

This transcript is from a NOAA-led National Stakeholder call with states and Tribes focused on Section 216(c) of the [Executive Order 14008 on Tackling the Climate Crisis at Home and Abroad](#). The executive order directs NOAA to collect recommendations on how to make fisheries—including aquaculture—and protected resources more resilient to climate change. This includes changes in management and conservation measures and improvements in science, monitoring, and cooperative research.

March 25, 2021

Coordinator: ...by. All participants will be in a listen-only mode during today's call until the comment-and-question session. During that session if you would like to ask a question or make a comment, please press star 1 and clearly record your first and last name for your question or comment to be introduced. I would like to inform all parties that today's call will be recorded. If you have any objections you may disconnect at this time. I would now like to turn the call over to your host, Ms. Heather Sagar. Thank you and you may begin whenever you are ready.

Heather Sagar: Thank you, (Beth). Good morning, good afternoon to everybody. I wanted to thank you all for joining this important call. As (Beth) stated my name is Heather Sagar. I'm the Senior Policy Advisor for the National Fishery Service on Section 216 of Executive Order 14008. And today's call is for state and tribal governments.

Let's see. I'm going to give you a little bit of ground rules for today. As you all know 216C of the Executive Order is on resilience for fisheries and resources in the face of climate change. There is no time limit for your comments but there are a lot of government representatives on this call today and we would like to hear from everyone.

So once we do we may go back for a second round of comments. We have extended today's call to be two hours long in hopes that we will hear from everyone.

We also have an option to submit a larger or a longer comment through an email box which is posted on our Web site. That is oceanresources.climate@noaa.gov. We are also just accepting comments today so we don't expect there to be much of a back a forth dialogue. However, if questions arise that we have an answer to we will be happy to share that information.

So the Operator has indicated how to sign up and make a comment, that's star 1. So I would like to introduce our speakers.

We are fortunate to have two leaders from NOAA on today's call. Mr. Samuel Rauch and Ms. Nicole LeBoeuf. Mr. Rauch is the Deputy Assistant Administrator for Regulatory Programs. He oversees regulatory actions programs including those that support the conservation and recovery of marine mammals and endangered species. And he ensures economically and biologically sustainable fisheries as well as promoting habitats, stewardship through restoration and conservation.

Mr. Rauch also served as the Assistant General Counsel for Fisheries where he supervised a team of attorneys, paralegals and support staff providing legal counsel to NOAA fisheries. And prior to joining NOAA, Mr. Rauch was a trial attorney and the Section Chief for Wildlife and Marine Sources Section of DOJ.

Mr. Rauch holds a JD from Northwestern School of Law of Louis and Clerk and an MS from the University of Georgia and a BA from the University of Virginia.

Ms. LeBoeuf is the acting Assistant Administrator for NOAA's National Ocean Service which is an organization of 1,800 staff in more than 50 locations around the country. She oversees all strategic and operational aspects of America's Premiere Coastal and Ocean Agency.

Ms. LeBoeuf has over 20 years of scientific and program management expertise with an emphasis of connections between science and policy. She grew up on the Texas Gulf and knows the importance of coastal communities to our nation.

She holds a bachelor's degree in Marine Biology from Texas A&M and a master's degree in sustainable development and conservation biology from the University of Maryland.

So now that we have learned whop our speakers are today and laid out the ground rules, I would like to turn it over to Samuel Rauch for some opening remarks to set the context for our call today. Samuel?

Samuel Rauch: Yes. Thank you, Heather and thank you all for taking the time to join us here on this call and share your thoughts with us today. So I'm here and we are here specifically to discuss section 216C of President Biden's Executive Order, Executive Order 14008 which is titled Tackling the Climate Crisis at Home and Abroad.

The particular provision that we are talking about today requires NOAA to and I'm just going to quote this, initiate efforts in the first 50 days from the

date of this order to collect input from fishermen, regional ocean councils, fishing management councils, scientists and other stakeholders on how to make fisheries and protected resources more resilient to climate change including changes in management in conservation measures and improvements in (unintelligible) monitoring and cooperative research.

That is the direction that we are seeking comment on now. The broader context the President has clearly shown support for minimizing the effects of climate change across all sectors within the US and we know that fisheries and protected resources and the habitats and ecosystems are being affected by climate change particularly if you look nationally. Not all are affected in the same way. Some effects are profound, some effects are more difficult to discern. But many of our fisheries and protected resources and habitats are clearly being affected.

