

Asserting Native Resilience

Pacific Rim Indigenous Nations Face the Climate Crisis

By Rudolph C. Rýser, Ph.D.

This article derives from an interview with Dr. Rýser conducted by Zoltán Grossman on October 5, 2009. It was published in the book *Asserting Native Resilience: Pacific Rim Indigenous Nations Face The Climate Crises*, edited by Zoltan Grossman and Alan Parker, and released in 2012.

In this essay, Dr. Rýser comprehensively explores the role indigenous sovereignty plays in addressing the challenges posed by climate change. Emphasizing the importance of traditional knowledge and governance structures in fostering environmental resilience and effective adaptation strategies, he highlights the critical need for indigenous peoples to assert their authority as regulators and standard-setters in the face of climate change.



Similkameen River & Pacific Northwest Trail. Photo: Greg Shine

If one wants to find the green parts of the world, look only where the Indigenous people live, and there's a reason for that. There is a strong motive to duplicate that, which means relying more heavily on Indigenous people.

The climate change issue is fundamentally an issue of Indigenous peoples' sovereignty, cutting across virtually every topic of importance to a society. Without exercising authority to define risks and vulnerabilities across a wide range

of interrelated parts in a society (as any tribal community might want to do), Indigenous nations cannot establish themselves as regulators or set standards that respond to the adverse effects of climate change—as they must. This ends up being a very significant problem for Indigenous people worldwide. This is true since they are faced with the threats and the realities of human-induced climate change. Indigenous peoples are not being asked, nor are they vigorously offering themselves to act in the capacity of governing authorities, as regulators and standard setters, but it is apparent that if they do not, they risk marginalization at best and exploitation to their detriment at worst. Adaptation and responses to the adverse effects of climate require firm leadership, sustained responses, and steady negotiations to ensure the tribal social, economic, political, and cultural survival—in other words, Indigenous governments acting as sovereign powers.

Tribal peoples must reach into their cultural toolbox to draw out resources that will enable them to adapt to climate change challenges internally. At the same time, they must meet the challenge of negotiating with neighboring peoples and institutions to prevent encroachments on their sovereign powers.

In the face of a growing interest to participate in the global and regional climate change dialogue, representatives from Indigenous nations or organizations attending international conferences demand to be heard. They call on states' government officials to hear them and, most particularly, hear that they possess

traditional knowledge that must be a part of the dialogue. Indigenous representatives have a problem when they are asked to share that knowledge—to explain what that traditional knowledge is and how it can enrich the debate about responses to changing climate. Too often, proponents of traditional knowledge fall silent about the actual content of their traditional knowledge, leaving the debate to conventional scientists and state government political leaders. Instead of falling silent, Indigenous representatives should be prepared to step forward with constructive analysis and proposals.

Traditional knowledge is a resource held within all Indigenous communities, yet for many reasons, we have often not been able to explore and apply this knowledge to the issue of climate change. This may occur for several reasons: 1) This knowledge may be held secret or protected, or conversely, it may be lost or in the process of being forgotten. 2) Similarly, because traditional knowledge has not been valued by conventional science or has been relegated to a secondary or adjunctive model, many people feel hesitant to proffer information that will be rejected. Finally, 3) since traditional knowledge is often locally specific, it has not been shared or tested across communities. Now is the time to overcome all of these obstacles and to assert [the] primacy of traditional knowledge in solving many of our environmental problems. But first, we must acknowledge and resolve the historical and community traumas that may preclude its application because of adherence to the myth of the primacy of conventional science.

In the U.S. Pacific Northwest, we are very interested in traditional forest management practices, but it is also the case that we end up with a lot of conventional scientific methods used to manage forests—methods that may not be effective in preventing carbon emissions or in increasing the capacity of that forest to absorb carbon emissions. This view is not to suggest that conventional science is wrong. It is really to say that conventional science and Native sciences rooted in traditional knowledge must be applied together where possible.

