Senator Cantwell: Thank you, Chair Baldwin and Ranking Member Sullivan for holding this important subcommittee hearing. And thank you, Dr. Spinrad and Rear Admiral Hann for being here, very much appreciate the opportunity.

I want to say to my colleague from Alaska, I certainly want a holistic approach to our salmon and making sure that we have the appropriate science and recovery methods. And one of the reasons why I fought so hard to stop the Pebble Mine, which would have been built on the largest sockeye run of salmon in the world, is because we definitely get the connectivity between Alaska and the State of Washington. But my colleague’s point is correct. We have to invest in all sorts of activities to make sure that we are robust in our approach.
I do want to talk to Dr. Spinrad about NOAA and the distribution of hatchery funds.

You know, one of the issues, I think, the Inflation Reduction Act really was a shot in the arm, in my opinion, to where we are with our hatcheries. But it's only the beginning. And so I think we really need an established permanent program for infrastructure on our hatcheries to ensure the long-term sustainable management [and] investment will continue. And I understand that NOAA is consulting with Tribes on this. But I want to get your feedback on how we make this a long-term investment and what we need to continue to do.

**Dr. Spinrad:** Yeah, thank you, Chair Cantwell, for that question. And I appreciate the dialogue with you and your staff throughout this. I want to be very candid and upfront with respect to the Tribal component on IRA. And as I stated a little earlier in my testimony here, we can do better. And in fact, I think at the end of the day, the fact that we now have within IRA $390 million, or 15% of the resources, going to Tribal activities. Not just with respect to hatcheries, and of course, the largest federal investment in hatcheries restoration we've ever seen, but also in some of the habitat restoration capacity building work as well.

Because we have begun this as a result of the consultations. And I might add the listening sessions, five of which we conducted during June, we have a much more active and interactive dialogue with the Tribes. And I want to take your question under advisement because I want to see what comes out of these listening sessions, what comes out of the proposed efforts associated with the hatchery repairs and maintenance, and be able to come back to you and say, based on that investment, based on the plans, based on what we're hearing from the Tribes, this is the sort of sustainable long-term effort that we need. And that's something that I'll take as a get back, but until we have that further interaction, and oh by the way, now that we're working with the Bureau of Indian Affairs also on this, I'd like to get their perspective on how to build this as a sustainable effort.

**Senator Cantwell:** I'm going to say something that's going to kind of shock people. I need to understand that the Biden Administration understands Tribal consultation. We in the West understand it, but we're spending an enormous amount of time trying to make sure this Administration understands it as well.

So I hope that doesn't take more listening sessions, because we've already forced Commerce to have many listening sessions. And, you know, I would say that, as you said, there's more work to be done there. And I don't understand. I don't know if it's like some historical perspective that people are missing. I don't know what it is, but we got to do better.

So will you commit to a permanent hatchery infrastructure program? Do you think that's wise?
**Dr. Spinrad:** At this point, I want to get more information about what a permanent hatchery infrastructure program might look like. And I don't have that information. But I will commit to getting back to you with a perspective on that once we're better informed.

**Senator Cantwell:** Okay, let me ask you this. How important do you think hatcheries are to our efforts in sustaining salmon?

**Dr. Spinrad:** As an Oregonian, I think they're very important.

**Senator Cantwell:** Okay. So why wouldn't we want to make sure that we have a well-managed program, from your viewpoint to whoever's next in line to take over in a new Administration? I think this is what we're looking for, the standardization of what we already know.

I joined my colleague on the stock assessment. I mean, that was another big priority for us is making sure there were resources there for stock assessment. Why? This isn't a game of like 20 questions when we come here to whoever the Administrator is. It is about what do we know today about the science and what do we need to do to move forward?

And so I personally think a NOAA Organic Act gets you that. It gets you standardized programs with oversight and real answers as to the progress that we're making.

So here, I believe in a permanent and specific stock assessment, and I certainly believe in a hatchery program as well. So keep me posted on coming back to us on Tribal consultation.

