F (503) 235-4228 www.critfc.org

TESTIMONY OF

Dr. Zachary L. Penney, Fishery Science Department Manager Columbia River Inter-Tribal Fish Commission Regarding the National Sea Grant College Program Amendments Act of 2019 Subcommittee on Water, Oceans and Wildlife **Committee on Natural Resources United States House of Representatives** May 8, 2019

Mr. Chairman, Ranking Member McClintock, and Members of the Subcommittee, thank you for the opportunity to testify on legislation to reauthorize the National Sea Grant College Program. My name is Zachary Penney and I am the Fishery Science Department Manager for the Columbia River Inter-Tribal Fish Commission (CRITFC). I would like to use my time to discuss the work of the CRITFC and the ways in which the mission of our tribes has benefited from the National Sea Grant College Program (Sea Grant).

CRITFC was founded in 1977 by the four Columbia River treaty tribes: Confederated Tribes of the Umatilla Indian Reservation, Confederated Tribes of the Warm Springs Reservation of Oregon, Confederated Tribes and Bands of the Yakama Nation, and the Nez Perce Tribe.

I am a Nez Perce Tribal member—Nimiipuu in our own language.

CRITFC provides coordination and technical assistance to the tribes in regional, national, and international efforts to ensure that treaty fishing rights issues are resolved in a way that guarantees the continuation and restoration of tribal fisheries into perpetuity. Our collective ancestral homeland covers nearly one-third of the entire Columbia River Basin in the United States, an area the size of the State of Georgia, and includes over half of the area still accessible to anadromous fish.

In 1855, the U.S. entered into treaties with the four tribes whereupon we ceded millions of acres of our homelands. In return, the U.S. pledged to honor our ancestral rights, with the tribes specifically securing the right to continue to take fish both on our reservations and at all usual and accustomed fishing places. Today, the anadromous fisheries in the Columbia River are nowhere near the abundance as at the time when the treaties were signed. Unfortunately, a perilous history brought the salmon resources to the edge of extinction, with 12 salmon and steelhead populations in the Columbia Basin listed under the Endangered Species Act (ESA). Some populations are already extirpated.

As co-managers, CRITFC and the four member tribes are globally-recognized leaders in fisheries restoration, management, and policy. We are integral in the region's efforts to halt the decline of salmon, lamprey and sturgeon populations and rebuild them to levels that support ceremonial, subsistence and commercial harvests. Columbia River fish stocks form the core of high-value fisheries from the interior West to Southeast Alaska valued in the hundreds of

millions of dollars. To achieve these objectives, our actions emphasize "gravel-to-gravel" management including supplementation of natural stocks, healthy watersheds and collaboration with state, federal and private entities.

As an employee of CRITFC, member of the Oregon Sea Grant Advisory Committee, and former Knauss Legislative Fellow, I am proud to sit here and voice my support for the National Sea Grant Program.

In 1966, Congress passed the National Sea Grant College and Program Act, which charged the federal government to develop a network of Sea Grant Colleges modeled after the Land Grant College system. This model combines research and engagement through its extension services and education programs. Sea Grant extension is the delivery of scientific research and knowledge to fishermen, community leaders, and other Sea Grant stakeholders. From the beginning, it was anticipated that the three pillars of research, extension, and education, and the network of cooperating universities, would be mutually supporting.

Sea Grant's mission is to enhance the practical use and conservation of coastal, marine, and Great Lakes resources to create a robust and sustainable economy and environment. Central to Sea Grant is the linkage of goal-directed research and the rapid and sustained delivery of that knowledge toward solving societally-relevant problems. Sea Grant's research agenda is informed through stakeholder input and is directed toward solving local, regional and national coastal and marine issues. The education of the next generation in diverse fields is intimately integrated into both Sea Grant's research and extension activities.