The Menominee Nation, located in Wisconsin, applies a sustainable forest management model that relies in part on traditional thinking. They harvest selectively. Menominee foresters harvest trees that are dead or dying or clear areas to allow for stronger trees to grow. Even though this method is more expensive, it has produced a hugely productive natural forest alive with diversity. The methods used now ensure a forest that appears from space as a large dark green rectangle in Wisconsin when the snows come, applying a blanket of white over the remainder of the state. The Menominee maintain a vital forest while earning revenues at the same time. Traditional knowledge has much to offer.

Other tribes that are forest-dependent need to cut trees to make money, but when they cut trees, of course, they reduce the capacity of the forest to absorb carbon. But, at the same time, they are eliminating carbon and expelling it into the broader environment by cutting the trees. Timber-dependent tribes must confront this difficult conundrum. What does traditional

knowledge offer here? The Menominee forest management system may be a good answer.

Tribes face financial obstacles when economic interest is a primary motive that stands against cultural interest and, ultimately, environmental interest. The Clinton administration advocated in the 1990s a policy that says everyone can have “economy and environment at the same time,” without clearly explaining how you do that. Each tribe is faced with virtually the same question when it comes to forest management: How do you make the money required by members while ensuring the low carbon footprint necessary for environmental balance?

Thus are defined two major aspects of the internal tribal dialogue: one is cultural relationships, the relationships that the culture permits people to have with the environment (food, medicines, fresh water, shelter). [To] the extent to which there is a codependence between people and the environment ensuring life, we must ask: how do we preserve, promote, and maintain that relationship as environmental circumstances change? Secondly, where do we get the financial resources to respond to change in a way that is sustainable for the tribe? Naturally, the inclination is to talk about things like cap and trade or state taxation of carbon emitters and to provide money off those receipts to those who don't produce carbon and greenhouse gases. Yet this also poses difficult challenges as it leads to increased dependence by the tribal community on the production of things that are carbon producers and requires more capital investment even as they [tribal members] become more dependent on currency.

Despite all our current and projected efforts, the ocean is rising and will continue to do so for some time. Indigenous nations must act in collaboration with others and on their own to reduce the adverse effects of climate change while working to develop strategies based on traditional knowledge and conventional science to *adapt*. Adaptation and collaboration are the major strategic actions that we have identified as viable approaches at the Center for World Indigenous Studies while working on behalf of the Quinault Nation and other nations in Africa and Canada in the international dialogue on climate change.

Responding to the adverse effects of climate change is essentially a matter of Indigenous peoples' adaptation. Adaptation strategies and policies are matters of local as well as international concern. The local reality is that Indigenous peoples (unlike other populations [who are] dependent on industrialized cities) have a biocultural relationship that is either dormant or active within one or more ecological zones. If the relationship is dormant or even damaged, it must be reactivated. What does this mean? It means that the culture of a people interacting with the biological and mineral environment is essential to the continuity of human life. Humans, as it is increasingly apparent, are a part of nature, not, as the Bishop of Hippo long ago argued, "separate from" nature and exercising power over nature. Ample evidence exists in the growing literature that human beings have long actively engaged in a symbiotic relationship with the natural environment—giving and receiving the benefits of nature's generosity. When human beings or any other life form takes more than

nature's capacity to reproduce, then humans or that life form suffers while the natural world licks its wounds. Hazel Wolfe, that wonderfully vigorous advocate of environmental protection and human cooperation, once observed with that special twinkle in her nearly hundred-year-old eyes, "Earth is to humans as a dog is to fleas. Humans are an irritant when they act badly, and like fleas on a dog, the humans are expendable; the earth and its environments, like the dog, will go on."

