

## Fostering Tribal Engagement in Climate Science Centers and Landscape Conservation Cooperatives

---

*Author's note: This discussion paper describes the policy language related to tribal engagement in Climate Science Centers (CSC) and Landscape Conservation Cooperatives (LCC), examines the Government-to-Government relationship in context of CSCs and LCCs, and discusses the benefits to Tribes and the federal government in having strong tribal engagement in these initiatives. It is intended to foster dialogue about the need for and opportunities to meaningfully engage Tribes in the implementation of these initiatives.<sup>1</sup> Comments, questions or suggestions can be submitted to [kathy@uoregon.edu](mailto:kathy@uoregon.edu).*

Place-based, natural resource-dependent communities of indigenous peoples are especially vulnerable to climate change. Climate change has the potential to impact a wide range of landscapes and resources that are vital to indigenous peoples throughout the United States. While some of these resources may remain accessible to Tribes via usual and accustomed areas, trust lands, or federally managed lands, others may not. As stated in a recent paper prepared by several organizations:

*“The Intergovernmental Panel on Climate Change found that Indian tribes are exceedingly vulnerable to and disproportionately impacted by climate change. Tribes have the longest, continual experience with climate, wildlife, the land and natural resources in North America. Because of their close ties to the land and natural resources, American Indians and Alaska Natives have first-hand experience with the devastating impacts of climate change. American Indians and Alaska Natives witness first-hand impacts to hunting, fishing and gathering, watch land disappear and water reliability decline. Native people have experienced not only changes to resource availability but also impacts to cultural practices. Because climate change is altering their environments so dramatically, traditional lifeways, from which indigenous identity is derived, are being threatened to their very core.”<sup>2</sup>*

There are numerous federal and regional climate change initiatives that may provide opportunities for American Indian Tribes, Alaska Natives and First Nations to engage. These opportunities may occur through direct partnerships, project funding, and working groups that could specifically focus on ways to understand and address climate change through impact assessments, research, and tool development. As the number and complexity of climate-related activities continues to rise, meaningful engagement and vibrant partnerships with Tribes and indigenous peoples are critical.

Collaborative partnerships and engagement of a broad range of tribal leaders, tribal members and tribal staff should be pursued in climate change initiatives undertaken by the Department of the

---

<sup>1</sup> Kathy Lynn with the Pacific Northwest Tribal Climate Change Project drafted this paper. Contributors and reviewers included Gustavo Bisbal, Northwest Climate Science Center, Preston Hardison, Tulalip Tribes, John Mankowski, North Pacific Landscape Conservation Cooperative, Gary Morishima, Technical Advisor to the Quinault Indian Nation and the Intertribal Timber Council, Don Motanic, Intertribal Timber Council, Garrit Voggesser, National Wildlife Federation and Kyle Powys Whyte, Michigan State University.

<sup>2</sup> Tribal Recommendations for the Fiscal Year 2012 Department of the Interior Climate Change Adaptation Initiative. These recommendations describe the potential for some of the most damaging effects of climate change, including large-scale ecosystem disturbance, resulting shifts in the range of culturally-important species and the significant impacts on tribal culture and traditional resources. The paper also discusses the federal government trust responsibility to tribes. [http://www.tribesandclimatechange.org/docs/tribes\\_345.pdf](http://www.tribesandclimatechange.org/docs/tribes_345.pdf)

Interior (DOI). As a matter of policy, relationships between Indian Tribes and the United States are to be conducted on a Government-to-Government basis that involves requirements for consultation and respectful discourse. To explore these issues in greater detail, this paper begins with background on the Government-to-Government Relationship and background on DOI's Climate Science Centers (CSCs) and Landscape Conservation Cooperatives (LCCs). The paper then explores strategies for engagement of indigenous leaders in these climate change initiatives.

