --> 04:23:27.519

With you, so Katie and Gabriela generally and sometimes other staff, Roger, has come to subcommittee meetings in the past, and other staff. So what we do is we try to set it up, for them to come and for you to ask questions and present and back and forth et cetera, at those subcommittee meetings. And we do take notes from those meetings as I mentioned, in the orientation.

909 "Heidi Lovett, NOAA" (314564608) 04:23:27.519 --> 04:23:41.910

They don't have to be noticed and open to the public because it's the fact finding work that you all are doing. When you're in decision making mode, that kind of discussion and conversation must occur at a federal at a federally noticed a meeting, a meeting that's noticed in the Federal Register notice on our website.

910 "Jocelyn Runnebaum" (3849817600)

04:23:41.910 --> 04:23:49.132

Great, thank you. Natasha, you have remembered what you were gonna say. This will be the final final word. Final final.

911 "Natasha M. Hayden" (3268169728) 04:23:49.132 --> 04:24:01.009 Okay, so one of the things, thank you madam chair. I was what I.

912 "Natasha M. Hayden" (3268169728)

04:24:01.009 --> 04:24:21.009

What I was curious about earlier is in one of the slides it was the trends about climate and temperature changes. There's like the three different, you know, the, the way that it had been predicted and then, but the how at the the very in I hope you guys all know what I'm just talking about the the way that the the trends were showing. And one of the things that I was thinking about.

913 "Natasha M. Hayden" (3268169728)

04:24:21.009 --> 04:24:38.779

What I didn't hear is that it's it's climate informed fisheries, but what about the fisheries informed climate changes? So are, is part of the human dimensions element is, is that overlaying fishery impacts? You know, we've got bottom trawling that has been, you know, it did, it doesn't go back.

914 "Natasha M. Hayden" (3268169728)

04:24:38.779 --> 04:24:58.779

200 years it goes back how many, you know, 50 years or 70 years, and I think it would be really interesting to see that, in all of the regions, you know, what, what those trend lines are and what

the impacts to see if there's any correlation, it's maybe it's already probably been done, but another.

915 "Natasha M. Hayden" (3268169728)

04:24:58.779 --> 04:25:17.809

Which is bottom trawling but logic, you know, pelagic fisheries that have card on bottom contact and just just to make sure that that is one of the elements that is being considered in climate change, that climate change is not.

916 "Natasha M. Hayden" (3268169728)

04:25:17.809 --> 04:25:37.173

Solely, you know, monitoring temperatures and, you know, air current, you know, what, you know, patterns, currents, those kinds of things, but also incorporating the fisheries impacts that have happened around the nation. So that's not necessarily a question, but thank you for that, madam chair.

917 "Jocelyn Runnebaum" (3849817600)
04:25:37.173 --> 04:25:47.213
I'd like to say thank you Natasha. I don't know if, Cisco or Melissa want to respond to that.

918 "Roger Griffis" (1203006464)

04:25:47.213 --> 04:26:07.879

Oh I'm happy to. Thanks, Natasha. I mean you that's that's the challenge, right? I mean the challenge of fishery management or any of these decisions is about taking stock of all the variety of.

919 "Roger Griffis" (1203006464) 04:26:07.879 --> 04:26:27.879

Of stressors that are taking place. The one that we currently are least able to do, is that, that climate layer. Not that we have our hands on, all the others all that well either, but, what this, what the CEFI system is trying to do is to add that robust information.

920 "Roger Griffis" (1203006464)

04:26:27.879 --> 04:26:45.063

About at least how we, what those future ocean conditions are gonna be, at least from that climate standpoint so that it can be considered along with all that other stuff that you've mentioned. Absolutely, it's about taking all of that into account. That's why, right? That's why I thinking.

921 "Jocelyn Runnebaum" (3849817600)

04:26:45.063 --> 04:27:02.659

Thank you. Yeah, thank you. Thank you, Cisco, thank you Roger for stepping in on the fly and thank you Marissa for that.

922 "Jocelyn Runnebaum" (3849817600)

04:27:02.659 --> 04:27:22.659

Melissa, excuse me, thank you Melissa for that wonderful presentation. So, we're going to start to wrap up. I'm going to look to Heidi I don't, and Katie it sounds like we don't have anybody from the public that is on.