Concerted and accelerated collaboration for adaptation is not new. Humans have long had to adapt to changes in the environment either because of human migration or as a result of sharp or evolving changes in the environment. Long ago, Indigenous peoples in Africa, Asia, Europe, and the Americas engaged in what we might now call "terraforming," the act of intentional modification of the earth's surfaces, caring for the flora and fauna in the "natural garden." The Passamaquoddy, Wampanoag, and Massachusetts nations, along with many of their neighbors, transformed the northeastern coasts of Massachusetts, Maine, and Rhode Island by carefully and systematically selecting plants, animals, and lands for sustainability. Were they natural environmentalists? No, they were opportunists who recognized that knowledge gained from observing nature can be applied to nature in a cooperative fashion, benefiting humans as well as the environment.

The upshot was, well before the formation of the United States of America, a highly productive food, medicine, shelter, clothing, and health environment for the peoples while maintaining

a balance in the environment. Notably, when the people along the coast of what is now Maine and Massachusetts died from introduced diseases from Northern Europe, the natural garden they created returned to the wild—demonstrating that the productive natural garden was dependent on human beings. Their longtime residence along the coast demonstrated the great benefits humans received from their “natural garden.” Similarly, Indigenous peoples in what are now the Ohio and Mississippi valleys, the California coast and the Southwest, Haida Gwaii, and the Pacific Northwest all engaged in terraforming—cooperatively engineering natural changes in the environment that enhanced and balanced human activity with the natural processes of the areas. This type of opportunism must once again contribute to restoring balance in the natural environment.

In the Pacific Northwest, where certain habitats were out of balance, people intervened (as is happening now on some reservations) to restore such habitats—increasing fish, plants, and various animals in an area. These traditional knowledge techniques included slash and burn, river and creek redirection, and adaptation of tools that encouraged desirable plants (consider the Quamash digging stick). Animals were encouraged by the clearing of meadows of brush to increase deer, elk, or moose grazing. All this occurred amidst adherence to systematic cultural rules for wild food and medicine harvesting. The technique of slash and burn ensured a strengthening of the soil while returning most of the wood fiber carbons to the soil. This increased the “living soil” quality [and] ensured increased

storage of carbon while providing lands for new plants and animals.

The Quinault Indian Nation recently completed the first phase of a long-term project to restore ecosystem functions in the Upper Quinault River through the installation of engineered log jams in cooperation with the U.S. National Park Service, Forest Service, local property owners, and others. The project was designed to stabilize flows and channel structures from extreme flows, provide spawning and rearing habitat for salmon, and protect roads and property from excessive erosion. The Quinault restoration effort will require several years and millions of dollars to complete. The Quinault Nation assigned this long-term, expensive project a high priority to protect their Blueback (a unique run of sockeye). This special salmon has sustained the Quinault Nation’s culture and economy for millennia. The terraforming project reversed the continued degradation of habitat from development and water flows that have become increasingly extreme in recent years. The nation adapted the earth to restore it.

Food security, emergency services, and a range of other social and economic vulnerabilities threaten Indigenous peoples, and thus, they give rise to the need for adaptation strategies. Adaptation now must mean reclaiming these and other cultural practices to rehabilitate on a larger scale whole ecosystems that have been damaged by sometimes more than a hundred years of destructive, industrial-scale exploitation by newcomers who assumed wrongly the resources were unlimited and free for the taking. Not only

are plants and animals limited, but there is a substantial price that must be paid, as is now quite evident.

These adaptation measures can reduce the adverse effects of climate change by increasing carbon sequestration in soils. Soils that are alive and vital can sequester three times more carbon than can plants and water systems, seas and streams. Managing ecosystems and re-establishing human/earth symbiosis through terraforming and selective plant management can provide a healthy and productive way of life once again for tribal peoples.

