TESTIMONY OF

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IMPACTS OF ENVIRONMENTAL CHANGES ON TREATY RIGHTS, TRADITIONAL LIFESTYLES, AND TRIBAL HOMELANDS

UNITED STATES SENATE
COMMITTEE ON INDIAN AFFAIRS
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Good morning Mr. Chairman and other members of the Committee and thank you for the opportunity to testify today. My name is JoAnn Chase and I am the Director of the American Indian Environmental Office in the United States Environmental Protection Agency's Office of International and Tribal Affairs. I'm pleased to be at this oversight hearing on the "Impacts of Environmental Changes of Treaty Rights, Traditional Lifestyles and Tribal Homelands" to discuss EPA's work to strengthen human health and environmental protection in Indian country within this context.

Tribal perspectives on the environment are unique. As so eloquently articulated by the National Tribal Environmental Council, there is no artificial separation drawn between air and water quality, between the "environment" and "natural resources" – all are seen as a whole which is connected, interrelated and participatory in nature. Protection and preservation of the environment is integral to the continued survival of tribal cultures and traditions. The integrated relationship of land, water, humans, animals and plants is a central facet of tribal life. As a citizen of the Mandan, Hidatsa and Arikara Nation, I can say with confidence that the work of the Agency is an important factor in protecting this way of life.

EPA has a long history of working with the 566 federally-recognized tribes.
In summary, the nine points of the EPA 1984 Indian Policy are:

- EPA stands ready to work directly with Indian tribal governments on a one-to-one basis (the government-to-government relationship), rather than as subdivisions of other governments.

- EPA will recognize tribal governments as the primary parties for setting standards, making environmental policy decisions and managing program for reservations, consistent with EPA standards and regulations.

- EPA will take affirmative steps to encourage and assist tribes in assuming regulatory and program management responsibilities for reservation lands.

- EPA will take appropriate steps to remove existing legal and procedural impediments to working directly and effectively with tribal governments on reservation programs.

- EPA, in keeping with the Federal Trust responsibility, will assure that tribal concerns and interests are considered whenever EPA's actions and/or decisions may affect Reservation environments.

- EPA will encourage cooperation between tribal, state and local government to resolve environmental problems of mutual concern.

- EPA will work with other federal agencies which have related responsibilities on Indian Reservations to enlist their interest and support in cooperative efforts to help tribes assume environmental program responsibilities for reservations.

- EPA will strive to assure compliance with environmental statutes and regulations on Indian Reservations.

- EPA will incorporate these Indian Policy goals into its planning and management activities, including its budget, operating guidance, legislative initiatives, management accountability system and ongoing policy and regulation development processes.

Since that time we have adopted many other policies to support our work with tribes and maintain that work within our trust responsibility to tribes and the federal-tribal government to government relationship. As it has been since the adoption of the 1984 Indian Policy, EPA's primary goal is to bring tribes to the table as co-regulating partners with environmental authority and responsibilities for their communities.

One of the first actions EPA Administrator Jackson took as it related to Tribes was to reaffirm the Indian Policy. With this action, EPA reiterated its recognition that the United States has a unique legal relationship with tribal governments based on the Constitution, treaties, statutes, Executive Orders, and court decisions. EPA recognizes the right of tribes as sovereign governments to self-determination and acknowledges the federal government's trust responsibility to tribes. EPA works with tribes on a government-to-government basis to protect the land, air, and water in Indian country.

EPA's tribal program has evolved since the Indian Policy was first adopted. Many significant milestones and successes in the EPA-tribal environmental partnership during these years can be directly attributed to the EPA Indian Policy. These include, but are not limited to, the EPA Policy on Consultation and Coordination with Indian Tribes, announced last May, which reflects the principles of the 1984 Indian Policy.

Yet, we still face many challenges that require a strong federal-tribal partnership. These challenges include reducing carbon pollution and addressing the impacts of climate change on tribal communities. A clean energy environment is critical, and as America moves forward, tribes are essential partners in this future.

STRENGTHENING TRIBAL PARTNERSHIPS

The commitment to strengthening tribal partnerships begins at the very top of EPA. It is one of Administrator Lisa Jackson's seven priorities for the Agency.
In this spirit of respect and cooperation with tribes, Administrator Lisa Jackson announced the release of the EPA Policy on Consultation and Coordination with Indian Tribes in May of 2011. We are proud to have just celebrated our one-year anniversary.

