

**SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION:
QUESTIONS FOR THE RECORD**

**FROM THE NOMINATIONS HEARING
ON MAY 20, 2021**

**Written Questions Submitted to Richard Spinrad, Nominee for Under Secretary of
Commerce for Oceans and Atmosphere**

Questions for the Record from Chair Maria Cantwell

***Aquaculture.* In the United States, coastal shellfish farmers are an important component of local communities, particularly in Washington state. While aquaculture has substantial potential in the United States, examples of massive escapements like the 2017 pen collapse in Puget Sound, mean that its expansion requires thoughtful scientific studies and planning before finfish aquaculture is considered in Federal waters. In addition, the roles of stakeholders must be clarified. Just this week, the Regional Fisheries Management Councils' Coordinating Committee drafted a statement noting that the councils should have a clearly defined role in the siting, permitting, and review of aquaculture operations in federal waters. In addition, numerous coastal communities and environmental organizations are advocating for a transparent process that is based in the best available science before any aquaculture operations commence in Federal waters.**

During your testimony before the Committee, you touted your endorsement by the National Aquaculture Association, but did not mention the fisheries management councils, coastal communities or conservation groups' role in the development of aquaculture. You also mentioned the need for standards for offshore aquaculture operations and noted previously introduced legislation, which experts find inadequate in that regard.

Question 1: During the Trump Administration, NOAA began to implement an Executive Order on Seafood Competitiveness as well as to identify two Aquaculture Opportunity Areas (AOAs). How will you personally review this process and determine if this is in accordance with the priorities of the Biden Administration and based on the best available science?

Response:

Aquaculture holds promise to increase the nation's seafood supply at a time when pressure on wild stocks is at a maximum. Nonetheless, aquaculture has a number of potential risks -- including escapement, water quality, safety of navigation, and habitat impacts -- that must be identified, addressed, and managed using the best available science. In addition, aquaculture development strategies should not be based on a "one size fits all" approach, but rather, tailored to account for regional, state and local considerations.

If confirmed, I would work to better understand the views of Congress and local communities by engaging tribes, regional fishery management councils, state fishery managers, environmental

organizations, aquaculture industry representatives, and others to understand the needs of their stakeholders to determine whether, where, and what types of aquaculture might make the most sense.

Question 2: Do you support the Advancing the Quality and Understanding of American Aquaculture Act? If so, why and if not, why not?

Response:

If confirmed, I would welcome the opportunity to learn more about this legislation and to work with you to evaluate sustainable aquaculture development, the needs of particular communities, and strong conservation standards.

Question 3: Do you believe that robust scientific studies are needed in advance of a new permitting regime for offshore finfish aquaculture?

Response:

Permitting regimes for aquaculture should be based on the best available peer-reviewed scientific information that takes into consideration appropriate siting, species characteristics, and potential impacts.

Question 4: If confirmed, what assurances can you provide that you will prevent large scale finfish aquaculture development that would pose a high risk of ecological degradation? How would you plan to accomplish this?

Response:

If confirmed, I will work within the agency to understand the risks of large-scale finfish aquaculture, while also understanding the concerns of communities and stakeholders. The only way to advance aquaculture in the United States is to do so responsibly, using the best peer-reviewed science.

***Fisheries and Ecosystem Science.* Fishing is one of the most climate-impacted industries in the United States. As oceans warm, our fisheries and the ecosystems they depend on are experiencing massive changes - in productivity and location. NOAA struggles to keep up with fisheries and protected species stock assessments as is. The fishing industry needs more tools from NOAA so that they can plan, adapt and build resilient operations in our changing climate.**

Question 5: What steps will you take to prioritize the modernization of NOAA's science and invest in the necessary research to understand ecosystem shifts for commercially managed species, as well as protected species using biological and oceanographic observations and regional-scale climate models?

Response:

Changing climate and oceans are having significant impacts on the nation's valuable marine ecosystems and the communities and economies that depend upon them. As a science and stewardship agency, NOAA is well positioned to expand and diversify its climate-related science and services to help communities address these challenges. If confirmed, I will advocate for the resources necessary to increase the agency's science and management tools, and to prepare for and respond to these rapidly changing environmental conditions with the products and services needed.

Question 6: NOAA must expand stock assessment surveys to meet emerging climate science needs, as well as traditional fisheries management which has been under-resourced. Despite consistent requests from the congress, NOAA has not communicated stock assessment survey needs. Will you work with the Congress to identify stock assessment survey needs in terms of both physical survey needs as well as budgetary requirements?