Climate related changes in ocean ecosystems such as warming oceans, increasing acidification and rising seas also can affect the distribution and abundance of marine species and thereby impact the people and the communities that depend on them.

Here at NOAA we work with our partners to understand and respond to change in climate and ocean conditions that will minimize those impacts, adapt to the changes that are coming to ensure that future generations can enjoy the benefits of healthy marine ecosystems.

So we want to hear from everyone to ensure that the federal regulations are appropriate for marine species, the industry and the public. And we want to ensure that we are doing all we can to sustain resilient fisheries and protected resources.

So I would like to invite you today to provide us with your thoughts regarding how to make fisheries and protected resources more resilient to climate change.

In doing so, keep in mind there is several relevant NOAA authorities related to this goal including the Magnuson-Stevens Fishery Conservation Act, the Endangered Species Act, the Marine Mammal Protection Act, the National Fisheries Act, the Coastal (unintelligible) Management Act and others.

Here at NOAA we are going to use the input we gather to inform any of our next steps including our next series of regional action plans under the NOAA Fisheries Climate Science Strategy.

The EO does require us to collect recommendations on how to make fisheries including aquaculture and protected resources more resilient to climate change and this could include changes in management conservation measures and improvement in science monitoring and cooperative research. So we are interested in all your thoughts on that.

We are accepting public comment through the request for information for 30 days that was in the federal register notice that we sent out. So the deadline for comments in the federal register notice is April 2 of 2021. That federal register notice is available and accessible via the Internet.

And to the extent that you would like to provide us written comments and as Heather indicated you can send those to oceanresources.climate@noaa.gov the ocean resources is all one word dot climate @ noaa dot gov.

Now let me say, before I open it up for comments, the Executive Order is quite broad and it covers many different things. So while we are here talking

about Section 216C, there are plenty of other provisions in the Executive Order such as provisions dealing with wind, with the Civilian Climate Corp and with other things.

And in particular I want to mention there is a provision under 216A that requires the Department of the Interior to conduct a report and provide a report to the President's Task Force of Climate within 90 days on how to achieve a goal of conserving at least 30% of US land and water by 2030.

So just if (unintelligible) we are NOAA, we are in the Commerce Department so this is an interior department request. To the extent that you have comments on this or any other provisions that are not related to 216C, we are happy to take those comments and forward them onto the Interior Department. But just to be clear we are in the commerce department and so we will not have the ability to engage back and forth as to what the interior department may or may not do regarding that provision.

So we are happy to take those comments and forward them on but that is a different provision of the Executive Order than the one that is trusted with the commerce department.

So with that at the outset let me turn it back over to Heather you and the Operator for instruction on how to conduct the actual comment process.

Heather Sagar: Sure. Great. Thanks, Samuel. And I just would add to Samuel's note about 30 by 30 being run by DOI, for those of you that are interested in sending comments directly to the Department of Interior, that email address is O-I-E that's Oscar, India, Echo, Alpha at I-O-S dot DOI dot GOV XON.

Operator, could you provide some directions and could we queue up some comments please.

Coordinator: At this time if you would like to ask or - excuse me, make a comment, please press star 1 and clearly record your first and last name for your comment to be introduced. Again that is star 1 at this time if you would like to make a comment. Our first comment comes from Amy Trainer, your line is now open.

Amy Trainer: Good morning. Thank you very much. My name is Amy Trainer. I am the Environmental Policy Director for the Swinomish Indian Tribal Community. The Swinomish Tribe is located at the mouth of Skagit River in Puget Sound. The Skagit is the largest river that drains into Puget Sound and fortunately or unfortunately depending on how you look at it, it's the only river on the west coast that still has all six species of wild salmon spawning in its waters.

That said, the Skagit like all of our other rivers in Puget Sound is in trouble and, you know, the tribes have been engaged with NEMS and all of our federal family for a number of years. And in fact in 2011 the tribes through the Northwest Indian Fisheries Commission published the Treaty Rights at Risk document.

And so my hope is that if current staff at NEMS and other federal agencies are not familiar with that document that perhaps as we all move forward in our relationships and working together to improve salmon habitat in the face of climate change, we can use that as a reference point.

