YUROK TRIBE

190 Klamath Boulevard • Post Office Box 1027 • Klamath, CA 95548

Frankie Myers, Vice Chairman, Yurok Tribe

Testimony Regarding

Natural Solutions to Cutting Pollution and Building Resilience

United States House of Representatives, Select Committee on the Climate Crisis

October 22, 2019

Good afternoon, Chairwoman Castor, Ranking Member Graves, and Subcommittee Members. Thank you for the invitation to testify today about the role of forests in cutting pollution and building resilience. My name is Frankie Myers; I am the Vice Chairman of the Yurok Tribe. I am a Yurok traditional religious practitioner, fisherman, hunter, and have lived on the Yurok Reservation for my entire life. I have worked for the Yurok Tribe for most of my career, and have served as the Vice Chairman for over a year.

The Yurok Tribe recognizes the direct threat and impacts of climate change to the Yurok Tribe, citizens of the State of California, United States, and global communities. Since time immemorial, the Yurok Tribe has acted purposefully to serve as responsible stewards of our land, culture, air, and water resources, and we will continue to expand and advance our capacity to restore and manage these resources for Yurok people. Our long-term strategic vision for the management of Yurok natural resources is based on our traditions and culture, but guided by modern, science-based adaptive management.

The Tribe has been opportunistic in finding mechanisms to support the restoration of our forests. As one of the first participants in the California cap-and-trade program, we have witnessed firsthand the program's environmental, cultural, legal and economic benefits. The California cap-and-trade program has allowed the Yurok Tribe to not only reacquire misused forestlands within our ancestral territory, but has allowed us to actively manage those lands to restore them to produce many climate benefits. This restoration effort will allow the forests to function as intended, sequestering carbon, releasing oxygen, and providing invaluable ecosystem services. The effort will also allow our Tribal members to use the land as our ancestors did and support recovery of the wildlife and aquatic species that are now imperiled. The restoration of our ecosystem can, and should, be a top priority to address and combat climate change, reduce pollution and build resiliency.

I. History of Yurok People

The Yurok people have occupied the pacific coast of Northern California and inland on the Klamath River since time immemorial. Our aboriginal territory included over 1.5 million acres of ocean, lagoons, redwood forest, the lower 45 miles of the Klamath River, and our sacred high country in what is now known as Northern California. Our aboriginal territory is one of the most wild, biodiverse, and ecologically unique places on the planet that includes the tallest trees in the world, some of the most ancient and largest fish on the planet, and the only fresh water lagoons on earth. From the beginning, we have followed all the laws of the Creator, which became the whole fabric of our tribal sovereignty.

In times past and present, the Yurok people have blessed the deep river, the tall redwood trees, the rocks, the mounds, and the trails. We pray for the health of all animals, and prudently harvest and manage the great salmon runs and herds of deer and elk. We never waste and use every bit of the animal or plant. Traditionally, our stewardship of the prairies and forests consists of controlled burns that improve wildlife habitat and enhance the health and growth of tan oak acorns, nuts and berries, grasses and bushes. We use all of these for food and materials for baskets, fabrics, and utensils. These practices led us to become early implementers of California's cap-and-trade program.

For millennia our religion and sovereignty have been pervasive throughout all our traditional villages. Our village way of life requires use of the sweathouse, extensive spiritual training and sacrifice, and firm adherence to tribal law. The Klamath River was and remains our highway, and from the beginning we have utilized the river and the ocean in dugout canoes carved from redwood trees. Our people come together from many villages to perform ceremonial construction of our fish dams, and to participate in our annual ceremonies. Our Yurok Country stayed in balance, kept that way by our good stewardship, hard-work, wise laws, and constant prayers to the Creator.