Sea Grant's connection to coastal and marine habitats, and human communities that depend on them, is well aligned with the mission of CRITFC. Our tribal fisheries are largely focused on anadromous species that spend more than half of their lives in the Pacific Ocean (e.g., Chinook salmon). Sea Grant investments directly support the fish and fisheries that are vital to tribal ceremony, subsistence, economy and identity.

Sea Grant has directly supported tribal fisheries in the Columbia River by providing training important to enhance tribal safety and marketing successes. Within the past seven years, tribal staff and tribal fishers have utilized Washington Sea Grant's marine safety and first aid training for our work in the Columbia River. This training helps reduce risk with port-based, U.S. Coast Guard-certified training in emergency preparedness, fire response, cold-water rescue, first aid and other safety measures using the latest equipment and procedures. Since the mid-1990s, Washington Sea Grant safety training classes on the Puget Sound, Washington's outer coast and the Columbia River have markedly reduced fatalities in several fisheries

In 2015, Washington Sea Grant trained 211 fishermen, including 100 Columbia River tribal fishermen. The Zone 6 tribal fishery on the Columbia River is among the deadliest fisheries on the West Coast according to the National Institute for Occupational Safety and Health. With Sea Grant's specialized tribal training, the Columbia River gillnet fishery, which previously averaged five fatalities annually, celebrated another casualty-free year.

In 2016, a CRITFC crew conducting a marine mammal survey capsized in rough water and we tragically lost a crew member from the Yakama Nation. The entire crew that went into the

Columbia spent nearly an hour in the frigid water before they were rescued. This accident could have been much deadlier had our full crew not received the cold-water survival training offered by the Sea Grant Program.

CRITFC and our member tribes have also benefited from the Alaska and Washington Sea Grant training related to seafood marketing. Due to tribal restoration efforts, the Zone 6 tribal commercial fishery in Columbia River is once again producing large quantities of Chinook, sockeye, and coho salmon, as well as steelhead trout. Tribal catch is now provided to consumers throughout the world. Tribal staff and fishers have used the "Fishermen's Direct Marketing Manual" produced by Sea Grant to help them market their catch and create a sustainable plan for a commercial fishing lifestyle. The manual provides a how-to guide and reference for commercial fishers who wish to bypass processors and wholesalers to sell their catch directly to brokers, restaurants and other buyers.

At the scientific level, CRITFC has supported and collaborated with institutions like the University of Washington and Oregon State University on Sea Grant proposals to help address environmental issues important to the four tribes. Sea Grant is a unique program within NOAA in that it sends 95% of its appropriated funds to coastal states through a competitive process to address issues that are identified as critical by public and private sector constituents and coastal communities throughout the United States. Sea Grant fosters cost-effective partnerships among state universities, state and local governments, NOAA, and coastal communities and businesses.

On a personal level, the Sea Grant program plays a vital role in facilitating professional development opportunities in ocean and coastal policy making. An example of this opportunity came for me in the form of the John Knauss Fellowship.

My path into the Knauss Fellowship is a little unusual. I finished my Ph.D. at the University of Idaho in 2013 on a dissertation focused on the mysteries of repeat-spawning in Snake River steelhead trout. The University of Idaho is not a Sea Grant affiliated school because Idaho does not have an ocean or a Great Lake. However, as a tribal member who focused his work on an ESA-listed species co-existing with the Federal Columbia River hydro system, it became evident to me that federal policies affected much of what I was studying. Also, federal policies profoundly affected the Nimiipuu as a federally recognized treaty tribe. The Knauss Fellowship was the right type of opportunity to help facilitate my understanding of congressional policy making. Thankfully, Oregon Sea Grant took me on as a Sea Grant "orphan" and I became a legislative fellow in the 2014 Knauss class, where I served in Congressman Huffman's office during his freshman term.

Although the Knauss Fellowship was a fast and hectic one year on the Hill, the connections made during my time in DC have been invaluable to me in my current role at CRITFC. Not only did I get the experience of seeing how things work, and sometimes don't work, the Fellowship provided an understanding of the balance representatives, senators, and committee staff must keep with regard to their constituents, districts, and the climate of the nation.