One of the requests in Treaty Rights at Risk was that federal agencies - NEMS specifically take the approach of the harvest of salmon which is very quantitative and methodical and very specific, that they take that same

approach with habitat and strengthen the regulatory requirements across federal agencies but also across state programs that have a federal nexus.

In the Skagit I will say there are a couple of specific climate resilience programs we are very focused on. One is ensuring that our salmon streams are climate resilient.

We have roughly 1,700 miles of salmon streams in the Puget Sound region including some in the lower Skagit Basin that are already polluted from temperature. So they are legally too warm under Section 303D of the Clean Water Act.

We know what needs to happen. We know trees need to be planted and we need those at a science based standard. And so we are hoping that NEMS can continue to bring its regulatory strength under the Endangered Species Act to help us protect ESA listed Chinook and ESA listed Steelhead habitats that are in dire need of trees to be planted in order to someday, decades from now probably, meet water quality standards for temperature pollution -- but also to buffer against the climate warming that is absolutely here and is going to increase.

Another piece is ensuring estuary habitat is adequate for our ESA listed salmon. So we know from best available science that our Chinook need enough estuary habitat so that our juvenile are healthy and strong enough and are grown enough before they take off out into the ocean.

Estuary habitat is a prime limiting factor in this lower Skagit Basin and that has a direct cause or link to the highly endangered southern resident killer whale.

So we need NEMS leadership, regulatory strength to whether it's through ESA Section 7 Consultations but to take a hard fresh look at all of the programs and consultations that exist and ensure that they adequately are making that direct causal link between adequate estuary habitat, the recovery of our Chinook as well as the recovery of our killer whales because Skagit Chinook are a primary prey source for southern resident killer whales.

And I will just close by saying, you know, all of this is coached in tribal sovereignty. Locally we have good relationships with NEMS staff. We welcome the opportunity to talk further about specific steps that are needed to recover not only our salmon but to ensure that our shellfish which are also a vital fast food and part of our tribal sovereignty are (upheld) and able to just kind of make it in the face of climate change and climate warming.

So with that I think you can very much and look forward to further engagement. Thank you.

Samuel Rauch: Thank you for the comment.

Coordinator: As a reminder, if you would like to make a comment, please press star 1 and clearly record your first and last name for your comment to be introduced. Again that is star 1. Our next comment comes from Doug Vincent-Lang, your line is now open.

Doug Vincent-Lang: So we start with three fish, right? (Unintelligible).

Coordinator: Mr. Doug, your line is now open.

Doug Vincent-Lang: Thanks. Commercial.

Coordinator: Doug, your line is open.

Doug Vincent-Lang: I have got to take a break here. Hold on. This is Doug, can you hear me?

Samuel Rauch: Yes, we can hear you, Doug.

Doug Vincent-Lang: Okay. Let me turn up my phone here a little bit. Good morning. For the record my name is Doug Vincent-Lang and I'm a Commissioner for the Alaska Department of Fish and Game which is the principal manager of Alaska's fish and game resources.

Thank you for the opportunity to provide oral comments on the recent Executive Order on climate change. My staff have been reviewing the Executive Order and we will be providing detailed comments by the deadline established with the NOAA's request for information.

Let me begin by saying that Alaskans are proud of the rich resources in our state and off our shores which support robust populations of fish, shellfish, plants, birds and wildlife.

We successfully manage our diverse resources sustainably to provide for the utilization, development and conservation in the best interest of the economy and the well-being of the people of the state. This is required by the Alaska Constitution and was a primary impetus for our statehood.

Alaska's approach is highly effective. Our fish and game management programs are lauded around the world.

Our management has maintained vast interconnected ecosystems with healthy populations of fish and wildlife species that provide food, recreation and economic benefits.

For example, Alaska produces more than half of the fish caught in the waters off the coast of the United States with an average wholesale value of nearly 4.5 billion a year.

Alaska fisheries are among the best managed, most sustainable in the world. Alaska resources provide jobs and a stable food supply for the nation while supporting a traditional way of life for Alaskan natives and rural fishing communities.

Section 216A of the Executive Order outlines a goal of conserving 30% of land and 30% of water by 2030. In determining how to implement this directive I urge you to recognize that conservation includes the management of human use of natural resources for public benefit and sustainable social and economic utilization.