Adaptation and Collaboration

Indian nations are not alone. Other Indigenous nations, counties, states, the federal union, and the international community all challenge the tribal governments and their communities. Competing interests surround Indian nations. They are compelled to negotiate within their territories among their own people and between territories—with neighboring tribal peoples and other jurisdictions. Negotiations among Indigenous peoples of the UN Framework Convention on Climate Change (UNFCCC) treaty involved a serious discussion of “adaptation” from the tribal perspective. Members of each Indian community must engage in the difficult task of carrying out an internal dialogue. How will each community respond to climate change? While those discussions don’t always deal with the details of specific measures one takes to adapt, they do need to focus on the framework for Indigenous peoples’ collaborative involvement in the process of adaptation. Once a framework for

the discussion is developed, it becomes possible to discuss the details to meet the adaptation demands.

The International Indigenous Peoples Forum on Climate Change is an ad hoc body of Indigenous organizations and Indigenous nations that has worked since 2002 at the international level in climate change negotiations based on the UNFCCC treaty. Adaptation has slowly become an increasingly important topic in the international debate.

In a jointly developed statement, adaptation was addressed by the IIPFCC this way:

Parties shall recognize customary methods of adaptation employed by Indigenous peoples and local communities; and further acknowledge the benefits to Indigenous peoples guided and informed by the best available science and traditional knowledge, innovations, and practices as obligatory for community adaptation, disaster planning, and response. Indigenous peoples’ law, regulations, plans, and customary standards shall be recognized as authoritative and determinative as to adaptation risks, values, and benefits within the Indigenous peoples’ territorial jurisdiction. Full and effective participation of Indigenous Peoples subject to their free, prior, and informed consent—at all stages of the adaptation process, including governance and disbursement of adaptation finance, planning, implementation, monitoring, and reporting consistent with the United Nations Declaration on the Rights of Indigenous

Peoples. (IIPFCC non-paper 8—negotiating text, 26 November 2009) The focus of this critique is on Indigenous peoples acting in the capacity of governing authorities. This is an essential element in the development of an adaptation strategy.

Even if we have an international treaty and we all agree to do something, it will ultimately come down to what we do in our own backyard. Do we produce more carbon in our little backyard, or do we take action that promotes the sequestration of carbon? Do we use chemicals that continue to pollute the waters, or do we not use chemicals to pollute the waters? Do we establish procedures where we can specifically identify a single-source pollutant, or do we have to look around and establish a completely new system to find out multiple-source pollution? Can we apply this to each one of these eco-niches? Ultimately if we can, it could be far more effective than anything else.

Collaboration and the recognition of the essential benefits of subsistence and symbiotic earth/human relations must precede a treaty. We must recognize the practical circumstance: if we don't do something, our house will fill up with water, and trees will fall on us. One would hope tribes could succeed by collaborating with neighboring jurisdictions. Yet the problem is most neighboring jurisdictions (counties, states, etcetera) don't want to recognize that the tribal population has either the authority, right, or interest to act and collaborate. Tribal officials must work to change this political environment, and that is where dealing with the state, the

federal government and the international community becomes essential.

Between 1964 and 1984, many Indian leaders developed a real understanding of the importance of intergovernmental relationships. As Quinault leader Joe DeLaCruz famously said, "We aren't going away, and the state is not going away, so we better figure out a way to deal with the state and vice versa." That principle has held sway ever since. The impetus, though, for developing effective intergovernmental mechanisms simply hasn't fully developed. The consequence of that is that we have a lot of language that says, "We ought to be following a policy," but we don't do the hard work of creating the tools to implement the policy. That is what we have to be doing now because the practical reality is that failure to do so creates enormous problems with climate change. Because let's say Tribe A decided to develop a set of regulations and cultural standards that assert, "This is how we are going to deal with this particular problem, and these are the do's and don'ts." The state has not had that conversation with you, but it is separately developing [its] rules and regulations— they could be *simpático*, or they could be in conflict. Absent an intergovernmental framework for working out the differences between tribal and state rules and regulations on climate change, both governments face growing jurisdictional conflicts. Intertribal conflicts over regulations emerge as a possibility as well.