In recent years, the DOI has implemented a number of initiatives to help understand and address climate impacts, most notably, Secretarial Order 3289: Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources. As illustrated below, Sec. Order 3289 addresses the impacts of climate change on Tribes, and articulates the Department's role in working with Tribes through DOI climate change initiatives:

*“Climate change may disproportionately affect tribes and their lands because they are heavily dependent on their natural resources for economic and cultural identity. As the Department of Interior has the primary trust responsibility for the federal government for American Indians, Alaska Natives, and tribal lands and resources, the Department will ensure consistent and in-depth government-to-government consultation with tribes and Alaska Natives on the Department's climate change initiatives. Tribal values are critical to determining what is to be protected, why and how to protect the interests of their communities. The Department will support the use of the best available science, including traditional ecological knowledge, in formulating policy pertaining to climate change. The Department will also support substantive participation by tribes in deliberations on climate-related mechanisms, agreements, rules and regulations.”*

Secretarial Order 3289 – Section 5.<sup>3</sup>

Sec. Order 3289 establishes that CSCs and LCCs will apply *“scientific tools to increase understanding of climate change and to coordinate an effective response to its impacts on tribes and on the land, water, ocean, fish and wildlife, and cultural heritage resources that the Department manages.”* CSCs and LCCs are focal points for engaging American Indian tribes, Alaska Natives and First Nations in collaborative efforts with the DOI through direct partnerships, project funding, and working groups. Effective engagement and representation of Tribes and indigenous peoples in these efforts are essential.

### **The Government-to-Government Relationship**

A unique government-to-government relationship exists between Indian Tribes and the United States Federal Government. This relationship is grounded in the U.S. Constitution, numerous treaties, statutes, federal case law, regulations and executive orders.<sup>4</sup> Consultation is a core element of the Government-to-Government relationship. In 1994, President Clinton signed a Memorandum on *Government to Government Relations with Native American Tribal Governments*, which establishes principles for federal executive departments and agencies to consult with Tribal governments before taking actions that affect federally recognized Tribal

---

<sup>3</sup> <http://www.doi.gov/archive/climatechange/SecOrder3289.pdf>

<sup>4</sup> Consultation obligations are found in numerous Executive Orders and statutes, including the National Historic Preservation Act to the Federal Land Policy and Management Act. [http://tribalclimate.uoregon.edu/files/2010/11/consultation\\_report\\_2-22-20122.pdf](http://tribalclimate.uoregon.edu/files/2010/11/consultation_report_2-22-20122.pdf)

governments, assessing the impact of federal initiatives on Tribal trust resources, and ensuring that Tribal rights are considered in those initiatives.<sup>5</sup>

### **The Role of Consultation in Effectuating the Government-to-Government Relationship**

Consultation is an important and essential process that enables American Indian and Alaska Native Tribes and the United States to identify issues concerns and seeks to resolve differences through respectful dialogue between sovereigns. Interactions between tribes and federal agencies should occur through processes and protocols that reflect relationships between political sovereigns, not through forums such as public hearings. Nor should consultation be viewed as an item to be checked off an administrative list. While there may be legal reasons for leaving ultimate decision authority in the purview of LCCs and CSCs, every effort should be made to provide opportunities for substantive engagement by Tribes and to satisfactorily address their concerns.

Executive Order 13175: *Consultation and Coordination with Indian Tribal Governments* (released in November 2000): requires federal agencies to “*have an accountable process to ensure meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications*” (§ 5(a)).<sup>6</sup> The Executive Order defines those regulatory policies as those that refer to “*regulations, legislative comments or proposed legislation, and other policy statements or actions that have substantial direct effects on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.*”

President Obama’s Executive Order in 2009 called for each federal department and agency to develop a tribal consultation plan, pursuant to Executive Order 13175.

*“History has shown that failure to include the voices of tribal officials in formulating policy affecting their communities has all too often led to undesirable and, at times, devastating and tragic results. By contrast, meaningful dialogue between Federal officials and tribal officials has greatly improved Federal policy toward Indian tribes. Consultation is a critical ingredient of a sound and productive Federal-tribal relationship.”*

All federal tribal consultation plans define consultation and establish procedures and principles for consulting with Tribes. Several definitions of consultation are provided below as examples:

- 2011 EPA Policy on Consultation and Coordination with Indian Tribes: “*Consultation is a process of meaningful communication and coordination between EPA and tribal officials prior to EPA taking actions or implementing decisions that may affect tribes.*”<sup>7</sup>
- 2010 USDA Consultation Action Plan: “*Tribal consultation is the timely, meaningful, and substantive dialogue between USDA officials who have delegated authority to consult and*

---

<sup>5</sup> <http://www.schlosserlawfiles.com/consult/1994memo.pdf>

<sup>6</sup> Executive Order 13175--Consultation and Coordination With Indian Tribal Governments. November 2000. <http://ceq.hss.doe.gov/nepa/regs/eos/eo13175.html>

<sup>7</sup> <http://www.epa.gov/indian/pdf/cons-and-coord-with-indian-tribes-policy.pdf>

*the official leadership of federally recognized tribes, or their designated representative, pertaining to USDA policies that may have Tribal implications.*<sup>8</sup>

- 2010 DOI Consultation Action Plan<sup>9</sup> calls for “*regular and meaningful consultation and collaboration*” to improve governmental relationships with Indian tribes and reflect the concerns and responsibilities of Federal and tribal governments.” This policy will:
  - Recognize the special legal status of tribal governments;
  - Respect tribal sovereignty and support self-determination and self-governance;
  - Honor the United States trust obligations;
  - Demonstrate Interior’s commitment to improving communications while maximizing tribal input and coordination;
  - Ensure that Interior consults on a government-to-government basis with appropriate tribal representatives;
  - Identify appropriate Interior officials who are knowledgeable about the matters at hand and are authorized to speak for Interior;
  - Ensure that Interior’s bureaus and offices conduct consultation in a manner consistent with the department-wide policy, thus harmonizing the consultation practices of Interior’s bureaus and offices.

Consultation policies should make clear that consultation and interaction must be addressed at the highest federal and tribal levels. Examples of agency consultation policies that illustrate best practices in this regard can be found in a recent review of federal consultation policies.<sup>10</sup>

Government-to-Government relationships are inherently strengthened by mutual respect between sovereign nations, and by fostering productive and regular opportunities for collaboration that are not limited to standard protocols implemented through consultation. In the preamble of Executive Order 13175, President Clinton explicitly calls for collaboration in his statement establishing “...*regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes...*” President Obama reiterated his commitment to both consultation and collaboration in his 2009 Memorandum.<sup>11</sup> Collaboration and coordination with Tribes can strengthen the Government-to-Government relationship through frequent interaction between agency and tribal leadership and staff. Furthermore, collaboration and partnerships between agencies and Tribes can lead to opportunities to leverage resources, coordinate cross-landscape efforts, and build an understanding of shared needs and common goals.

### **Traditional Ecological Knowledge (TEK)**

While honoring government-to-government relationships and consultation are essential, it is also important to understand that traditional ecological knowledge (TEK) is commonly kept and transmitted by individuals within indigenous communities who are entrusted with its care. TEK, in terms of its use in understanding impacts from climate change and in identifying adaptation strategies, is another key issue. Many American Indian and Alaska Native

<sup>8</sup> [http://www.usda.gov/wps/portal/usda/usdahome?contentidonly=true&contentid=otr\\_consultations.html](http://www.usda.gov/wps/portal/usda/usdahome?contentidonly=true&contentid=otr_consultations.html)

<sup>9</sup> <http://www.doi.gov/news/pressreleases/upload/DOIConsultationActionPlan.pdf>

<sup>10</sup> The Government-to-Government Relationship in a Changing Climate: A review of federal consultation policies: [http://tribalclimate.uoregon.edu/files/2010/11/consultation\\_report\\_2-22-20122.pdf](http://tribalclimate.uoregon.edu/files/2010/11/consultation_report_2-22-20122.pdf)

<sup>11</sup> <http://www.justice.gov/otj/pdf/obama-executive-memo110509.pdf>

communities are actively identifying and implementing place-based, culturally appropriate strategies to assess climate impacts and adapt to projected changes. TEK has the potential to play a central role in both indigenous and non-indigenous climate change initiatives. The detection of environmental changes, the development of strategies to adapt to these changes, and the implementation of sustainable land-management principles are all important climate action items that can be informed by TEK.<sup>12</sup>

TEK is culturally sensitive and proprietary. It is also important to recognize that there is a need for reciprocity in regards to the exchange of traditional and western science. Tribes and non-tribal entities stand to benefit from an increased breadth of knowledge, but it is critical that tribal communities also benefit from ready access to western science that is relevant to their specific issues and circumstances.