923 "Jocelyn Runnebaum" (3849817600)
04:27:22.659 --> 04:27:27.660
From everybody that is in attendee mode is a member of NOAA. Of NOAA is what I'm understanding, so we need to note for the record. No

924 "Heidi Lovett, NOAA" (314564608) 04:27:27.660 --> 04:27:46.299 public comment. Yes. Actually, I was gonna ask if the individuals who are in attendee mode, if anybody wished to make public comment to raise their hand.

925 "Heidi Lovett, NOAA" (314564608) 04:27:46.299 --> 04:27:48.142 And then we would elevate them. Elevate meaning bring them into this meeting directly to be able to say something.

926 "Jocelyn Runnebaum" (3849817600)

04:27:48.142 --> 04:27:51.380

Yes, please. And I don't see any hands raised, and it's my understanding they can raise a hand. I hope I got that right, but they are to our knowledge all staff, and they know how to find us if they want to let us know anything.

928 "Jocelyn Runnebaum" (3849817600)
04:28:03.761 --> 04:28:23.085
So thank you Grace for popping a lot of the information into the chat as well on the climate and ecosystem fisheries initiative.

930 "Jocelyn Runnebaum" (3849817600)
04:28:25.799 --> 04:28:40.820
Heidi, should I take through, should I give a summary and then you can give or do you want to give us an update about the next? Why don't you do the summary 1st? Great, ok. Thank you everybody for today. I.

931 "Jocelyn Runnebaum" (3849817600)

04:28:40.820 --> 04:28:56.090

And again just blown away by the enthusiasm, the interests and, the quality of the conversation that we always seem to have at MAFAC. So today the themes that I really.

932 "Jocelyn Runnebaum" (3849817600)

04:28:56.090 --> 04:29:12.860

I've Heard, where again this concern about funding and continued funding for the agency to meet their mission, and just the critical importance of cooperative research, I would also.

933 "Jocelyn Runnebaum" (3849817600)

04:29:12.860 --> 04:29:28.940

Gabby Gabby is amazing if you have not worked with her yet. I'm looking at her notes from the summary of today. So, the other thing I would add, is just the importance of.

934 "Jocelyn Runnebaum" (3849817600)

04:29:28.940 --> 04:29:48.940

Indigenous knowledge and, knowledge systems and perspectives, really finding a lot more elevation in these conversations. There's a lot of, knowledge that exists, that I've heard Clay speak about, that I've heard Natasha speak about and now that.

935 "Jocelyn Runnebaum" (3849817600)

04:29:48.940 --> 04:30:09.440

Marissa has joined us. She's just conveyed that as well, and I'm always so intrigued to hear more about, the information that can come from those knowledge sources. I also, had a real.

936 "Jocelyn Runnebaum" (3849817600)

04:30:09.440 --> 04:30:29.440

Sense of, urgency that this group is feeling about fishery, about surveys in general, be it fisheries independent surveys or information coming from the recreational fishery through MRIP or other, other places.

937 "Jocelyn Runnebaum" (3849817600) 04:30:29.440 --> 04:30:32.000 I.

938 "Jocelyn Runnebaum" (3849817600) 04:30:32.000 --> 04:30:51.950

I'm personally feeling a lot of anxiety about that and I know that the strategic, what is it called now? The strategic subcommittee is, it's not the full name of strategic planning and budget subcommittee, will be addressing that and it may make sense to.

939 "Jocelyn Runnebaum" (3849817600) 04:30:51.950 --> 04:31:11.950

Figure out how we can continue to support those efforts because of their critical importance. We had some really great presentations from from NOAA's staff, from Brian Pawlak and Cisco and Melissa that were super informative and.

940 "Jocelyn Runnebaum" (3849817600) 04:31:11.950 --> 04:31:29.510 Really informational. And so I think for some next items, or for some action items that are coming up, there's some information about the other federal advisory committees to, NOAA.

941 "Jocelyn Runnebaum" (3849817600) 04:31:29.510 --> 04:31:46.220 That need to be shared around, I think Heidi is gonna share around some information about SK grant recommendations that MAFAC made a few years ago, and Katie.

942 "Jocelyn Runnebaum" (3849817600) 04:31:46.220 --> 04:32:06.410 Is going to take on the daunting task of figuring out how to brainstorm or incorporate MAFAC updates into our one stop shop web page, and we're also gonna get the survey that Pat and Sarah.