When tribal leaders negotiated the Centennial Accord with the Governor's Office of the state of Washington in 1989, we didn't create a framework for its onward operation; we just

laid out the principles of co-management of natural resources. Now, that was interesting and a valuable first step, but here we are many years later, and there is still no framework for working out fundamental intergovernmental conflicts over jurisdiction. As it turns out, there's equally no framework for tribal governments dealing with the United States either. We discussed developing a tripartite intergovernmental mechanism that involved tribes, the federal government, and the states when tribal governments sponsored a yearlong study by the Inter-tribal Study Group on Tribal-State Relations (Joe DeLaCruz, president of Quinault, and Russell Jim, councilman from Yakama, co-chaired). What that proposal would have initially required is the underlying tribal governmental structure that we now have with the self-governance mechanism negotiated through self-government compacts in 1990. So, it's now more possible to do a tripartite intergovernmental mechanism than it was in 1980 when the study group first developed the idea. I have a lot of optimism, but there isn't an awful lot of memory about how any of this works. Because we don't have the political leadership who has that historical memory, it's becoming incumbent upon some of us who do remember to try to remind people or let people know that this initial work has happened and the framework is there to create this mechanism. Northwest tribal governments have led on the formulation of new tribal-state-federal policy in many ways, in large measure because of the visionary leadership we had, including people like Joe DeLaCruz (Quinault), Lucy Covington, and Mel Tonasket (Colville Confederated Tribes), Bob Jim, Roger

Jim, and Russell Jim (Yakama Nation), Cal Peters (Squaxin Island), Sam Cagey (Lummi), Tandy Wilbur (Swinomish), and Joe Garry (Spokane).

A similar framework for intergovernmental relations has become essential at the international level as well. There is currently no such intergovernmental mechanism. Such a mechanism can facilitate negotiations and mediation between tribal governments and state governments over climate change policy or any other policy.



American Indians fishing. Photo: Russell Lee

Changes since the Boldt Decision

In the Northwest, we had a whole host of agreements between tribes in the late sixties and the seventies. The tribes frequently met en masse and discussed public policy and common threats and how they were going to deal with them. During that time, up into the eighties, we had political leaders who understood that the key issues were the protection of our land base, development of our tribal government, and preservation of our culture. The fourth issue was

treaty rights. Every issue that came to the table was about how we achieved those four things.

But, as we got through the federal court's Boldt Decision recognizing Washington tribes' treaty rights in 1974, we were increasingly asked to have technical people address various technical problems associated with fisheries management. The people of vision—the political leaders—stepped back. This led to more people who had managerial and technical knowledge at the table. Meetings were no longer about these four subjects; they were about things like, “How does a liver fall out of a fish, and how do we prevent that?” or “Is a hatchery better than wild fish?” and those kinds of questions. Biologists and engineers were talking, but most political leaders had no knowledge about what any of this really meant. It's not that they were ignorant; it just wasn't their area of expertise. Because these discussions and outcomes were never clearly linked back to the four major subjects, treaty rights, culture, strengthening tribal government, and affirming the land base as a matter of the tribal vision, it resulted in a schism between traditional knowledge, science, and political action that we are trying to mend.

As time went along, we ended up with a new generation of elected officials who were quite distant from those early mandates. Tribal vision as the defining force was set aside and replaced with efforts to mirror the behaviors of the United States. If the US had certain kinds of scientists, tribes had to have the same. Often, since the US paid for much of what tribal communities began to do technically, the capabilities became focused on duplicating US capabilities. It created a greater

distance between political leadership and the population with whom they were supposed to be identified. A language barrier evolved between the technical or official language and what people knew as the vision. The population, for a hundred years, understood treaty rights. They understood cultural development and preservation of culture. They understood land rights. These were ideas that people had become accustomed to thinking about. They increasingly understood the tribal government ideas of sovereignty and self-government, even though these ideas were often shrouded in official language. But the temperature of the water and the pH degrees of the soil...?—This language was obscure and unrelated to ordinary experience, and it excluded people. The efforts of earlier political leaders were about inclusion and not specialization that excluded the participation of whole parts of the Indian population.