TEK has the potential to play a vital role in indigenous climate change assessment and adaptation efforts, as well as make important contributions to the climate change efforts of federal agencies, institutions and organizations at a local, national and international level. Many indigenous groups, agencies and organizations are taking steps to facilitate the incorporation of TEK into climate change initiatives. There are also policy tools in place to help ensure that TEK is protected. For example, the United Nations Declaration on the Rights of Indigenous Peoples adopted by the General Assembly in 2007, as well as the international law of Free Prior and Informed Consent, can inform how to protect sensitive information. Formal agreements should be utilized to ensure tribes and traditional knowledge holders understand and are comfortable with how information is used and shared.

Within CSCs and LCCs, there should be opportunities for tribal leaders to engage with federal officials in defining protocols regarding how TEK may be used, what kind of information exchange may take place, and how to ensure that culturally sensitive information is protected.

### **Climate Science Centers and Landscape Conservation Cooperatives**

Secretarial Order 3289: Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources, created Climate Science Centers (CSCs) and Landscape Conservation Cooperatives (LCCs). CSCs provide scientific information, tools and techniques that land, water, wildlife and cultural resource managers and other interested parties can apply to anticipate, monitor and adapt to climate and ecologically-driven responses at regional-to-local scales. Much of the information and tools provided by the CSCs, including physical and biological research, ecological forecasting, and multi-scale modeling, will be in response to the priority needs identified by the LCCs and other partners. The LCCs are landscape-scale applied conservation science partnerships that will support and enhance on-the-ground natural and cultural resource management by facilitating the production and dissemination of applied science, tools, resources and information for decision makers.

#### ***Tribal Engagement in CSCs and LCCs***

Government-to-government relationships with Tribes are foundational to the work of CSCs and LCCs. This relationship is exhibited in a number of ways, including how CSCs and LCCs are structured, and in the actual work and priorities of understanding and addressing climate change

---

<sup>12</sup> [http://tribalclimate.uoregon.edu/files/2010/11/TEK\\_CC\\_Draft\\_3-13-2012.pdf](http://tribalclimate.uoregon.edu/files/2010/11/TEK_CC_Draft_3-13-2012.pdf)

through impact assessments, research, and tool development. Effective engagement rests upon strong relationships with Tribes that provide for abundant, unrestricted, early and regular communication. This can contribute to meaningful discussions of priorities and future projects, in many cases, before final decisions on funding of research initiatives or project proposals.

CSCs and LCCs are engaged in identifying and developing science and informational resources that informs management of resources important to American Indian Tribes, Alaska Natives and First Nations. Consequently, government-to-government relationships are a critical foundation and operating principle for this work. Furthermore, climate change will have economic and ecological impacts on places, species and resources that are integral to the cultural fabric of tribal communities.

In efforts of CSCs and LCCs, Tribal engagement can provide important and unique contributions to inform the knowledge base for decision-making. Such contributions include, but are not limited to:

- (1) Tribes are ideally suited to play important roles in long-term monitoring, observation and reporting of local manifestations of climate change because of their permanent ties to place and intimate relationships with the environment and natural resources;
- (2) Tribal intergenerational experience in contending with environmental change could help identify and prioritize actions for preparation, adaptation, and mitigation.
- (3) Accumulated traditional knowledge and more than 125 languages in Tribal communities could help inform analysis and interpretation of information and data.
- (4) Because of their unique legal and political status, Tribes bring a unique set of tools to the table to address climate change (e.g., inherent sovereignty, treaties, court orders, executive orders, rights of co-management of shared resources, familiarity with local politics, growing economic influence, and the public trust doctrine). Tribes have a strong interest in maintaining treaty-protected rights and agency consultation with tribal leaders and inter-tribal organizations can help explore and identify strategies to protect treaty rights and trust resources.
- (5) Many Tribes operate sophisticated natural resource programs staffed by individuals schooled in western science; Tribes can bring unique, practical know-how to the management of land and natural resources by coupling western science with insights of traditional knowledge.