The key point to establish at the beginning of your process, conservation is not preservation. The methods used for conservation in Alaska should be the model for establishing guidelines for determining whether lands and waters qualify for conservation under the Executive Order.

National Parks preserve forests, monuments and wildlife refuges currently cover nearly 40% of Alaska and much of the remaining areas outside of these is well conserved already.

We do not need more land set aside in Alaska. We have exceeded the goals. One need only to look to the various provisions that congress included in the

Alaska National Interest Lands Claims Act over 40 years ago to see that it is not only address conservation designations for our great state but also amended the Alaskan Native Claims Settlement Act and the Statehood Act.

This was to ensure the conservation designation would not interfere with the fulfillment of state and native corporation land entitlement or the ability to have access to and use lands and waters for a variety of purposes. Such as rural community access and infrastructure needs and opportunities for a responsible resource development.

When you look at section 101D is clear on congressional intent that no further legislation or regulation designating new conservation system units, national recreation areas or national conservation areas are warranted because ANILCA struck a proper balance between protection of national interest in the public lands of Alaska and future economic and social needs of the State of Alaska and its citizens.

Congress confirmed this by taking additional steps in ANILCA 1326 to deliver the power of the executive branch to use its authority to offset that proper balance.

Section 1326 provides clear and unambiguous restrictions on future executive branch actions with respect to future withdrawals and future studies or reviews without congressional approval.

Inclusion of this language was not unintentional nor was it done without considerable effort. These no more clauses in ANILCA were a critical step to striking necessary balance for ANILCA successful passage. With the passage of ANILCA, Alaska not only met but exceeded the intent of the 30 by 30 goal (and) the Executive Order over 40 years ago.

Currently 137 million acres or nearly 40% of Alaska is already designated for conservation purposes. ANILCA was and remains to date the single largest expansion of protected lands in US history and more than double the size of national parks system.

Yet despite the no more clause of ANILCA, the federal government continues to create new terms of art such as wilderness study areas, areas of critical environmental concern or aquatic resources of national importance that further the effect of diminishing access to share state resources by Alaskan citizens.

As with land, we do not need more water set aside in Alaska. Over 65% of Alaska's economic exclusive zone is close to all or some fisheries to conserve habitats, sustain fisheries in coastal communities and protect marine mammals.

Over a million square miles of Alaska's coast has been selected as proposed and designated critical habitat for a variety of ESA listed species. The proposed and designated critical habitat off Alaska is the size of the seven largest low 48 states combined. This compares to less than a half million miles of proposed and critical designated habitats off the entire lower 48 states.

Management programs for Alaska's waters and lands are developed through well-established processes that provide for healthy and intact ecosystems and ensure that nature is conserved.

Setting aside additional lands and waters in Alaska solely to hit a numerical, not a biologic goal would be a disservice to other parts of the country where restoration and conservation is sorely needed.

Not conserving those areas would set up the 30 by 30 approach as a failure for conserving nature. In sum, we do not need to conserve more of Alaska, we need more of the nation to look more like my state. And we need more of the rural to look like Alaska.

The Biden Administration should look behind the United States and encourage through all available mechanisms the set aside of lands and waters in other countries that have poor environmental regulations of their lands and waters compared to Alaska and the United States.

Section 216C of the Executive Order directs NOAA to gather input on ways to make management of fish and wildlife and their habitats more resilient to climate change. Climate change is certainly one of the largest and headline grabbing challenges facing our fish and wildlife management systems. However, cannot and should not become the single driving force of management.

Other biologic, social and economic factors that directly impact fish and wildlife and their habitats may be more immediate than climate change impacts and should be addressed by resource managers as needed.

Simply put, we cannot become myopic in our focus on climate change. A focus on climate change should not blind us to other issues especially when other issues might be more pressing.

For example climate change-driven Endangered Species Act listings in Alaska for species ring fields and bearded fields which number in the hundreds of thousands to millions is prioritizing resources away from species with higher conservation needs such as the North Pacific white whale with a population size of around 30.

Based on experience in Alaska, existing management processes are best suited to ensure that fish and wildlife resources are resilient to changes in climate and other environmental factors. Through the Alaska Board of Fisheries and Game the North Pacific Fishery Management Council and other bodies, Alaska Fish and Wildlife Management Programs use a variety of conservation tools to adapt to social, environmental and economic changes including climate related variables.