After the Boldt Decision was finalized, we began to create a hybrid understanding of the relationship between European science and Native science. Nobody called the practical/everyday/integrated approach to things “Native science,” but that's what it is. And it did have an influence: Many of the political/cultural leaders would say, “The wild fish are the essential part of our understanding of good fish,” and a biologist would say, “Why would that be true?” Then, they would come up with a biological explanation of why whatever the leader said was true. Then, they could go to court, which is the motivation for doing this in the first place, and argue that you must have wild fish because of the biological argument. And we say, okay, that's fine, but what

that represented was an attempt at integrating Native science and Western science, so they could be used simultaneously.

The tribes in the Northwest began combining conventional science and Native science not only on fish but also in the Hanford nuclear waste cleanup efforts, involving the Yakama Nation, Umatilla, and Nez Perce, and the hydroelectric discussions about dams involving the Colville Confederated Tribes and the Lower Elwha Klallam. It isn't as if there has been a total separation—there just hasn't been a total integration of Native and Western science. The development of the climate change challenge and the need for an intergovernmental framework combined to make it necessary to integrate the two. That is the nature of the discussions the Quinault Indian nation has had with the United States on climate change. I expect it will take many more years before there is a full understanding and appreciation of how that intergovernmental process works. The Quinault government has a great deal of responsibility to demonstrate how it works. If we can show how the two sciences working together can function, then it becomes a case example of what the United States and other jurisdictions should apply to [their] adaptation needs.

International Climate Change Discussions

For the past several years at the international level, there has been a functional impasse between Indigenous peoples and the UN member states' governments. The states' governments have essentially placated Indigenous peoples

in a sustained attempt at relieving a political pressure valve [without] actually conced[ing] to Indigenous peoples' demands. The relationship between Indigenous peoples and state governments became stagnant. The Quinault government took a proactive approach to change the dynamics by offering itself as a governing authority instead of the usual approaches used by non-governmental organizations. To test out some potential solutions, we began discussions with selected states' government representatives directly, instead of meeting through UN organs and representatives. We discovered there was a considerable interest in an aggressive action on the part of Indigenous peoples to put recommendations and proposals on the table, acting as governing authorities with responsibilities similar to states' governments. The response was very different from what had been going on for many years. Indigenous peoples acting in the role of non-governmental organizations would approach UN member states' delegates and say, "Well, what are you going to do for me today?" And, of course, the states would say, "Talk to your own state because they represent you." Indigenous nations had classified themselves as non-governmental entities functioning within the context of "civil society." States' governments simply responded in a normal manner to representatives from within their states.

What we and the Quinault government discovered was that states' government officials would deal with Indigenous peoples if they saw them as governing authorities acting within a particular jurisdiction. An Indian

government with jurisdictional responsibilities and accountability to constituencies [was] understandable. Once an Indian government presented itself as an equal, the member states' governments began to say, "Yes, of course, we should be able to talk. Because you have regulations, and we have regulations, and you have rules, and we have rules, and you make laws, and we make laws, and we don't want to create problems for ourselves.... We ought to find a way to work together."

The Quinault government proposed the creation of the International Intergovernmental Contact Group on Climate Change, identified as the "Five States, Five Nations" solution. Basically, what the proposal provided was an integrated approach to addressing climate change and a focus for Indigenous peoples and state governments to deal with the proposals from the Indigenous table. The proposal was carried directly to individual states' governments. The position taken by virtually all Indigenous peoples' actors before this proposal was to present themselves as a civil society interest. As civil society participants in international meetings, Indigenous peoples or their organizations and communities took the position that they may advise on treaty language, but they cannot have a role in decision-making to settle the outcome.