EPA's Policy serves as the overarching framework for consultation across EPA. It establishes consistent and transparent EPA practices developed through a consultation process with tribes. EPA standards for the consultation process, include defining the what, when, and how of consultation; designating specific EPA personnel responsible for serving as consultation points of contact in order to promote consistency in, and coordination of, the consultation process; and establishing a management oversight and reporting structure that will ensure accountability and transparency. Most importantly, the policy sets a broad standard for when EPA should consider consulting with tribes based upon Executive Order 13175 and the principles expressed in the 1984 EPA Policy.
To ensure that tribes are aware of EPA's upcoming and current consultation opportunities, and to ensure that the tribes have all the necessary information to review and analyze prior to consultation, EPA developed the Tribal Consultation Opportunities Tracking System as a one-stop shop for all EPA consultations. This system, which is found on EPA's Tribal Portal website, allows tribal users to view EPA consultation information and to directly submit comments to EPA.

An additional example of tribal partnership is the Tribal ecoAmbassadors Program, piloted in 2011. Working closely with the American Indian Higher Education Consortium, a national organization comprised of the Presidents of all 37 Tribal Colleges and Universities (TCUs), EPA solicited project proposals for innovative, community-based solutions to an environmental issue. As a ground- breaking initiative, the Tribal ecoAmbassadors program engages professors, students and local communities on social science and natural science research including energy efficiency and innovative uses of technology for education. TCU professors serve as the principal investigators, and work with a group of their students, who earn college credit and a small stipend. Each Tribal ecoAmbassador is paired with an EPA scientist knowledgeable in the area of their proposal.

Now approaching the end of the pilot year, the eight selected Tribal ecoAmbassadors worked with a total of 63 students. Each student presented project results to their families and neighbors, garnering community involvement. Capitalizing on the use of technology, two online courses were developed that both promoted distance learning opportunities and used on-line applications to monitor and analyze project data. Moreover, each project is sustainable and transferable to other tribal nations, of which there are 566 nationwide covering approximately 56 million acres of our land base. Thousands of tribal citizens have increased their awareness of the role they play in protecting human health and the environment in Indian country and the broader community through both direct and indirect participation in the Tribal ecoAmbassadors program.

We are in the pilot year of this program, and our eight ambassadors are concluding their projects, ranging from non-point source pollution assessments to developing manufacturing techniques for carbon-negative building products. This past June the pilot program projects were presented to EPA's joint EPA-tribal Tribal Science Council. I am

pleased to announce that this program will continue for the 2012-2013 academic year, with funding available for at least six new Tribal ecoAmbassadors projects.

TRAINING THE AGENCY

In addition to strengthening the work with external advisory groups, EPA has built upon its long tradition of internal staff training in tribal matters to launch its newest training program called Working Effectively with Tribal Governments, which was publically announced by the Administrator just yesterday. This is an annual, mandatory training for all EPA employees, that creates a better informed EPA workforce on how to work best on tribal issues and with tribes and includes a full understanding of the unique legal and historical relationship between the federal government and tribes. This latest version is based upon our previous versions of Working Effectively with Tribal Governments which were the foundation for the Office of Personal Management's federal work force-wide Working Effectively with Tribal Governments training.

INTER-AGENCY PARTNERSHIPS

EPA is working closely with other federal agencies to more effectively address tribal concerns and to leverage knowledge and resources. Providing greater access to safe drinking water and wastewater facilities for tribes serves as an example of this work. EPA continues to play a major role within the federal Interagency Infrastructure Task Force to Improve Access to Safe Drinking Water and Basic Sanitation in Indian country. This task force examines concerns and develops solutions to those concerns regarding access to water and wastewater facilities. This active partnership includes the Department of Agriculture, Department of Health and Human Services, Department of Housing and Urban Development and the Department of the Interior. Of course, the tribes are right there with us at the table.

The EPA has entered into a Memorandum of Understanding with the Department of Energy and the Department of the Interior to develop a multi-agency program to address the highest priority challenges associated with safely and prudently developing unconventional natural gas and tight oil resources. An important part of this group's mission will be to understand the implications of developing unconventional energy resources on tribal lands.