Our social and ecological balance, thousands and thousands of years old, was shattered by contact with non-Indians in the mid-1800s. In 1851, California's first Governor promised "a war of extermination will continue to be waged between the two races until the Indian race becomes extinct." In finally apologizing on behalf of California, Governor Newsom, in 2019, called this what it was – "genocide." For us, it is not history. We lost more than seventy-five percent of our people through unprovoked massacres and diseases. After goldminers swarmed over our land, we signed a "Treaty of Peace and Friendship" with representatives of the President of the United States in 1851, but then the United States Senate failed to ratify the treaty. Then in 1855, the United States ordered us to be confined to the Yurok Reservation (then called the "Klamath River Reservation"), created by Executive Order. In 1864 and 1891, our reservation was merged with the Hoopa Valley Reservation. But even this small remnant of our ancestral land did not last long.

In the late 1890s individual Indians received allotments from the tribal lands on the Yurok Reservation and almost all of the remainder of the Reservation was declared "surplus" and opened for homesteading by non-Indians. The forests were logged excessively and wildlife was depleted. Even the great salmon runs went into deep decline. In the mid-1930s, the State of California

attempted to illegally terminate traditional fishing by Yurok people. Our rights were judicially reaffirmed in the 1970s and 1980s after decades of legal and physical battles. Then, in 1988 Congress passed the Hoopa-Yurok Settlement Act to separate the Yurok Reservation from the Hoopa Reservation and distribute tribal assists. The Yurok Reservation remained under Yurok control with only slightly over 5,000 acres of trust land while the Hoopa Reservation remained under Hoopa control with over 90,000 acres of trust land.

In a matter of 130 years, the Yurok people lost over 1.49 million acres of land. In the Hoopa-Yurok Settlement Act, Congress recognized that the Act was not favorable to the Yurok people. It included in the Act two provisions to address the inequities. The first, an authorization for the Tribe to acquire more land adjacent to the Yurok Reservation, and the second, an authorization for appropriations to purchase more land. Congress also expressed its intent to continue to work with the Tribe to rebuild its land base through appropriating federal funding to purchase land and supporting future land acquisition.

Against all odds, we have resisted, survived and maintained our culture and our people: in part, because we were never relocated, and in part because we believe in our cultural and religious traditions. Today, we are the largest California tribe with over 6,400 tribal members. Indeed, many tribal members still live a traditional subsistence based way of life. Every year we hold tribal ceremonies, dancing for the health of babies and to balance the world. Many of us still live in our traditional villages along the Klamath River where our ancestors lived, and subside based on a fishing, hunting, and gathering life way.

Today, we are lawyers, doctors, soldiers, judges, artists, amongst other occupations and we proudly continue to live our traditional ways. But it is not easy. The annual income on the reservation is $11,000 and many of our members live well below the poverty line. They attempt to make ends meet through supplementing food sources with subsistence activities, hunting of deer and elk and fishing of salmon, sturgeon, eels, and other fish. But the resources of the reservation continue to be diminished by off reservation development. Specifically, the Klamath River salmon runs over the last four years have been the lowest on record. The salmon have been killed by various fish diseases caused by poor water quality, high water temperatures, and low flows all of which are caused by dams and agriculture. We have been forced to close our fishery and we have declared a fishing disaster every year for the last three years. Animals on the land are in decline because of lack of habitat due to logging, spraying of pesticides on reservation by logging companies, and massive illegal marijuana grows.

While much has been lost, the spirit of the Creator and our inherent tribal sovereignty still thrive in the hearts and minds of our people as well as in the strong currents, deep canyons, thick forests, and high mountains of our ancestral lands. The Yurok Tribe has emerged, strong and proud from the tragedies and wrongs of the years since the arrival of non-Indians into our land. Our sacred and vibrant traditions have survived and are now growing grander and richer each year.

Our future lies in sustainable economic development based on our rich natural resources, cultural traditions, and preservation of our way of life. There is little economic opportunity in our area, and it is up to us to use our limited resources to advance our people.