Thus, while CSCs and LCCs are not decision-making entities, these initiatives stand to benefit from Government-to-Government relationships with Tribes to help understand climate change impacts and inform preparation and adaptation responses. This, in turn, will ensure that Tribes have an opportunity to benefit from the strategies and outcomes from these initiatives. Specifically, leveraging resources through the CSCs and LCCs can assist Tribes in managing their conservation goals, research priorities, and efforts to address climate change. In order to ensure tribal participation and engagement, however, considerations must be made in regards to funding that would enable Tribes with limited staff and financial resources to participate in these initiatives.

## **CSC and LCC Initiatives in the Pacific Northwest**

*Author's Note: The section highlights examples of how the Northwest CSC and North Pacific LCC are beginning to engage Tribes in their efforts. It is not intended to be a comprehensive review of tribal engagement strategies among CSCs and LCCs across the country.*

The Pacific Northwest offers opportunities for immediate and substantive engagement of tribal leaders in the ongoing efforts related to the Northwest Climate Science Center (NW CSC) and the three LCCs in the region (North Pacific, Great Northern and the Great Basin). As documented through the Pacific Northwest Tribal Climate Change Project, many Tribes throughout the region have begun to examine climate change issues, conducting climate risk assessments and developing climate change plans. Discussions on opportunities for Tribes to engage in climate change studies, plans, conservation efforts, and grants are actively underway through the Pacific Northwest Tribal Climate Change Network.<sup>13</sup>

As called for in Sec. Order 3289, tribal engagement and opportunities for government-to-government consultation with Tribes and Alaska Natives must be present within DOI climate change initiatives. As illustrated below, the NW CSC and some of the LCCs in the region are demonstrating their commitment to incorporating the knowledge and information needs of Tribes throughout the region as they work to accomplish their respective missions.

### ***Northwest Climate Science Center***

The mission of the NW CSC is to provide scientific information, tools, and techniques to anticipate, monitor, and adapt to climate change, and to bring together federal and university scientists to address climate change priority needs of federal, state, and tribal resource managers. The NW CSC convenes an Executive Stakeholder Advisory Committee (ESAC) that assembles federal, tribal, and state resource management agencies represented in the Northwest. The ESAC includes three tribal seats, currently represented by the Northwest Indian Fisheries Commission, the Columbia River Intertribal Fish Commission and the Affiliated Tribes of Northwest Indians. Collectively, these inter-tribal organizations offer a communication channel with 73 Tribes in the Pacific Northwest.

### ***North Pacific Landscape Conservation Cooperative – Tribal Engagement Strategy***

The North Pacific Landscape Conservation Cooperative (NPLCC) has established a strategy for tribal engagement that includes participation from Tribes, Alaska Natives and First Nations on the NPLCC steering committee, a Tribal/First Nation committee, and a sub-committee on science and traditional ecological knowledge. The NPLCC strategy for tribal engagement provides an opportunity for tribal leadership to engage in the NPLCC at various levels, a strategy that will build an understanding of tribal information needs related to climate science, tools, and resources, and a mechanism to ensure that American Indian and Alaska Native tribes and First Nations throughout the NPLCC have a chance to engage in science and planning to address the impacts of climate change on natural and cultural resources. This strategy is under development, but may serve as one example for other LCCs seeking to find ways to engage American Indian and Alaska Native tribes and First Nations.

The NPLCC Steering Committee is comprised of senior leadership of federal, state, provincial, tribal and partnership organizations that manage natural and cultural resources. At the request of

---

<sup>13</sup> <http://tribalclimate.uoregon.edu/network/>

Tribes and First Nations, tribal participation on the steering committee includes one tribal leader each from Oregon, Washington, California and Alaska, and a First Nations leader from British Columbia. The NPLCC recognizes that no one indigenous group can represent all indigenous groups. As such, participation on the steering committee may rotate periodically in coordination with the American Indian and Alaska Native tribes and First Nations from each state/district.