CLIMATE CHANGE

Mr. Chairman, we know the impacts of climate change are causing extraordinary challenges for tribes across the nation. In Alaska, climate change impacts are immediate. Rapid erosion and less protection from winter storms due to reduced coastal sea ice have forced tribal communities to prepare to abandon their homes and traditional lands in order to survive. Federal, state, and tribal officials have identified 31 villages that face imminent threats from these impacts. At least 12 of the 31 threatened villages have decided to relocate--in part or entirely--or to explore relocation options. Federal programs that could offer assistance to these threatened villages to prepare for and recover from disasters and to protect and relocate them are limited and unavailable to the majority of villages.

The Federal Emergency Management Agency has several disaster preparedness and recovery programs, but villages often fail to qualify for these programs because they may lack approved disaster mitigation plans or have not been declared federal disaster areas. Tribes are frustrated by the fact that there is no single comprehensive proactive federal program to assist villages with their relocation efforts, nor is there a designated lead Federal agency to provide a coordinated federal and state response to climate

change related impacts, such as village relocations. However, individual federal agencies can assist villages on specific projects, such as funding the construction or relocation of homes.

Tribes are experiencing other impacts, including damage to traditional food cellars, permafrost melting, and dropping water tables. In many rural tribal communities, their water is drawn from tundra lakes and these are disappearing with the permafrost. Another potential impact of melting permafrost is the loss of a stable foundation, endangering the sewer and water infrastructure that EPA, and the American taxpayer, has invested billions of dollars in.

These risks are increased by the open dumps that exist in close proximity to most rural communities. Human waste and solid waste are often comingled and when there are floods or storm surges from the loss of protective ice, viable bacteria and contaminants are carried through the community and into people's homes. Often, running water is not available for sanitation, and so consequentially contamination results in significant and dangerous impacts to both the environment and human health of rural Alaskan communities. Most dumps are unlined, but permafrost partially contains their toxic materials. Without permafrost, however, the untreated leachate can become a contamination risk for their water supply.

Tribes are more vulnerable to transboundary contaminants, and with the melting of glaciers, dioxins and pesticides previously retained for decades are now being released back into circulation. Researchers from Canada, China and Norway say some persistent organic pollutants (POPs) are being "remobilized" into the Arctic atmosphere. These pollutants accumulate in animal and plant species that tribes are dependent on to sustain themselves and their traditional way of life.

Tribes throughout the Pacific Northwest are facing similar issues. These similarities are especially acute in coastal Tribes that face erosion, sea level rise, salt water intrusion into coastal wetlands, invasive species encroachment, loss of species of traditional importance due to habitat changes, and changes in seasonal timing leading to traditional spiritual and cultural ceremonies no longer being aligned with animal and plant availability. There are also concerns over paralytic shellfish poisoning, ocean acidification, and impacts to water resources.

With a changing climate comes habitat and ecosystem changes. Northward migration of invasive species and pests is another issue that threatens both ecological and human health in Tribal coastal communities. Also, seasonal changes mean that some pests that used to die out in cold winter temperatures are now surviving to emerge in greater numbers the following spring. Some pests are able to add another reproduction cycle with the lengthening of the growing season due to warmer air temperatures. Many species, both plant and animal, are shifting to new ranges. This creates a problem for Tribes with fixed boundaries or traditional use areas, which no longer may be able to access the resources that sustain them.

Salmon of the Pacific Northwest are central to the lives of native peoples; they bring spiritual, physical and cultural well-being. Climate change is bringing profound habitat challenges, from rapidly changing stream flows to warming waters. The consequences of agricultural runoff and clear-cut forest techniques further degrade water quality. Addressing these issues will require large scale cooperative restoration and

enhancement projects between many partners. Also, some species loss will occur before solutions can be found and implemented.

For those tribes more inland, water may be a primary issue. They may be facing longer and hotter dry seasons and heavier seasonal and more frequent peak rainfalls events, creating a greater risk of flooding and erosion as the heavy rains fall on land too dry to absorb it. Habitat loss contributes to this.

Warming and inadequate water supplies may not sustain key fish species and may not fully recharge aquifers. Diminishing snow pack changes water availability drastically, making stream flows much more variable and dependent on rainfall. Without snow pack, the waters also do not stay cool enough, creating more stress for fish.

As aquifers are not recharged, wells could begin to fail, which may cause hardship to communities, farmers, and private landowners. This could also put more stress on the infrastructure, as more sediments are brought up, causing more wear and tear on the water system.