II. Forests as Nature Based Solution to Climate Change

In 2011, the Yurok Tribe became one of the first participants in the California Cap-and-Trade Program (Cap-and-Trade Program) by participating in the development of the California Assembly Bill 32: Global Warming Solutions Act and operating one of the first carbon sequestration projects under the Act. By 2020 we will manage multiple Improved Forest Management projects, totaling over 47,500 acres on and adjacent to the Yurok Reservation that are registered in the California Air Resources Board ("CARB") as part of the Cap-and-Trade Program which we refer to as the "carbon project."

The carbon project is part of a two-decade land acquisition effort whereby the Tribe reacquired nearly 60,000 acres of forestlands within its ancestral territory that was completed in 2018.[1] These lands—along with tens of thousands of other Yurok ancestral forestlands—were lost in the mid and late 1800s through federal Indian land reservation and allotment policies, allowing millions of acres of tribal lands across the nation to pass to non-Indian ownership. After allotment, the original 25,000-acre Yurok Reservation (including the lower 22 miles, and approximately half the acreage, of the present-day Yurok Reservation), representing only a fraction of the Tribe's ancestral territory, was cut down to less than 4,000 acres of Tribal lands. For over a century, Yurok ancestral forestlands were used by non-Indians as commercial timberlands, turning a dynamic old-growth coastal redwood forest ecosystem into a network of dirt roads, timber slash piles, and clear-cut hill slopes, driven by monoculture forestry practices that decimated wildlife habitat and suppressed the native ecology. But now, through the reacquisition of forestlands, the Tribe is engaging in forestry practices guided by traditional knowledge and contemporary scientific knowledge with the goal of restoring the forestlands to a dynamic ecosystem the forest once knew and allowing Yurok Tribal members to interact with the landscape as they have done since time immemorial.

To facilitate the land acquisition funding, the Tribe developed carbon projects on certain parcels of the forestlands. In doing so, Yurok was the first tribe to participate in selling California Air Resource Board ("ARB") ARB issued carbon offset credits in the State's cap-and-trade program. The program provides a market mechanism for reducing carbon dioxide emissions from California's largest polluters who are regulated by the State. The program works by limiting, or capping, the amount of emissions large polluters can emit. That emission limit is then reduced over time so total emissions will decrease to meet state targets. The regulated entities can buy carbon offsets to help meet their emission limits along the way, but still ensuring that pollution volumes decrease. Carbon sequestration projects, like Yuroks, supply the carbon offsets that the regulated entities may buy to meet their limits. On the carbon offset seller side, carbon projects are developed on forestlands that may otherwise be used for other extractive purposes, primarily industrial timber. When a party, like Yurok, decides to create a carbon project, it agrees to maintain the forest's ability to sequester carbon for 100 years. During that time, the forest cannot

[1] For a thorough discussion of the Tribe's carbon project and land acquisitions, *see attached* Beth Rose Middleton & Kaitlin Reed, *Returning the Yurok Forest to the Yurok Tribe: California's First Tribal Carbon Credit Project*, 39 STAN. ENVTL. L. REV. (forthcoming Jan. 2020).

be managed to lower the amount of carbon it sequesters at the time of project outset. Thus, forest carbon projects work by requiring forestlands to remain intact as forests for 100 years, maintaining and growing the amount of carbon those forests sequester over that time.

The largest project, on the "Phase 1" property, was developed in 2011 and covers over 22,000 acres of forestland. The smaller project—Cook Coppala Gerber Gleason—is approximately 9,000 acres and was developed in 2012. The Tribe has benefited greatly from its participation in the California carbon market. The revenues realized from its carbon sales have been used to pay back loans for the reacquired lands and, critically, are used for on-the-ground management and operations expenses.