Response:

Scientific research surveys underpin NOAA's management of U.S. fisheries and protected resources. The impacts of climate change on managed fish stocks and protected species will require NOAA to continuously track and account for shifting species distributions to ensure the continued accuracy of stock assessments. If confirmed, I will work with you to address the long-term fiscal and physical challenges of fielding fisheries and protected species surveys.

***Tribal Consultation and Engagement.* NOAA must do more to support Tribes and Tribal fishers. I am concerned about the previous administration's "check the box" posture to government to government consultation.**

Question 7: Please list and describe specific areas for improvement in NOAA's consultation with Tribes and fulfilment of federal treaty responsibilities.

Response:

Consulting tribes and incorporating their traditional ecological knowledge (TEK) is an essential part of NOAA's resource management responsibilities and ensures better resource stewardship. Furthermore, government-to-government consultation with Federally-recognized Tribes is a critical aspect of the sound and productive relationship between the United States and sovereign Indian Tribal governments.

If confirmed, I would assess whether we have the adequate level and prominence of staffing to engage with Tribes and address their interests in fisheries and other resource management issues. I would engage Tribes in a thorough review of our current practices to ensure that NOAA is engaging with Tribes and incorporating TEK into its management decisions in a meaningful way. I place a high value on providing pertinent scientific information to tribal entities and to learning what additional science and services NOAA can provide to assist Tribal communities. I welcome your long-standing expertise on this issue moving forward.

Question 8: Government to government consultation should extend beyond regulatory matters. Tribes should be consulted and engaged on policy, conservation and other matters that impact Treaty Resources both directly and indirectly. How can NOAA improve relationships and meaningful engagement with Tribes? If confirmed, what specific steps will you take to ensure that Tribal engagement and consultation is a priority for NOAA fisheries, and throughout the agency?

Response:

I agree that government to government consultation with Tribes should extend more broadly to include NOAA's conservation initiatives and strategies beyond those that are regulatory in nature. NOAA's management of resources and provision of science and services benefit from incorporating traditional ecological knowledge from Tribes. If confirmed, I will work across the agency to ensure meaningful, active, and ongoing engagement and consultation with Tribal partners.

Question 9: Chairman Billy Frank Jr. once told me that "half of zero is zero." That means, as salmon populations become endangered, and even disappear, so does a Tribe's ability to access their Treaty Right. Treaty Rights At Risk is an initiative aimed at restoring salmon and protecting Treaty Rights. What more can NOAA do to engage with Tribes on salmon restoration, specifically? Will you work with us to ensure that NOAA participates and responds to the Treaty Rights At Risk Initiative?

Response:

Tribal communities play an important role in the recovery and restoration of salmon, and I look forward to learning more about the Treaty Rights At Risk Initiative. If confirmed, I commit to working with you and Tribal communities on ways NOAA can engage more meaningfully in salmon restoration and recovery in the Pacific.

Salmon.

Question 10: How will you bring a whole of NOAA approach to Pacific salmon recovery to leverage the scientific expertise of the whole agency to address these critical science and recovery needs?

Response:

Pacific salmon are critically important for our culture, recreation, and economy. If confirmed, I look forward to learning more about NOAA's research for the recovery of Pacific salmon and their habitat, and other management efforts that are taking place across the agency.

Question 11: NOAA must be a stronger leader on Pacific salmon recovery and management. If confirmed, how do you propose NOAA work across the federal family to better leverage resources to address habitat, research and other salmon recovery needs?

Response:

Partnerships among Federal, state, local, and Tribal entities, together with non-governmental and private organizations, are key to restoring healthy salmon runs and securing the economic and cultural benefits they provide for future generations. If confirmed, I commit to building on my strong record of inter-agency collaboration, working with key partners to conduct adequate research, monitoring, and analyses needed to ensure Pacific salmon recovery and sustainability. I look forward to learning more about the work that is currently underway at NOAA and to working with you on this issue.

Fisheries Disasters. Washington state fishermen and Tribal communities are just starting to see some of the \$90M of the Covid-19 related fisheries disaster funds. In addition, there are 10 pending fishery disaster determinations for Washington state salmon fisheries. Some requests, such as the Washington Puget Sound Coho Salmon Fishery, have been pending for almost two years.

Senator Wicker and I have reintroduced our bipartisan bill to reform the fishery disaster process, including adding deadlines to ensure that fishery disasters are evaluated and declared in a reasonable timeframe. While our bill makes improvements, NOAA needs to do more to speed up the disaster process, and modernize how funds are used help communities adapt to a changing climate and shifting stocks.

Question 12: What more can NOAA do to modernize the fishery disaster process? How could these programs be used to help communities adapt to climate change?