In addition, the North Pacific Management Council has already begun the process of evaluating how to make fisheries more resilient to climate change through initiation of an action module for climate change within the Bering Sea fishery ecosystem management plan.

These well-established management processes are science based, flexible and stakeholder-driven and they provide for a successful model to address climate change impacts in marine ecosystems that support fisheries.

A critical aspect of resilience of protected resources to climate change is ensuring connectivity and low levels of other stressors. When an area is closed off, effort intensifies elsewhere. What is less certain is what happens to fish and wildlife stocks outside of protected areas?

NOAA should recognize the success of current conservation and management processes and ensure that additional conservation efforts are not simply regulatory and administrative hurdles and burdens that do little to make fisheries in protected resources more resilient to climate change.

Ongoing science and monitoring are critical to Alaska's conservation and management programs. NOAA should continue to support fisheries and

ecosystems surveys to provide best available information to assess and manage fisheries and protected resources.

I cannot overstate the importance of maintaining baseline data collections in the face of changing environmental conditions, although science and research need to evolve over time, it is critical to maintain support for existing surveys and monitoring programs rather than shift substantial resources to reduce climate change efforts.

States should have access to robust grant opportunities to address federal initiatives that affect their ability to prosecute fisheries empowerment activities.

Adequate funding for states to improve science, monitoring and research on climate change impacts to fisheries and marine mammals is critical for robust management of these shared resources.

Too often federal agencies decrease external funding opportunities as an easy way to pay for new federal initiatives. In such cases the new initiatives tend to fail because states are not viewed as true partners.

In closing, any 30 by 30 effort needs to be focused on conservation, not preservation and unlike other states and nations, recognize the vast amounts of habitat are already in some type of conservation status in Alaska, far more than the 30% specified in this initiative. Simply put, we do not need additional set asides in Alaska. Efforts should be focused elsewhere.

Regarding climate change, any effort needs to recognize that our climate is an important driver, it should not become the most important management

consideration as the other factors that can affect fish and wildlife and the habitats they occupy may be spatially and or temporarily more important.

Biologic systems are definitely complex and we simply cannot become myopic in our quest to address climate impacts.

Thank you for the opportunity to share my concerns and comments with you today.

Heather Sagar: Thank you, Doug for your comment on 216C. For the sake of time I would just like to remind folks that the Department of Interior is responsible for 30 by 30. There is no one online here from the Department of Interior. The email address for comments on 30 by 30 is oie@ios.doi.gov. Thank you very much. And we can go on to our next speaker.

Coordinator: Our next comment comes from (Garry Moshima), your line is now open.

(Garry): Thank you. We need more than a listening session to gather input for others to consider and make decisions. Tribal governments want and need to be poll participants in developing and implementing real solutions to the climate crisis and the problems that are confronting people in the US and worldwide.

With global change we are dealing with many complex and challenging issues that result from accumulated impacts of actions and decisions that were taken years ago in various places for the manifest today locally in unique ways.

I recommend that we establish a collaborative tribal, state and federal inter-governmental process to develop, evaluate and implement measures to address the climate crisis. Engagement in respectful dialogue between sovereigns to share knowledge, world views and values would be vital to reach effective

and lasting solutions that are consistent with reserved and legal rights, judicial decisions, laws and political interactions.

Indigenous ways of knowing and science coupled with a profound commitment stewardship for future generations are needed to compliment western science and inform decision-making.

Additionally, the intimate tribal understandings of place-based environments, resources and socioeconomic and political relationships will be crucial to the ability to formulate and employ local actions to address the climate crisis.

Thank you.

Samuel Rauch: Thank you for your comment.

Coordinator: As a re minder, if you would like to make a comment, please press star 1 and clearly record your first and last name for your comment to be introduced. Again that is star 1. The next comment comes from (Osten Azmark), your line is now open.

(Osten Azmark): Yes. Good morning from (unintelligible) Alaska (unintelligible). I'm a lifelong resident of Nome, Alaska here in western Alaska. Thank you for the opportunity to provide comment on NEMS (unintelligible) fisheries.

Here in western Alaska in the northern Bering Sea (unintelligible) for now or over a couple of decades climate change has been building more and more. More accurately warming has been occurring which has changed the Icelandic nature of our traditional waters to a choragic system.