In direct response to these issues, and at the direction of EPA Administrator Lisa Jackson, several high-level initiatives have been created to coordinate EPA's work on climate change and specifically in regard to EPA's climate change work with tribes. EPA has developed and submitted a Climate Change Adaptation Plan as part of their 2012 Strategic Sustainability Performance Plan as required under Executive Order 13514. This plan serves as an Agency-wide blueprint for assessing vulnerably to climate change impacts and the associated plans for addressing those risks to EPA mission, program, and operations. This plan will guide the development of subsequent EPA regional- and program-level adaptation planning initiatives. Again, tribal input is critically important to us and we are actively seeking tribal input to make sure EPA adequately addresses tribal needs. During the development of the Agency Climate Change Adaptation Plan, EPA engaged the Tribes in three informal teleconference roundtable discussion and conducted three additional teleconference dialogues to provide formal briefings on the development of the Plan and to hear additional comment from Tribal leaders. Concurrent with review of the Agency's draft Plan by CEQ and OMB, EPA has opened a formal draft review and written comment period for the tribes to help the Agency craft an acceptable strategy for working with the Tribes on this issue. To further insure adequate consideration of tribal issues and concerns in agency adaptation planning, EPA has formed, at the request of tribes, a Tribal-EPA climate adaptation workgroup. The goal of this group is to improve tribal capacity, coordination, and engagement in climate change adaptation activities, and to develop proposals for additional work or more specific recommendations that would be most effective in Indian country.

To continue to elevate the issue of climate change with EPA's external tribal partners, just last week, on Tuesday, July 10, the Advisory Committee on Water Information (ACWI) FACA voted to establish a standing workgroup on Water Resources and Climate Change. Invitation letters will be sent out soon inviting non-federal organizations and federal agencies to join the workgroup. The National Tribal Water Council and the National Congress of American Indians are on the list to receive an invitation to join.

ACWI is a long-standing and important forum that includes many federal agencies and associations and citizen stakeholders. The ACWI represents the interests of water information users and professionals in advising the Federal Government on Federal

water-information programs and their effectiveness in meeting the Nation's water information needs.

In addition to the agency adaptation plan and EPA's work with external partners, EPA is working with the Canadian government and an indigenous not-for-profit organization to host a workshop this fall that will leverage tribal expertise to develop climate change adaptation strategies to ensure food security and protect traditional plant use.

An example of the way in which EPA is currently acting to address tribal climate change concerns is found in EPA Region 10 located in Seattle, Washington. EPA is working with the state and tribal governments on a way to reduce temperature stress on salmon in the South Fork Nooksack River in Washington. EPA is working with the State of Washington's Department of Ecology, the Lummi Nation, and the Nooksack Tribe to identify the best way to integrate available climate change data into the State of Washington's Total Maximum Daily Load water parameters process. Examining the way temperature can be improved in the Nooksack watershed in order to support salmon restoration is a high priority for the Nooksack Tribe and Lummi Nation. This work will produce a number of models that include potential future climate change scenarios and effects on salmon for 20 to 80 year periods. This cooperation is providing a case study of an effective process to use to support future tribal consultation on climate change science issues and the co-management of this invaluable resource.

TREATY RIGHTS

Courts have long held that Indian treaties are binding on the United States unless abrogated by Congress. Many of these treaties provide certain rights to resources, for example, "a right to take" fish.

In an effort to protect tribal resources, EPA works with many federal agencies. For example, EPA recently funded the Puget Sound National Estuary Program (NEP) at approximately $160 million over the last five fiscal years. Approximately 21% of this funding has gone to tribal restoration and protection projects and to support tribal engagement in the governmental processes established to recover Puget Sound and to protect tribal resources. The remaining funding has gone to projects related to marine, nearshore and watershed protection, reduction of toxic, nutrient and pathogen pollution, education, outreach and stewardship and management.