The UN system is obligated to listen to civil society, and representatives of non-governmental organizations do get an opportunity to speak or submit a paper. But that doesn't guarantee that anything gets qualified as a part of the final decision. And as Indigenous peoples, there is no way to leverage influence to decide what is done.

First, Indigenous communities don't have enough people. The Indigenous population relative to the size of other populations is nil. One and seven-tenths percent of the total U.S. population is made up of more than 560 tribal communities, and either individually or collectively, these communities have no representatives in the Congress of the United States, no political tool other than the ability to lobby. So, if tribal communities want climate change legislation, they can offer a viewpoint, but they will have a tough time competing with the coal companies.

What we found with the Quinault leadership is that when Indian nations assert their governmental role, and they are prepared and willing to act as governing authorities (to not only impose but enforce their rules), then the other government representative on the other side of the table says, "I recognize what that is: that's the kind of thing we do."

International Rulemaking

In the spring of 2009, Indigenous delegations came together in Anchorage, Alaska, and at the end of several days of deliberation, participants issued a declaration. Contained in their declaration are a number of measures that were formulated into legal proposals that require ratification and approval of Indigenous peoples back home. That's what we ought to be doing if we are going to face up to the role of Indigenous peoples as parties to international rulemaking. Waiting to deliver a message to a panel of experts at the United Nations generates at least thirty years of possible discussion and maybe two sentences about something or other in a UN

convention somewhere. We don't have time like that.

Indigenous peoples have the ability that the UN system doesn't have if they would just take advantage of it. They don't have a lot of bureaucracy, so they can act more quickly on their own and establish rules, even if they can't get the UN member states' governments to agree to them now. We have to be aggressively advocating for ourselves. We have to aggressively promote, develop, and execute solutions. We can't ask somebody else who created the problem to come and solve our problem.

What we need to know from tribes is what you can do about the problems. And if you have a solution—tell us about it. If you have a proposal for steps to be taken—lay them out. We can work together to try to find a way to do that. Indigenous peoples are not homogeneous, and we are going to have different points of view; that should be accepted. The only reason we talk about having a unified position now is that member state governments demand it— that's the only reason. Offering a coherent policy or plan—even different policies and plans—can nevertheless produce important progress. Indeed, proffering policies and plans suitable for different ecosystems is essential for each nation.

Asserting Local Solution

How do we succeed amidst all the opposition, given that states, organizations, and corporations do not wish to accept the presence of Indigenous nations in the international dialogue? We set the schedule, we define the question and redefine it when necessary, and then we offer the solutions



Salish Indians in a canoe. Photo: Wellcome Library, London

and set about addressing them. We have had these successes in self-governance, child foster care laws, and housing—because the tribes pushed and created a little wave. They proactively set the agenda and said what must be done. They didn't say "We've got a housing problem; what do you think I ought to do?" No, they said, "Here is the solution to the housing market," and pushed it.

The same thing has been happening as we push forward on climate change. We are saying, "These are the things that have to be done. The ecosystem is really the focus." We can have a profound effect on climate change—far more significant than treaties or, frankly, state government legislation. All of the solutions are really at the ground level. Yes, you will have pipes spilling pollutants, but if you have pockets in the world that are actually getting cleaner and working better, tribal communities have the ability to survive. Once we can survive, then we can begin to deal with everybody else.

There should be thousands of agreements, and you cannot deal with Indian Country as

one country. It is more than 560 countries and even more. So we must deal with each one, and while it is the case that bureaucracy loves to have limited numbers, we are going to have to overcome and go past that. That means bypassing the bureaucracy to be able to address the practical reality that we have all these tribes, all these different ecosystems that need to be addressed, and they must be dealt with by the merits of each one.