And that change has come with some really significant problems, really significant impacts to our people, really significant impact to our subsistence way of life.

And again with wide scale and really dramatic declines in salmon initially in the 1990s, western Alaska is still recovering from those salmon declines as a result of climate change and perhaps other factors even large scale commercial fishing.

And then in the last decade or so a significant number of impacts to marine mammals have started to show up. Unusual mortality events, the disappearance of primary prey species at the lower end of the triangle, (unintelligible), you know, and such. And then recently in the last several years a really dramatic decline in (unintelligible).

These changes resulted in obvious, measureable and clear marine mammal declines over the last decade that have occurred in response to sea life declines. And lifelong hunters like myself, you know, we are contemplating that in fact the possibility of localized extinctions of ice seals, you know, ice associated marine mammals.

And for well over several decades people in my region who were in western Alaska in fact are critically divided politically separate from the urban portions of Alaska.

Alaska is in fact a strongly politically divided along the urban and rural lines and this has created a really significant problem -- because political appointments come from the urban centers and so fish and game management there as opposed to the previous speaker from the State of Alaska isn't really

science-based at all. It's politically motivated. It's politically based. It's not based on science.

Well, they call it science but it's not based upon input from a wide range of people. It's not based upon, you know, subject to objective evidence, subject to collaboration. In fact the State of Alaska routinely ignores rural residence, rural (unintelligible) advisory committees.

Then when you look at the federal government, it's even a more especially the North Pacific Fishery Management Council, the National Fishery Services and the Alaska Fishery Science Center, folks in rural Alaska who are, you know, very concerned about the ecosystem and fisheries management we have a very poor, extremely poor relationship with the National Fishery Service and the Alaska Fishery Science Center.

The North Pacific Fishery Management Council has one of the poorest public processes that exists probably in the entire nation. The North Pacific Fishery Management Council routinely in its agenda routinely submits written documents past the written comments' deadline and so members of the public are extremely frustrated with a process that does not allow a good public involvement.

Folks from rural Alaska submit significant testimony in regards to the impacts of climate on fisheries. We plead our case for more conservation even protection and routinely the North Pacific Fishery Management Council ignores concerns from rural Alaska residents.

In fact, at this last, this most recent North Pacific Fishery Management Council meeting we in the region have expressed really string concerns about

the recent king crab declined the local or commercial fisheries are not even buying king crab for the winter commercial fishing.

And despite these really strong concerns that the North Pacific Fishery Management Council heard from the advisory committee and the Subsistence Regional Advisory Council, they ignored the concerns and said go somewhere else with your problem. Go to the Board of Fisheries. And so we went to the Board of Fisheries - the State of Alaska Board of Fisheries and they ignored the request for a special agenda item to address the decline of king crab.

You know, all of these, you know, is really complicated political problems that we have that could make fisheries management climate really are burdened by some, you know, really profound problems that exist within the change (unintelligible) within the National Fishery Service.

Since 2018 the National Fishery Service has allowed large scale commercial fishing to occur north of St. Rhodes Island in my region in the northern Bering Sea and not a single one of those large scale commercial fishers have been on AIS. We have never seen these vessels on AIS.

And so of course that provides and immediate safety concern but it also doesn't provide us as members of the public with much ability to be able to provide narratives about the impact of large scale commercial fishing in the northern Bering Sea.

In order for climate ready fisheries or even for an industry to even consider the notion of enacting or proposing or considering (unintelligible) fisheries a suite of things need to occur.

One of those things that must be considered that must be part of the equation is a notion where the possibility that large scale commercial fishing north of 60 degrees must be stopped, must be halted. That has to be part of the solution package. If it's not then we are not subjecting the possibility of (unintelligible) fisheries to enforce certification, we are not subjecting the Board of Fisheries to, you know, objective evidence taking.

And so we don't know if we cannot consider all the possibilities including stopping and halting large scale commercial fishing north of 60 degrees whether we are doing the right thing.

And so obviously (unintelligible) should also consider the impact of global warming, greenhouse gases. Right now as of this moment the US fishing fleet is only 150 miles from the Bering Sea ice. These fishing vessels as well tankers and our cargo vessels are emitting black carbon. Black carbon is a really strong climate forcing agent. It's one of the stronger climate forcing agents. It reduces (albedo) of snow and ice.