943 "Heidi Lovett, NOAA" (314564608) 04:32:06.410 --> 04:32:08.166 Not Sarah Schumann.

944 "Jocelyn Runnebaum" (3849817600)

04:32:08.166 --> 04:32:25.340

But the other Sarah, my brain is forgetting names right now. I apologize. MacDonald Sarah MacDonald. Sarah MacDonald, who has stepped off, she's termed out, but she was spearheading these efforts, so we're gonna get the marine mammal survey.

945 "Jocelyn Runnebaum" (3849817600)

04:32:25.340 --> 04:32:40.970

And who is going to be distributed to, and most important, Gabi is gonna clean up the SIMP recommendations coming from MAFAC and then most importantly.

946 "Jocelyn Runnebaum" (3849817600)

04:32:40.970 --> 04:33:00.009

Heidi is going to tell us or send out an email explaining how to sign up for subcommittees. So please keep keep an eye out for that, come join the conversations that each of the subcommittees are having. There's a lot of enthusiasm and knowledge in this group that I hope we can pull into our thinking quickly, and I'm gonna let maybe Heidi make the announcement for our next meeting.

947 "Heidi Lovett, NOAA" (314564608)

04:33:00.009 --> 04:33:28.490

Yeah, so, you all should have on calendars and have seen, I think in the original message that we sent out, particularly to the new members, that the next meeting is the week of, or it's September ten to twelve and it's going to be in Kodiak Alaska.

948 "Heidi Lovett, NOAA" (314564608)

#### 04:33:28.490 --> 04:33:45.080

Natasha, you're gonna get another call from us soon. The normally, the meeting is three days or two and a half ish days. Obviously it takes little time to travel to Alaska, but travel dates generally are the Monday of the week.

949 "Heidi Lovett, NOAA" (314564608)

04:33:45.080 --> 04:34:05.080

Meeting is Tuesday, Wednesday full day and half a day or longer depending on the agenda, on Thursday and then return travel can is sometimes depending on location, it's Thursday evening or Friday. So all of that is in the traveling, will be in travel instructions. We have got some group blocks.

950 "Heidi Lovett, NOAA" (314564608) 04:34:05.080 --> 04:34:25.310

Secured and we're still just figuring out the exact meeting location. We've got sleeping room blocks secured. Some of the things I was gonna mention in addition to that, I think Jocelyn already did. So, we have, I'll send that out in an email to you.

# 951 "Heidi Lovett, NOAA" (314564608)

### 04:34:25.310 --> 04:34:44.750

In that email, there's also going to be a link to a qu to a little survey that we like to do at the end of each meeting to get your feedback and suggestions for the next meeting. So there'll be a link and we definitely appreciate you. It's not very long this this kind of a survey. And we definitely appreciate your feedback.

952 "Heidi Lovett, NOAA" (314564608)

04:34:44.750 --> 04:35:04.750

I'll be sending the web links to the to three different other advisory committees and those links will take you to their webpages that you can then scan to find and see the list of members. You can see the charters if they're a federal advisory committee, and I believe there's a, I think there's a charter for all of them, even the one that's not a.

# 953 "Heidi Lovett, NOAA" (314564608)

04:35:04.750 --> 04:35:29.320

Officially a federal advisory committee or not a fact. We will, we have a little matrix with all your names listed and all the subcommittees. So you I've put in Xs for those from when I've heard you've already say that you're interested in a subcommittee or those members that have been on the committee, there'll be Xs from where you have been participating, but we'd like everybody to.

954 "Heidi Lovett, NOAA" (314564608)

04:35:29.320 --> 04:35:49.460

View that and you can move if you've been on a committee and you want to step off that and go to a different one, that is perfectly fine, but we're just gonna set a date and just ask everybody to

let us know which committees they want to be on so we can connect you with the chair and with the calendar and the information related to that individual subcommittee's work.

955 "Heidi Lovett, NOAA" (314564608)

04:35:49.460 --> 04:36:17.165

I was gonna ask, I've tried to capture everything in the chat and we originally had said, Please don't use the chat for information, but I've tried to capture it all, but if I, it would be helpful for staff or members who shared a link or other information in the chat. If you can send that link to me, I'm gonna make sure that it is included and appended at the bottom of the notes or minutes for this meeting.