Both carbon projects are defined as improved forestry management forest projects, where "The Forest Owner must adhere to a renewable long-term management plan that demonstrates harvest levels which can be permanently sustained over time …." By including a carbon project on Yurok-managed forestlands, the Tribe undertook a management initiative that included timber harvesting but cabined by the need to sustain and grow the carbon sequestering potential of the forests. For the Tribe, these seemingly contrasting goals actually supported each other. Because the forests had been historically harvested so heavily and were in unnatural and even ecologically dangerous condition, they demanded active management to restore them. Such work required a level of timber harvest to remove dense timber stands that would be small, regular, but sustainable. In turn, the remaining forest could grow stronger and faster, sequester more carbon, and provide for better wildlife habitat.

a. Traditional/Historical Resource Management of Yurok Forests

The Yurok Tribe possesses a profound connection to the land, air, water, and animal resources of the natural world. These resources have provided for the cultural, spiritual, and physical health and well-being of the Yurok people since time immemorial. Historically, Yurok people were care-takers of the natural world, respecting and managing the natural resources that they relied upon for survival. Tribal members were conscious of the physical and biological cycles of the natural world, and lived in ways that respected those cycles. Disregard of theses cycles could easily cause imbalance and disruption of the natural balances of the ecosystem, and seriously threaten the health and survival of families, villages, and the Tribe as a whole. To avoid disruptions and threats to Yurok survival, strong cultural traditions guided the rhythms of life, and the utilization and management of critical natural resources. Natural resources were managed comprehensively for eco-system wide health. The harvesting and gathering of resources were closely managed. Seasonal gathering times and places were in rhythm with these natural cycles, and meant to harvest only what was needed to meet the needs of the people. Hunting places, and fishing places were respected, and resources were shared among the people. This ensured balance with the natural world, provided consistency and assurances, and resiliency in times of hardship and strife.

A strong, vigorous, and healthy natural ecosystem remains just as important to the Yurok Tribe now, as in historical times. The cultural, spiritual, and physical health and well-being of the Yurok People continues to be bound and connected to the well-being of the natural world. We

envision a renewed and restored natural ecosystem, that when managed carefully, with respect and balance, will provide for the needs of Yurok People now and for generations to come. Tribal members will have the ability to actively manage their lands, to gather, hunt, practice Yurok ceremonies, and pray for spiritual and world renewal.

Natural resources are also considered the cultural resources of the Yurok Tribe. The cultural resources are broad, and encompass the landscape, and all the natural resources within it. Significant cultural resources include, but are not limited to; elk, deer, marten, fisher, otter, pileated woodpecker, acorn woodpecker, stellar jay, grouse, hazel, bear grass, acorns, huckleberry, mushrooms, and a variety of medicinal plants. Coyote, frog, and salamander are important animals also, and are embedded in many Yurok stories of the spiritual world. All, are currently found in Blue Creek and surrounding tribal lands. We desire, and strive to protect, restore, and manage these resources to meet the cultural and economic needs of tribal members now and for the generations of Yurok People to come through conservation-based management, and sustainable forest management.

The Yurok Tribe wishes to share the benefits of this restored ecosystem with other stakeholders, and apply the knowledge and lessons learned from our experience with other tribes and state and federal land managers, and apply it to other watersheds in the Klamath-Trinity River basin.

b. Contemporary Yurok Forest Management

The Yurok Tribe recognizes that developing healthy, functioning forest ecosystems, will provide long-term benefits, certainty, and resiliency to the impacts of climate change. Forest resources can be enhanced with the careful and thoughtful, science-based application of various methods of thinning, logging, and other careful application of culturally prescribed fire. It may take 50 or more years to return the whole landscape to a state of equilibrium where the forest and its' resources are healthy, resilient, and abundant. Resource management planning must account for this timeframe, and focus on long-term management goals and objectives, guided by a clear vision of the future state of the forest, rather than focusing on the short-term benefits of extractive management. The Yurok Tribe's vision is long-term, and includes application of sustainable forest practices, uneven-aged forest management, acceleration to mature and old growth forest types, and careful implementation of forest prescriptions that support ecosystem function, and integrity. The Yurok Tribe believes that forest ecosystem function and integrity should hold equal value, and be balanced with the economic benefits the forest can provide. This vision, recognizes the inherent value of the forest, for the various resources and economic support it provides, but also for the cultural, spiritual, and ecological benefits of a healthy forest. Implementation of this vision would not preclude other activities such as logging and other forest management techniques from occurring; rather it needs to include wisely managed selective-timber harvest, pre-commercial thinning of overstocked stands, and other modern vegetation management techniques. The Tribe believes this long-term, balanced approach will respect and honor traditional values and methods, but also be a solution to improve forest health, increase carbon sequestration, improve water quality, protect fish and wildlife habitats, and increase resistance and resiliency to uncontrolled wildfires.