For the past three years the Administration has proposed to terminate the Sea Grant program along with Sea Grant's STEM education activities and the Knauss Fellowship program. The Administration is again recommending this termination proposal as part of its FY 20 budget

request. I believe Congress should act to strengthen the Sea Grant program because of the impact and return on investment delivered by this valuable, cost-effective investment in the health of our coastal communities and their economies. As a partner to and beneficiary of Sea Grant's work, I am heartened by Congress's continuing strong support for Sea Grant.

According to NOAA, in FY 2017 the Sea Grant program helped generate an estimated \$579 million in economic impacts, created or supported over 12,500 jobs, assisted 462 communities to improve their resilience, helped nearly 17,700 fishers adopt safe and sustainable fishing practices, helped restore an estimated 700,000 acres of coastal ecosystems, worked with about 1,300 industry and private sector, local, state and regional partners, and supported the education and training of over 1,800 undergraduate and graduate students. The Sea Grant program achieved this with a Congressional appropriation in FY 2017 of \$72.5 million, which was leveraged with matching funds.

Reauthorizing the Sea Grant program for an additional five years with funding levels that demonstrate Congress' *strong and bipartisan support* for this program should send an important message to NOAA and the Administration. The reauthorization should also strengthen the role of science, technology, engineering and mathematics (STEM) education and the Knauss Fellowship programs within the Sea Grant program. Outreach to underserved and underrepresented communities is also essential.

CRITFC takes a multifaceted approach to develop a skilled workforce by creating opportunities for tribal members to achieve a college education and technical expertise necessary for work in STEM related fields at the core of day-to-day fisheries work. The CRITFC Workforce Development Initiative supports tribal students from elementary school through post-graduate levels with a place-based curriculum that provides hands-on, experiential projects that reinforce teachings, incorporates intergenerational mentoring, and supports positive cultural identity development. Students witness the success of tribal decision making and experience their own competent and innovative tribal programs at work where it matters most: across their homelands. Sea Grant facilitates these goals.

Aquatic non-native species pose a serious threat to the Columbia Basin's native fish, ecology, and economy. Tribal resources in the Columbia River Basin are very vulnerable and will remain so until prevention and control measures for aquatic invasive species are developed and proven in the field. Because the federal budget for invasive species monitoring, prevention, and control has been very limited, programs like Sea Grant are absolutely essential. For example, in Oregon, the Sea Grant program provides educational resources to teachers, informal educators, parents, and students on the impacts of aquatic invasive species through its "Menace to the West" program.

Finally, the Knauss Fellowship program is a unique program deserving of the Committee's strong support. Knauss provides a unique educational and professional development experience to graduate students who have an interest in ocean, coastal and Great Lakes resources and policy decisions affecting those resources. But it also serves the needs of policy makers in Congress and the Executive Branch as it puts marine science policy expertise in the hands of these policy makers regardless of political party. The marine policy issues that Sea Grant deals with, which

are central to the Knauss fellowship program, do not fall along any hard and fast boundaries – either geographical or political.

Mr. Chairman, I appreciate the invitation to appear before this subcommittee and to offer my strong endorsement for legislation to reauthorize the National Sea Grant College Program. If I learned one thing during my time as a Knauss fellow it was that partisan legislation rarely went far. I wouldn't be here today if the legislation were not strongly supported by both sides of the aisle. This is because the Sea Grant program is there for its stakeholders.

Thank you for the opportunity to present this testimony. I would be happy to answer any questions you and your subcommittee members may have.

For questions related to Sea Grant contact: Dr. Fredrika Moser, Sea Grant Association President and Maryland Sea Grant Director, (301) 405-7500, moser@mdsg.umd.edu or Meg Thompson, Federal Science Partners, (202) 787-1673, mthompson@federalsciencepartners.com

For questions related to CRITFC contact: Charles Hudson, Director of Government Affairs, (503) 731-1257, hude@critfc.org