956 "Jocelyn Runnebaum" (3849817600) 04:36:17.165 --> 04:36:18.129 Okay.

957 "Heidi Lovett, NOAA" (314564608) 04:36:18.129 --> 04:36:23.349 Let's see. I think that that was everything I had on my list and I'm gonna look to staff if there was anything I forgot. Other stuff.

958 "Katie Zanowicz" (2127667200)
04:36:23.349 --> 04:36:37.870
I was just gonna add that we'll also be sending around information about the new member mentoring opportunity and just matching up the mentors with the mentees.

959 "Heidi Lovett, NOAA" (314564608) 04:36:37.870 --> 04:36:43.031 Thank you.

960 "Katie Zanowicz" (2127667200) 04:36:43.031 --> 04:36:45.593 But besides that, I think you. And since we mentioned that survey, The questionnaire, Heidi.

961 "Heidi Lovett, NOAA" (314564608) 04:36:45.593 --> 04:37:02.980 No, I did, but since we also mentioned the PR survey, the protected resources survey, I likely will send a sort of an independent.

962 "Heidi Lovett, NOAA" (314564608) 04:37:02.980 --> 04:37:22.980

That's like a unique project, so I'm gonna send that as a separate email from sort of the wrap up from this meeting because the what we're gonna ask you to do is we'll share the survey so you can see it, but most importantly, we're gonna be asking for members to look at the list of contacts that we already have or.

963 "Heidi Lovett, NOAA" (314564608)

04:37:22.980 --> 04:37:42.980

Outlets or websites where we know we can share the information. It will automatically be going to all the councils and commissions and our state contacts for sharing the link to that survey, it'll be on our own website when we roll it out, when it actually kicks off. But if there's individual groups or.

964 "Heidi Lovett, NOAA" (314564608)

04:37:42.980 --> 04:38:10.207

Newsletters or lists or media that you know, touch that that would reach a lot of various groups that use the marine environment and that might be very curious about how to determine marine mammal interactions. Those are the names and and contexts that we want. So that'll help us be as successful as possible. You usually have to, you know, throw a survey like this out to a thousand different outlets to get.

965 "Jocelyn Runnebaum" (3849817600)

04:38:10.207 --> 04:38:24.730

A five or 10 % return, so and we hope we get better than that. So then helping us drum up the interest in it will be helpful as well. Great, thank you. The only other thing I would add is that maybe we can send around.

966 "Bobbi Hudson, Pac. Shellfish Inst." (3139179264)

04:38:24.730 --> 04:38:35.911

The notes from the 1st day that highlight everybody's interests, and what they bring. Bobby I see you have yeah just really quickly, it'd be great if we.

967 "Heidi Lovett, NOAA" (314564608)

04:38:35.911 --> 04:39:08.454

We could receive copies of the presentations that weren't in the, weren't LinkedIn as well. That probably is a plan, but just making that request. Yes, so we do, we will share them by email with you all. They, we do always post all presentations on the website, but we have some pretty strict guidelines to make sure they're compliant with accessibility requirements known as five oh eight requirements and takes a little time sometimes for the real colorful great science serve presentations to make that marked. But I will, we will send them out to you all directly and hopefully within about a week to two weeks they will be posted on the meeting website.

968 "Jocelyn Runnebaum" (3849817600) 04:39:08.454 --> 04:39:15.650 Excellent. Thank you. Unless there's anything else that anybody is dying to ask, I will thank you all very much for your participation. Thank you for your patience.

970 "Jocelyn Runnebaum" (3849817600) 04:39:34.160 --> 04:39:52.158 With a new person navigating, how to cut off very smart people. So thank you, thank you all for the encouragement. I'm still looking forward to seeing everybody in Kodiak, it's so beautiful in September.

971 "Natasha M. Hayden" (3268169728) 04:39:52.158 --> 04:39:54.777 And thank you.

972 "Roger Griffis" (1203006464) 04:39:54.777 --> 04:39:56.095 Before.

973 "John V Young- Euclid Fish Co" (2938856448) 04:39:56.095 --> 04:40:01.698 Just being here. That's great. Nice job Madam.

974 "Heidi Lovett, NOAA" (314564608) 04:40:01.698 --> 04:40:22.017 Sure, thank you. Thanks. Thank you. Thank you. Thanks Viay. Nice to see everyone.