Response: I appreciate your concern that fishery disaster determinations be made more expeditiously, including fishery disaster funds for Washington fisheries. I recognize the economic importance of these fisheries to Washington's coastal and Tribal communities, as well as the subsistence, cultural, and ceremonial value of these fisheries to the local Tribes. If confirmed, I look forward to learning more about NOAA's fishery disaster program, how it can assist community adaptation efforts, and implementing any changes needed to improve the process.

Weather Infrastructure. With the increase in intensity and frequency of severe weather events, millions of lives rely on NOAA's weather predictions and forecasts more than ever before. In the last five years the Pacific Northwesterners have experienced a "new" weather event - "smoke storms" - where catastrophic fires from hundreds of miles away drove people inside their homes for days to retreat from the smoke.

Question 13: Will you work to expand NOAA's social science program to improve communicating warnings and watches to the American public, particularly those underserved communities that NOAA may not have traditionally worked with? Please describe.

Response:

Social science has become increasingly important in the manner in which NOAA listens to public concerns, communicates forecasts and uncertainty to ensure people understand

environmental threats and takes the appropriate actions to reduce risks to life and property. If confirmed, I look forward to working with you on expanding NOAA's social science capacity and its application to advise communities effectively in the wake of extreme weather events. I am particularly interested in exploring and implementing ways NOAA can better serve the needs of traditionally underserved communities.

Question 14: Please describe how you see NOAA's role in national efforts to address wildfire hazards. What potential is there for NOAA to expand and improve its fire weather mission, and what would it require to do so?

Response:

It is my understanding that NOAA plays a vital role in supporting federal, state, local, territorial, and Tribal partners in battling wildfires, while also addressing fire community needs before, during, and after wildfires. NOAA's involvement ranges from detailed weather and environmental modeling and forecasting; to research, observations, and detection; to historical analyses of past fire seasons based on archived NOAA data. If confirmed, I look forward to working with you on improving NOAA's fire weather capabilities.

Questions for the Record from Senator Tester

***Space Situational Awareness and Low Earth Orbit Congestion.* There are currently around 6,000 satellites circling the globe (2,500 active). The number of satellites in Low Earth Orbit (LEO) is expected to grow exponentially in the coming years as companies like SpaceX and Amazon launch thousands of satellites to beam broadband internet to the earth. LEO broadband satellite constellations will bring fast and reliable internet to unserved rural customers, including in Montana.**

The US Innovation and Competition Act (formerly the Endless Frontier Act) incorporates the SPACE Act, which provides NOAA's Office of Space Commerce with the authority and funding to perform space situational awareness activities.

Question 1: What is your vision for ensuring that American companies will continue to have safe access to low earth orbit, given the expected exponential growth in cube satellites and satellite constellations?

Response:

I believe that NOAA and the Office of Space Commerce (OSC) play a key role in working with the commercial space industry to foster American leadership in space. If confirmed, I look forward to learning more about the Office of Space Commerce and to working with Congress to ensure that it is properly prioritized and resourced to continue serving this important function.

Question 2. How will NOAA encourage information sharing so that commercial space operators, and the government, can avoid conjunctions that would damage property, risk life, and increase "space junk" and debris?

Response:

It is my understanding that NOAA works with partners, including NASA, DoD, and private industry, to share information on satellite operations and monitor for potential hazards. If confirmed, I look forward to working with you, commercial space operators, and interagency partners on this important issue.

Questions for the Record from Senator Rosen

Regional Climate Center program. First authorized in 1978, NOAA's Regional Climate Centers (RCCs) were created to develop products and services for sector specific, climate-related problems. The program is divided into six regional centers, with the Western RCC housed at the Desert Research Institute in Nevada. The Western RCC addresses a range of climate needs and issues specific to its region and beyond, including drought monitoring, weather and climate extremes, and wildfire and smoke impacts.

Question. Dr. Spinrad, given the increasing activities of the RCCs and the need for immediate action on climate change, will you commit to further investing in and support Regional Climate Centers? How can Congress better support RCCs, including through the FY22 appropriations process?

Response:

If confirmed, I will commit to ensuring that NOAA is effectively delivering climate science and services to communities, using existing critical programs, such as the Regional Climate Centers (RCCs), as well as evaluating the need for new areas of climate research and tools. It is my understanding that the Regional Climate Centers play a crucial role in helping communities understand the unique climate issues and sensitivities of their regions. RCCs provide value-added products, deliver climate services, support operational climate services efforts across NOAA and other agencies, and integrate non-NOAA and NOAA data. If confirmed, I look forward to working with you through the President's budget process to support the RCCs.