And if I could, Rear Admiral Hann, ask you about the Coast Guard Authorization Act [that] was signed into law in December [and] authorized six hurricane hunter aircraft. These planes are needed to replace the P3s, which will be at the end of their service of life in 2030. The omnibus provided NOAA with $320 million [to enter into] a contract to acquire a new fleet of hurricane hunter aircraft. I understand that NOAA has entered into a contract for only one plane. With only one aircraft, NOAA will have fewer resources in 2030, than they do today. And as we can see, these are really important weather information tools for us. They reach some of the most intense levels of four and five [storms]. And this is why we need this information.

So what is holding us up in acquiring these new aircraft?

**Rear Admiral Hann:** Chair Cantwell, thank you for the question. And thank you for the support for the re-capitalization. As you mentioned, there's an authorization for six aircraft and our aircraft re-capitalization plan cites the operational requirement for four aircrafts. We've been aggressively working toward those contracts to ensure that we have the capabilities online in 2030, when the P3s need to go offline. So as you mentioned, we're working toward awarding a contract. I will award a pre-production contract in the next month, so that will be one aircraft with an option for at least three
more aircraft. And a production contract in early 2024, fiscal year 24, for the full production contract.

So working with the manufacturer, Lockheed Martin, that spaces us in their production schedule to ensure we can get through the building of the aircraft, the extensive modifications for instrumentation that we do to collect that data, and have at least two of the aircraft online and operating by 2030, when the P3s go offline.

Senator Cantwell: So you’re saying, what's holding us up is prototyping?

Rear Admiral Hann: I would say at this point, we're working to spend the appropriated funds that we have, and working with the manufacturer within their production schedule and all the orders we have to make sure that we are in their plans, we are in their orders.

So it's a six year process to build and modify the aircraft. And we're making sure that we're in their production schedules with the funds that we have appropriated to get those aircraft delivered. And we look forward to continuing to work with Congress and the Administration to fully execute the aircraft and the aircraft re-capitalization plan.

Senator Cantwell: Is it true there are only four qualified G4 pilots currently in the NOAA Corps?

Rear Admiral Hann: I believe we have six right now that are fully qualified, but you do make a very good point. NOAA Corps staffing is critical. The only way that we’re meeting tasking right now is to have them sign high-time waivers, which means that they fly more than 120 hours in 30 days. They have to ask for and be approved by a flight surgeon to fly more than 120 hours. That's a lot of hours and extreme flying. You know, as you're well familiar with. And it's not just important for hurricanes. It's critically important for atmospheric rivers.

So we are working to increase the recruitment of the NOAA Corps, specifically pilots. We've instituted a couple of new things in the next officer class, which swears in today and starts at the Coast Guard Academy on Monday. Eight of those officer candidates will go to aviation upon completion at the Coast Guard Academy. In January, which is our next class of officer candidates at the Coast Guard Academy, for the first time ever, I directed an aviation board and a mariner board. Within that aviation board, the selections are going on right now. But we have many qualified pilots with all of their pilot licenses, which means immediately upon completion of training at the Coast Guard Academy, they will go to the aviation operations center and start flying. So we're taking some pretty radical measures to make sure we can get the pilots onboard. And to your point, it takes years of training to get to be a qualified hurricane aircraft commander.

Senator Cantwell: How many years do you think?
**Rear Admiral Hann:** If someone comes in with experience, they have all their licenses and experience, probably the quickest we can get them in there is three to four years to be a qualified hurricane aircraft commander. It depends largely on the hurricane activity. You have to have a minimum number of flights into the environment, into the hurricane, to get your qualification. But with bringing in people with their license and flight experience, that allows us to expedite the process up to four to five years.

**Senator Cantwell:** Is OMB blocking the contract for more than one plane?

**Rear Admiral Hann:** At this point, we’re working with them, with the Administration, on the funds that you appropriated, thank you very much, to make sure we spend them as efficiently as possible the meet that operational demand in 2030.

**Senator Cantwell:** Well, we’re definitely going to need the information about the pilots. So thank you very much.