c. Importance of Culturally Prescribed Fire and Fuels Management

Healthy forests, provide ecological stability, and resiliency to the impacts climate change, including; accelerated loss of fish and wildlife habitats, degraded air and water quality, and increased intensity and severity of uncontrolled wildfires. Wildland fires within our forests can be devastating to both the forest ecosystem, result in massive economic costs, and loss of resources, property, and human lives. Healthy, functioning forest ecosystems, with diverse species composition and age-structure can increase resiliency to the impacts of wildland fire, and help protect sensitive fish and wildlife species, and the communities which rely upon them. Although wildfires can potentially be harmful if uncontrolled, and initiated in dense, over-stocked, unhealthy forest types; the safe and responsible application of prescribed fire had been used as a traditional land management technique, and has proven to promote and ensure the healthy forest ecosystems that have supported Yurok People since time immemorial.

Unfortunately, decades of fire suppression, and industrialized commercial logging activities in the Klamath-Trinity River basin has created an unhealthy forest condition. This unhealthy condition was created by short-term extractive management, and severely degraded fish and wildlife habitats, water quantity and quality, and increased the threat of catastrophic wildfire. Forests that have experienced decades of fire suppression and commercial timber management have resulted in very dense, even-aged, overstocked forest stands, and excessive fuel loading conditions. These conditions, and the risk of catastrophic wildfire have been compounded by climate change. Increased regional annual air temperatures, changes in the natural hydrologic cycle, and changes in seasonal weather patterns exacerbates the risk of catastrophic wildfire across the landscape, and the potential impacts to forest resources and the communities that rely upon them.

The Yurok Tribe promotes the application of modern, science-based land and natural resource management techniques across a landscape scale. However, there is also a recognition of the need to adapt modern management, and integrate with traditional Yurok ecological knowledge and values. Culturally prescribed fire has been used for centuries by the Yurok Tribe to reduce fuel loading, maintain prairies and grasslands from forest encroachment, improve habitat and forage for wildlife, and promote growth of culturally important basket materials, foods, and medicines for Yurok People. In recent years, with the support of both tribal and non-tribal communities, the Yurok Tribe has coordinated with state and federal agencies to responsibly, and carefully restore the application of culturally prescribed fire as a management tool on tribal lands. Regular application of low-intensity, culturally prescribed fire can promote forest health through reduction of fuels, increased nitrogen cycling, and increase and accelerate forest stand diversity and age-structure. The Yurok Tribe believes that through inter-agency partnerships, integrated resource planning, and application of culturally prescribed fire can be an important tool to promote healthy forests, protect against the impacts of catastrophic wildland fire, and increase resiliency to the impacts of impending climate change.

III. Declaring Personhood Rights to Nature for Climate Resiliency

The Yurok Tribe has a long history of protecting the Klamath River including through the establishment of the Yurok Constitution, Tribal Law, and many lawsuits, administrative proceedings, petitions, and grassroots activism. On May 9, 2019, the Yurok Tribal Council adopted Resolution 19-40 granting the rights of Personhood to the Klamath River and established the Rights of the Klamath River to exist, flourish, and naturally evolve; to have a clean and healthy environment free from pollutants; to have a stable climate free from human-caused climate change impacts; and to be free from contamination by genetically engineered organisms. The Klamath is the first river in Northern America to have personhood rights declared.