Black carbon tends to live in the atmosphere for a relatively short time frame a couple of weeks but based upon the wind current that exist now in the Bering Sea, the US fishing fleet is only like I had mentioned only 150 miles from the ice which means it only requires less than - that carbon from those fishing ships and those tankers and cargo vessels only need three days transit time to omit black carbon onto ice, onto snow at this time of the year with increasing sun contributing to earlier and more rapid meltdown.

And so black carbon needs to be part of the suite of solutions to make public fisheries (unintelligible) ready and our world ready so that we can be good stewards of the environment.

And lastly, you know, Alaskan native people in rural Alaska we depend very heavily upon fish and wildlife from the ocean. We harvest fisheries and wildlife resources that NEMS manages and we now are under the consideration our US critical habitat for ice seals or even (unintelligible) seals and (unintelligible) already sort of tipped its hat to not being to instill or put in place quite a variety of options.

The NEMS is considering providing an exclusion for the military ice exercises which is a really small exercise that occurs for five weeks every year as an exclusion to critical habitat.

NEMS needs to really change its demeanor, change its attitude towards (unintelligible) emissions and not in (unintelligible) preclusions or exclusions such as with the military for (unintelligible) which are now under consideration via the public comment period for critical habitat.

And so again in closing we in rural Alaska are very thankful for this opportunity. There is a long way to go to make climate ready fisheries climate ready because of as I mentioned the North Pacific Fishery Management Council, National Fishery Service in the State of Alaska have some of the poorest public processes that are not very well backed by science, science that is not objective and science that is arbitrary and precocious when it comes to the ecosystem as a whole. Thank you.

Heather Sagar: Thank you, (Osten).

Coordinator: As a reminder, if you would like to make a comment at this time, please press star 1. Again that is star 1. Next comment comes from Debra Aseltine-Nielson, your line is now open.

(Debra Esotyne-Nielson): I apologize, I was on mute. This is Debra Aseltine-Nielson. Can you hear me okay?

Heather Sagar: We sure can.

Debbie Aseltine-Nielson: Great. I'm a Senior Environmental Scientist with the California Department of Fish and Wildlife and I just have a few comments. First of all, we will be submitting written comments so I just want to highlight a few items right now.

In particular we at the state have put together our Ready California Fisheries for Climate Change. That report came out in 2017 and so I will provide you my written comments reference for that.

We also have within our various climate strategic plans for the state have listed fisheries actions for state managed species and I will provide some of that information as well.

And I would also like to reiterate that definitely baseline data and research is critical to the work that's going forward. There is still a lot that we need to learn about climate and how it's impacting our fisheries. And that is all I'm going to do and I will forward my comments.

Heather Sagar: Thank you very much.

Coordinator: And there are no further comments in queue.

Heather Sagar: Okay. Let's take a couple minutes here and see if any folks - press star 1 to get in the queue to comment.

Coordinator: Our next comment comes from (Lorraine Devine), your line is now open.

(Lorraine Devine): Hi, can you hear me? This is (Lorraine Devine).

Samuel Rauch: Yes, we can hear you.

(Lorraine Devine): Excellent. Thank you. My name is (Lorraine Devine) and I work for the Aleut community at St. Paul Island which is located in the Bearing Sea of Alaska so good morning and good afternoon.

I would like to just provide brief comments really specifically speaking to section 216C and what the Department of Commerce could really help improve to address climate ready fisheries.

And I think there should be a significant focus on strengthening the Magnuson-Stevens Act and the national standards regarding indigenous access to fishing opportunities. Not just commercial but in Alaska we have a very special case earlier about, you know, the bounty and opportunities Alaska provides for the nation's fisheries.

And these are incredibly important to our indigenous groups in Alaska, in the Bearing Sea in particular where huge, world (unintelligible) commercial fishery level activities are occurring.

And the system that governs those fisheries the North Pacific Fishery Management Council is quite broken as you heard Mr. (Amosik) speak to in the public commenting process in how documents are provided and really a lot of the system it is virtually inaccessible to our tribal fishermen, to our rural community members that livelihoods and cultures are inextricably hived to fishing and fishery resources.