In September 2011, the White House Council on Environmental Quality designated EPA, National Oceanic and Atmospheric Administration, and the Department of Agriculture, National Resource Conservation Service as co-leads for a renewed federal effort to contribute to the protection and restoration of Puget Sound and the Washington coast. This endeavor responds to concerns raised by Western Washington Treaty Tribes about continued habitat losses and associated diminishment of fishery resources. Under the leadership of the three co-chairs, federal agencies with authorities in Puget Sound and western Washington coastal river basins are re-focusing existing efforts and working better to protect and restore habitats important to salmon, shellfish, and other species. This improved interagency effort includes a critical review of existing policies, authorities and funding programs to contribute to the overall objectives for Puget Sound and western Washington coastal habitat restorations. A Puget Sound Region Federal Agency Action Plan was developed and specifically includes language that the federal partners, including EPA, will coordinate with each other, the state and the tribes to affirm commitments to the Treaty Tribes of western Washington. The Puget Sound Region

Federal Agency Action Plan also creates a Tribal-Federal Habitat Forum for addressing unresolved priority habitat implementation measures.

EPA has undertaken several measures to address specific tribal habitat concerns including developing a summary of EPA's authorities regarding habitat protection and restoration. For each of these activities, EPA has developed roles, timeframes, geographic scope, and measures to provide for accountability. We have obtained this same set of information from the other 14 members of the Puget Sound Federal Caucus. This document was cross-walked with tribal information on barriers to salmon recovery in each watershed of tribal interest to determine the extent to which federal agencies' current activities and new commitments will address the tribal issues. This will help identify gaps in EPA efforts and authorities, and opportunities for better coordination of federal habitat work.

USE OF TRADITIONAL ECOLOGICAL KNOWLEDGE

By definition Traditional Ecological Knowledge is based on the acknowledgement that indigenous peoples who live on the land and harvest its resources have an intimate understanding of their environment grounded in a long-term relationship with the surrounding land, ocean, rivers, ice and resources. This understanding includes knowledge of the anatomy and biology of resources based on centuries of harvesting and processing, distribution of resources, animal behavior, seasons, weather and climate, hydrology, sea ice, currents, how ecosystems function, and the relationship between the environment and the local culture. EPA has acknowledged this definition and the bases that support it and has begun to use this invaluable resource in EPA work.

During development of the National Pollutant Discharge Elimination System (NPDES) General Permit for Oil and Gas Exploration, Development and Production Facilities located in State and Federal Waters in Cook Inlet, EPA contracted to collect Traditional Ecological Knowledge information to assist in understanding the linkage between oil and gas development and production in Cook Inlet and tribal subsistence uses. This effort was initiated in direct recognition of the value of Traditional Ecological Knowledge and the need for EPA decision-making to be informed in a meaningful way by Traditional Ecological Knowledge.

Traditional Ecological Knowledge data were collected from seven Cook Inlet area tribes by trained professionals through individual or workshop interviews within tribal and subsistence communities on a set of focused questions developed by EPA [to assist EPA with obtaining information relevant to the action.] Tribal members from multiple villages, identified as spokespeople by their communities, expressed consistent observations, concerns and questions based on an informed traditional understanding of the Cook Inlet aquatic environment. Observations included Cook Inlet flow, current and waste deposition history, declines and changes in species availability and range, and health and safety concerns regarding traditional food quality and contaminant load. In general, concerns fit into two main categories: (1) the potential for environmental impacts from catastrophic events such as oil spills - especially considering the age of the platforms and associated pipelines, and (2) the effects from routine platform operations that include the discharge of contaminants.

EPA utilized the Traditional Ecological Knowledge observational data in reissuance of the Cook Inlet General Permit. The Traditional Ecological Knowledge process influenced the Cook Inlet General Permit issuances in the following ways: revised the

setback distances for discharges from exploratory facilities by increasing the prohibition of the discharge of drilling fluids and drill cuttings within 1,000 meters of sensitive areas, such as coastal marshes, to 4,000 meters; eliminated discharges of produced water, drilling fluids, and drill cuttings from new sources; established new limits on both the amount of treatment chemicals added, and toxicity, for discharges such as water flood waste water and cooling water; established more stringent limits for total residual chlorine; required two new studies to gain a better understanding of the potential impacts of the discharges – specifically that operators of all new facilities are required to conduct baseline monitoring and large volume produced water dischargers are required to conduct a study of the water and sediment concentrations in the vicinity of the discharges.

I am happy to report that this use of Traditional Ecological Knowledge by EPA is not new. We used it in 2007 for the NPDES Cook Inlet General Permit reissuance and again during 2010-2011 for the reissuance of the Arctic Exploration NPDES General Permit which is ongoing.

Thank you, Mr. Chairman, for the opportunity to appear before you today and highlight some of the work EPA is accomplishing for, and with, tribes. I am happy to answer any questions you or the Committee may have.