This change in Yurok law was based on the Yurok Tribal Council's recognition that in the face of unpredictable and drastic impacts from the changing climate, Yurok courts would need a legal structure that would allow for holistic review of the harms impacting the Klamath River and a path to remedy those harms. Any remedies awarded by the courts will go directly back to the Klamath River in the form of clean up or restoration projects to address the harms litigated in court, thus providing a legal avenue to keep those who would harm the River accountable.

The Rights of the Klamath River also incorporates and recognizes the Yurok relationship and experience with the River and its ecosystem through traditional ecological knowledge. The law encourages the Yurok people to continue living and practicing their traditional lifeways to harvest plants, salmon and other fish, animals, and other life-giving foods and medicines for both subsistence and commercial uses. The law also establishes the rights of the Yurok people to protect and represent the River in Yurok courts if they witness harms impacting the River. Through this legal mechanism, the Yurok Tribal Council wished to encourage the courts to hear and adopt traditional ecological knowledge to ensure the reciprocal relationship to care and protect each other between the Yurok people and the Klamath River can be fully adopted in judicial proceedings.

We see this change in the law as a climate change adaptive measure to increase climate resiliency because it will allow the courts to address a wider range of unpredictable harms impacting the Klamath River and ensure Yurok traditional ecological knowledge can be incorporated in judicial proceedings.

IV. Ocean Ecosystem Instability

In addition to salmon, the Yurok Tribe has long been dependent on the marine resources in its aboriginal territory. Traditional Yurok villages existed all along the coast from Damnation Creek to south of present-day Trinidad, California (Tsurai Village), a stretch of coast spanning over 80 miles. Nearshore marine resources were carefully managed through traditional knowledge and traditional cultural practices for thousands of years. In addition, the primary resource that Yurok rely on, the great salmon, steelhead, lamprey, sturgeon and eulachon runs all depend on the marine environment and its rich food resources for part of their lives.

Although the Yurok intend to continue this tradition and practice of stewardship of marine resources, climate change now presents an existential threat to these resources. One of the predicted effects of climate change is ocean ecosystem instability, which will have profound

effects to the Yurok people. Several primary factors related to climate change are responsible for this instability:

1) ocean acidification interferes with the ability for plankton and other animals to make calcium carbonate shells;

2) currents and winds will change in unpredictable ways that could have significant consequences to the physical environment, and;

3) warmer temperatures will bring about a shift in species composition including food species and predator species.

Ocean acidification is caused directly by increased CO2 concentrations which in turn dissolve into the water and then create carbonic acid. Acidic conditions interfere with the ability for certain marine organisms such as mussels, and certain species of phytoplankton and zooplankton to create calcium carbonate shells. Because these species form the backbone of the marine ecosystem acidification presents a threat to the very foundations of the food chain. Although the greatest effects are not expected for several decades, once acidification begins to interfere with these animals, the effects to the food chain will be devastating and impossible to reverse quickly.

Changing winds, currents and ocean conditions will also affect marine ecosystems. The nearshore ocean off the west coast of the United States is dominated by upwelling processes, which are primarily wind-driven near Yurok ancestral territory. Cold nutrient-rich water rises to the surface as nutrient depleted water moves offshore. This upwelling drives one of the largest, most productive marine areas in the world. Species from salmon, to killer whales and ultimately humans all depend on this rich and productive system. In 2014 through 2018, a "blob" of warm water that stretched from Alaska to northern California stopped the upwelling processes and decimated the food chain. In combination with river practices and fish diseases, this nearly wiped out the salmon runs. This condition returned in 2019, and is now occurring with alarming frequency. The 2019 salmon runs were a small fraction of its predicted size and it appears that a non-functioning marine ecosystem was to blame. Although it can be difficult to pin individual events such as this directly to climate change, given the extremely long memory of the Yurok people and the fact that this has not happened before, it is a reasonable hypothesis that these events are in fact linked to climate change.