And in order to really make this process available to our rural citizens, to our small scale fishermen our subsistence and recreational fishermen beyond just those engaging in commercial fishing, we need to have direction and clear improvement regarding the Magnuson-Stevens Act and the national standards around the trust responsibility to Alaskan native tribes.

We have so many populations in decline, ecosystems in decline, however there are incredible indigenous-led conservation efforts such as the Northern Bearing Sea (unintelligible) area and other types of conservation acts that do not require setting aside or keeping things off limit or, you know, removing all economic benefits from the State of Alaska to address climate and the impacts that we are feeling right now and have been feeling regarding our fisheries.

And one of the areas that I really would like to focus on or see a focus on is having our federal agency work with our fishery management councils particularly I'm speaking for Alaska is that the council that we work with and that I'm involved with so the North Pacific Fishery Management Council in particular we would like to see the Department of Commerce specifically NOAA work with our council and council bodies to make tribal consultation meaningful, timely and encourage consistent and ongoing tribal consultation through these processes.

As I said, the council process is virtually inaccessible to tribal members. Council members tell us that tribal consultation is a mandate of our National Fishery Service and not the council itself and thus we have a disjointed process whereby actions are taken, policies are made, management decisions are finalized without inclusion of any results that come from tribal consultation without tribal consultation being initiated.

And this really highlights the brokenness of the system that we are operating in. I think that if we are to continue to benefit economically from Alaska's bountiful fishery resources, we must first fix the very broken institutional processes that govern those resources.

And I would really like to see some (unintelligible) strengthening of those national standards to improve this so that we can be ready for the impacts of climate change on our fisheries and ensure sustainability and access to our user groups long into the future. Thank you.

Samuel Rauch: Thank you for your comment.

Coordinator: Next comment comes from (Paul Williams), your line is now open.

(Paul Williams): Hi, thanks for this opportunity to comment. I'm a Shellfish Biologist for the Skokomish Tribe located in Puget Sound side of Washington. And I have managed shellfish there for 30 years. The species I manage include crabs, shrimps, sea cucumbers, sea urchins and several different clam species.

Climate and ocean change are impacting these species in ways we are just beginning to understand. But for many we still manage these species as if nothing is changing. We are not really taking climate change into consideration and we are managing using information that's really inadequate.

Spot shrimp are a good example. We don't have methods to assess the size of shrimp populations. We manage based on past catch.

And also we have set quarters but when individuals reach their tax limits we ask them to release the shrimp they harvest but we don't know how many of those shrimp survive.

Now these have been persistent problems ever since for the last 30 years and the shellfish are co-managed between the State of Washington and the Treaty Tribes in Puget Sound but neither the tribes nor the state have the capacity to conduct some of the basic research on these species.

We really need help developing a fisheries independent method to assess spot, crab, shrimp population size and assess mortality after release. Now these are some things that the scientists at NOAA could really help with and I have asked in the past and they tell me that, you know, Puget Sound, things within Puget Sound are not in the jurisdiction of the federal waters that NOAA is, you know, has jurisdiction in.

However, you know, the federal government does have a trust responsibility to the tribes and unless we start managing these species responsibly they are not going to survive climate change. You know, these are small fisheries but they impact tribal members and other community members really, you know, this is their lives we are talking about, you know, climate change impacts people's lives.

So I guess my question is, who is going to, you know, help manage these species?

I have been out on NOAA cruises, \$35,000 a day, you know, to go access ocean acidification difference and ocean conditions and that's very important research. But it's also very important to do research on the basic life history parameters of these species that are important to the lives of tribal members and all the citizens of the State of Washington. And then we will also, you know, submit comments online. Thank you very much.

Samuel Rauch: Thank you for your comment.

Coordinator: If you have a question - excuse me, a comment at this time please press star 1 and clearly record your first and last name for your comment to be introduced. Again that is star 1 if you have a comment at this time.

Heather Sagar: Okay. (Beth), do we have any additional comments?

Coordinator: There are no comments in queue.

Heather Sagar: Okay. Well, I think we should wrap up today. I want to thank everybody for joining this call and remind you that all the information on - for sending comments in to either NOAA or DOI are on our Web site. And we look forward to hearing from you and we appreciate everybody taking the time out of their day to comment for us today.

Coordinator: Thank you for your participation. That concludes today's call. You may disconnect at this time.

END