The NPLCC Tribal/First Nations committee is open to all American Indian Tribes, Alaska Natives, and First Nations throughout the NPLCC region. The Committee will support American Indian and Alaska Native tribes and First Nations representatives on the NPLCC Steering Committee by providing perspectives, information, assistance, recommendations, and guidance.

The Science and TEK subcommittee is developing and recommending a 5-year NPLCC science strategy for consideration by the Steering Committee. The subcommittee membership includes university, government and nongovernmental scientists, researchers, and specialized science and technical expertise, including traditional knowledge holders and elders from the geographic area of the NPLCC, to the degree they find it appropriate to share that TEK. The NPLCC Science and TEK subcommittee (with assistance from the NW CSC) recently funded seven pilot projects throughout the range of the NPLCC that are designed to gather, refine, and communicate traditional knowledge as it relates to natural and cultural resources, and assess how culturally-important resources will be affected by changing climate and related environmental stressors.

### **Considerations for Tribal Engagement**

With Climate Science Centers and Landscape Conservation Cooperatives so early in their development, there is significant opportunity for indigenous communities to engage in and help shape these initiatives. Through consultation and collaboration, federal agencies involved with CSCs and LCCs can work with Tribes in a Government-to-Government relationship to understand the impacts of climate change, identify science and information needs, and move forward in the development of strategies in response to anticipated climate conditions.

Tribes should be offered an opportunity to play a substantive role in CSC and LCC deliberations. When Tribes and public agencies make a commitment to working collaboratively, there is greater opportunity to develop mutually acceptable actions to resolve concerns, issues, or disagreements. One strategy to facilitate this level of collaboration would be to convene indigenous leaders and staff in high-level discussions on how climate change will impact indigenous communities, with a particular focus on the natural and cultural resources of importance and how climate change may affect them. Discussions of this nature may be most successful when Tribes have an opportunity to convene gatherings and develop meeting agendas and structure.

Tribal voices must be heard on a broad range of issues, including tribal perspectives on adaptation and natural resource management, how Traditional Ecological Knowledge (TEK) can be used in understanding climate impacts and ensuring that culturally-sensitive information is protected. Government-to-Government interactions through the CSC and LCC initiatives can ensure that there are meaningful opportunities for dialogue on these issues and long-term collaboration in addressing climate change.

Strategies are needed to increase awareness of important policy-level information on climate change among tribal leaders. The sheer number of publications, forums, and conferences on climate change can be overwhelming and it is rare for efforts to be made to convey relevant information in forms that can be quickly and readily grasped by tribal communities and leadership. There is a need to efficiently and effectively communicate and synthesize climate-related information in a way that brings the significance and importance of global issues and strategic approaches to address climate change to the local, tribal level. One strategy for information sharing with tribal leaders would be to establish (or make use of existing) regional or national networks. Coordinating with existing regional and national networks (including media, policy forums and intertribal groups) to gather, evaluate, and distribute information and perspectives could be an effective way to share information and encourage engagement with CSCs and LCCs. Another strategy would be to establish help centers that could provide case-specific information and advice to tribal communities.

The impacts of climate change will not recognize geographic or political boundaries. Collaboration, shared resources and an exchange of knowledge will be critical in leveraging limited resources and fostering an understanding of how climate change will impact communities and landscapes. And while climate change may pose significant threats, it also offers an opportunity for a new conception of how indigenous communities and public agencies can work together within the Government-to-Government relationship. Within Government-to-Government interactions, there is an opportunity (in addition to formal consultation processes) to foster effective communication, partnerships and collaboration, and mechanisms to exchange knowledge while protecting culturally sensitive information. Initiating dialogue and interactions about climate change through the Government-to-Government relationship shows recognition and respect for tribal sovereignty. Moving forward, collaboration, partnerships and communication can foster greater opportunities to achieve common goals.

---

*\*\*To submit comments or questions about this document, contact Kathy Lynn with the Pacific Northwest Tribal Climate Change Network at [kathy@uoregon.edu](mailto:kathy@uoregon.edu) or 541-346-5777.*