The ceasing of upwelling and shift to warmer water temperatures have other deleterious effects. In addition to stopping upwelling processes, warmer water temperatures bring in new species that can either have a competitive advantage, or directly prey upon species important to the Tribe. For example, this year, when ocean temperatures reached about 8ºF above normal, albacore tuna were found much closer to shore in areas where salmon are usually found in colder waters. We believe these types of changes are contributing to the loss of salmon on the west coast, although management of river flows, the presence of dams and other factors in the watersheds also play a significant role.

V. Recommendations for Working with Tribes to Combat Climate Change

Concurrently with reacquiring our traditional land base, the Tribe has been working on federal legislation to expand the boundaries of the reservation and empower the Tribe to respond to climate change. The Yurok Lands Act of 2019, H.R. 1312, was introduced into the U.S. House of Representatives earlier this year and a hearing on the bill was held in September in the Natural Resource Subcommittee on Indigenous Affairs. The paradigm-shifting piece of legislation seeks to strengthen the Yurok Tribe's sovereignty and capacity to self-govern. It expands the Yurok Reservation to include the land the Tribe recently reacquired, including the carbon projects lands, which is a critical step to ensure the project's success and long term viability. The bill also supports federal-tribal land management partnerships to ensure that tribal human, financial, and technical resources as well as ecological knowledge are incorporated into federal land management decisions affecting the Yurok Reservation. The bill empowers the Tribe to respond to climate change and we urge this Congress to pass it.

Further, the Yurok Tribe believes that partnerships between tribal, federal, state, international and private interests are vital to develop innovative solutions to address the complex problem of anthropogenic climate change, and critical to mitigating impacts and increasing the resiliency of natural and socio-economic systems. This Congress should support partnerships between tribes and other entities to facilitate climate adaptation and mitigation.

To that end, we offer the following specific recommendations:

- Congress should ratify and fully bind the United State of America to the United Nations Declaration of the Rights of Indigenous People ("UNDRIP"). Ratification of UNDRIP will ensure the United States respects the rights of indigenous peoples and their nations and territories, which in turn will protect the lands, resources, and cultural resources within the United States.

- Congress should also to enact legislation that would require all federal, state, local, and territorial governmental agencies to:

    1. Conduct meaningful government-to-government consultation and obtain free, prior, and informed consent for all decisions that affect indigenous peoples and their traditional and ancestral territories;

    2. Honor all treaties and agreements with indigenous peoples;

    3. Protect and enforce the sovereignty and land rights of indigenous peoples;

    4. Recognize and incorporate sustainable development principles in reducing greenhouse gas emissions and adapting to climate change, in order to simultaneously promote economic development, social well-being, national security, and environmental protection. Some of these principles include, but are not limited to:
        a. Returning ancestral lands and waters to indigenous peoples to protect and manage;

b. Provide funding and political support for the development of green jobs and renewable energy infrastructure in lower socio-economic communities, communities of color, and in Indian Country;
c. Provide non-competitive funding to support culturally appropriate climate change resilience measures; and
d. Remove dams and restore water ways to their natural conditions.

5. Reduce U.S. greenhouse gas emissions to net zero or below as soon as possible, consistent with the latest peer-reviewed science; and

6. Work with other nation states and Native nations to reduce global greenhouse gas emissions to net zero or below and to hold the increase in the global average temperature to the lowest possible increase above pre-industrial levels.

Budget and Finance:

- Ensure consistent multi-year funding for Tribes through the BIA Tribal Resilience Grants and other funding programs including the Climate Science and Adaptation Centers, and the Landscape Conservation Collaborative Program.
- Increase funding for BIA programs which promote and support culturally prescribed burning and fuels reduction on tribal lands to improve forest health and increase wildland fire resiliency.
- Direct federal and state appropriations and create and streamline federal grant processes/programs to provide full support for tribal climate programs.
- Support federal and state financing for tribal priorities related to displacement, relocation and emergency services, and renewable energy production.
- Develop administrative rules that provide for tribal co-management of resources and land and provide funding to support co-management projects and programs.
- Fund tribes to conduct necessary marine studies for the marine portion of the life cycle of the fish.
- Fund tribes to study and manage its nearshore and intertidal marine resources.
- Address the need for stronger relationships between tribes and funders to increase understanding and effectiveness of funding.
- Address the impacts on funding resources that are caused by changing federal authorities.
- Tribes need site specific funding in terms of using Traditional Knowledge, integrating climate change and STEM education, accessing site-specific data, building tribal capacity, and implementation of projects.
- Encourage the Congressional Research Service to study available climate change related grants that tribes are currently excluded from and recommend how to open up funding mechanisms for Tribal governments to study, plan for and address climate change and ecosystem resiliency.