Tribal communities are already making important and immediate changes. The Hoh on the Pacific west coast discovered they had to move their whole village to avoid the overwhelming floods that had been building for a hundred years. The Hoh government began that process in 2008. The Quinault observed that 60 yards of their beach has eroded, and the water is now 60 yards closer. That doesn't mean fifty years from now; it means we have less than five or ten years, and so the whole village of Taholah has to be moved, or new adaptation measures have to be developed. The first step is to establish the principles upon which a tribal community is going to operate. We may want to prioritize emergency services, hazard relief, the construction of buildings, public health, and food security. For example, how do we address the fact that berries are not there anymore and the deer aren't coming down close enough to catch them? These are the kinds of questions that tribal communities will need to ask. First, a preliminary assessment is required and then the commitment to conducting a lifeway risk assessment, which is an entirely locally focused review of all the different vulnerabilities. Only after taking these steps can

a community begin to identify ways to respond to vulnerabilities.

Native Science and the Failure of Carbon Trading

The European Union had quite a number of years of experience attempting to commodify carbon, and they found that it didn't really work when they used a cap-and-trade system. A lot of that had to do with the fact that they gave away a lot of permits, and a lot of companies made a lot of money off of those free permits. This has led to the conclusion that regarding the commodification of carbon and greenhouse gases, a straightforward taxation system is going to be necessary.

The identification of various forests for carbon sequestration as a part of the formulation of permit systems also has very serious problems because there are no consistent methods of measurement. The local rule of Indigenous peoples is ultimately going to have to be the solution, which is to say they define what is available.

This leads back to applying Native science to these kinds of problems. Conventional sciences have something to offer, and we can agree to that, but we must have reciprocity, and the states' governments must agree to accept the conclusions of Native science. We know that even the Western sciences aren't generally accepted. There has to be an agreement on the integration of these two bodies of knowledge so we can make some judgments. There is also a tendency to ignore the fact that Native sciences

are not absolute, which is to say they recognize variances that take place. The problem with a lot of Western science is that it's supposed to be absolute, and actually, it is conditional. Once the scientist has made the truth, then it's supposed to be the truth. Of course, we've discovered that that isn't altogether true. We need to accept the natural variances in how we measure things—it alters how we define the value of carbon in the forests or in the soil or in the ocean or wherever it is—we allow for changes to take place over time, we allow for the nonfinancial value of things, and that's where Native science allows you to step in. You can say that things are life-supporting in ways that have nothing to do with the medium of exchange and push for the definition of life values. I think “life values” is one of the things that Indigenous peoples can place on the negotiating table.

Native Advantages

There was a belief for a while that each tribe could act autonomously (with all of its resources) to achieve whatever it wanted, but on some issues like climate change that crosscut so many different areas of human concern, it is impossible to do that. Individual tribal communities can affect their own ecosystem and make internal decisions that have benefits, but how are they going to deal with somebody who is spewing smoke out 48 miles away and off your territory?

They have to coordinate their responses with other nations and apply the intergovernmental process as well. Tribes have experience with the intergovernmental process, and they don't fear it. We used to fear it, but we don't anymore.

Native societies have advantages by definition, not only here in the Northwest but everywhere. They have the benefit of broader resources, not only in terms of financial and institutional resources, but they also have technical personnel with enough experience. They can make quicker decisions (if they choose to do so) and recognize that they themselves could take the initiative and make decisions that would actually have effects. When they do make those decisions, they have ripple political effects on all other jurisdictions around them. Understanding that is crucial, and I think the tribes in the Northwest have demonstrated their understanding over the years. When they have taken the initiative, they have developed political leverage, proactively defined the agenda, and they have identified a process by which they will achieve a solution—and they proposed a solution that can be negotiated. The intergovernmental framework needed has yet to be developed, and when it is developed, it becomes possible for Indian nations to act as equal partners in the international dialogue to develop adaptation strategies and effect responses to climate change.

Originally published in:

Ryser, R. (2012). Current Responses. In Z. Grossman, & A. Parker (Eds.), *Asserting Native Resilience: Pacific Rim Indigenous Nations Face the Climate Crisis* (pp. 137-144). Oregon State University Press.

Reprinted with permission.