Carbon Policy/ Greenhouse Gas Emission Reduction:

- Develop and pass equitable legislation related to cap and trade and or carbon tax/fee that specifically includes tribes, provides a set aside of revenues for tribes, increases tribal capacity, and provides tribal investments in carbon sequestration, carbon reduction actions, renewable energy, and climate adaptation and mitigation funding.
- Uphold the Paris Climate Agreement goals and coordinate implementing those strategies with tribes, state, cities, counties and organizations working to control Green House Gas emissions.
- Classify carbon revenue as trust revenue (through carbon offset projects developed by tribes)
- Create forest management plans that include carbon sequestration and consider ecosystem services.
- Federal Transit Administration guidelines should reflect Green House Gas emissions; Tribes need green infrastructure to solve transit issues.
- Federal mandates for green building to reflect Climate Change priorities should be integrated within Tribal housing programs.

Renewables/ Energy Sovereignty:

- Promote tribal energy sovereignty that reflects climate change priorities including funding to develop tribal solar, wind, geothermal, energy efficiency and other green technologies.
- Congress should develop policies and incentives for tribes to develop renewable energy generation on tribal infrastructure and tribal trust lands. Congress should not support nuclear energy because of the harms uranium mining and the disposal of nuclear waste causes to indigenous communities and their environments.
- Decentralize renewable energy and provide incentives. Recognize the connections between housing and energy production.
- The Federal government should serve as a mediator between tribes and financial institutions to finance green building, renewable energy, etc.

Traditional Knowledge:

- Co-develop perspectives, research, and projects using Traditional Knowledge ("TK") to better understand and interact with unique cultural landscapes.
- Create scientific research questions that would lead to compatible management strategies, values, and goals between tribes and agencies.
- Ensure for the protection of cultural tribal knowledge. Disseminate information data sharing agreements early on in planning process and understand Freedom Of Information Act (FOIA) and how it can be problematic for protecting sensitive information.
- Create policy requiring the Free, Prior, and Informed Consent of Tribes when working with TK.
- Tribal Government and tribal perspectives need to be understood by agency staff and other partners when using TK.

Youth Engagement/ Education:

- Fund and invest in multi-cultural and interdisciplinary science to raise awareness among tribal citizens and youth.

- Integrate climate change education into tribal communities through K-12 curriculum and community education programs.
- Bureau of Indian Affairs should re-invest in funding in youth programs, including internships to provide tribal youth and early career tribal citizens with the training and experience needed to address climate change.
- Assist Tribes to work collectively on youth and climate change education and STEM at the state, regional, national, and international levels.

Adaptation:

- Agency partnerships with tribes should be based on climate bioregions, and inform various partnerships networks that strengthen cross-boundary management. Continued support for Landscape Conservation Cooperatives is one example of this.
- Federal agencies need to provide more technical assistance in developing data sharing agreements and to make site-specific data more accessible to tribes.
- Work with BIA programs and other agencies to support tribal priorities: Food sovereignty, entrepreneurship, economic sovereignty, and energy efficiency.
- Tribal and natural resource agencies should promote diverse stand management structures and vegetation in their management and administrative practices to meet the need for creating resilient forest conditions, including restoration practices.
- Tribal adaptation plans should be looked at as models for non-tribal jurisdictions doing adaptation planning in regions covered or adjacent to Tribal plans.

Thank you for the opportunity to testify. We look forward to working with the Select Committee to address climate change.