

‘Polishing the Kaswentha’: a Haudenosaunee view of environmental cooperation

James W. Ransom ^{a*}, Kreg T. Ettenger ^b

^a *Haudenosaunee Environmental Task Force, Via Box 366, Roosevelttown, NY 13683, USA*

^b *857 Westmoreland Avenue, Syracuse, NY 13210-2637, USA*

Abstract

Increasingly, Native American and non-Native governments, institutions and individuals are searching for cooperative ways to address environmental problems. While such approaches can offer substantial benefits over top-down or unilateral efforts, there are also potential pitfalls, especially when considering the needs and interests of the Native parties. Among these are threats to their status as sovereign nations, and to their political, economic and cultural autonomy. Given such concerns, many Indian Nations are seeking models for collaboration which protect their unique status based on indigenous and treaty rights, while respecting their cultural identity, values, and indigenous knowledge. In this paper we explore how one Native group in particular, a coalition of Haudenosaunee Nations in the US and Canada, has dealt with these complex issues. We show how positive relationships with outside agencies and researchers have been made possible through the use of mechanisms and processes based on traditional Haudenosaunee concepts and values. Finally, we explore how one item in particular, a 17th century treaty belt called the *Kaswentha*, offers a powerful symbol for forming relationships which respect Haudenosaunee autonomy while allowing collaborative partnerships to address critical environmental concerns. © 2001 Published by Elsevier Science Ltd.

Keywords: Native Americans; Treaty rights; Environmental collaboration; Sovereignty; Indigenous knowledge; Cultural values

1. Introduction

Native American Nations have been involved with cooperative approaches to environmental protection in a number of areas, including wildlife management, resource conservation, and environmental protection. In these efforts they have partnered with federal and state agencies, universities, not-for-profit organizations, and other Indian Nations, as well as various research consultants and other individuals. Through these partnerships, Native peoples have sometimes developed greater control over government policies while building their own internal capacities for environmental protection and natural resource management. Some projects have shown the value of indigenous knowledge (IK) as a tool for understanding the environment and sustainably managing natural resources; others have demonstrated the role that cultural values and traditions can

play in successful environmental partnerships (Kleymeyer, 1994).

At the same time, Native Americans have learned that entering into cooperative relationships can pose risks as well as producing benefits. For one thing, many so-called ‘collaborative’ institutions and processes do not truly respect and integrate indigenous knowledge and values. Emphasis on scientific validation and interpretation of local knowledge, for example, tends to remove such knowledge from its social and cultural context and can devalue local peoples’ contributions to environmental protection. Cooperative structures can also undermine Native peoples’ larger goals with respect to self-government, sovereignty and cultural survival. Institutions and processes based on western decision-making models may not adequately reflect indigenous models of problem solving, such as consensus-based forums. There is also a danger of diverting attention and resources from the process of building local capacity if cooperative or external bodies become the main mechanism for environmental protection. Finally, there is always the risk of improper appropri-

* Corresponding author.

E-mail addresses: ransom@m2000.net (J.W. Ransom), kreg.ettenger@excite.com (K.T. Ettenger).

tion and use of indigenous knowledge when it is removed from local institutions, which can have negative economic, cultural and political implications for indigenous peoples. Such pitfalls suggest to many Native groups that requests for *cooperation* by non-Native agencies and researchers may in fact lead to the *cooptation* of Native authority and identity (Lacy, 1985).

To help safeguard Indian Nations and other indigenous communities from such risks, and to enhance their role in local and regional environmental protection processes, several bodies have integrated IK and indigenous rights into international and national agreements and conventions. Notable among these are the Convention on Biological Diversity (UNEP 1992), and Agenda 21, Chapter 26 from the 1992 United Nations Conference on the Environment in Rio de Janeiro.

Similar statements are found in protocols for research in indigenous communities, including those developed by non-Native agencies (EPA, 2000), Native governments (NRI/ITC, 1998), regional, national and international indigenous organizations (SFIC, 1996; ICC, 1993, 1996) and academic and not-for-profit institutions (Grenier, 1998). These statements, agreements and protocols help define appropriate and meaningful relationships for cooperative environmental protection. Some even strive to protect indigenous rights with respect to sovereignty and cultural identity. Our purpose here is not to challenge these approaches, but to offer an additional perspective based on traditional Haudenosaunee beliefs and values regarding the nature of proper relationships between Native and non-Native parties working on environmental protection issues. By doing so, we hope to increase understanding of the social, cultural and political contexts surrounding Native approaches to cooperative institutions and processes.

2. Indigenous peoples, indigenous knowledge and environmental protection

Gro Harlem Brundtland remarked on the special status of indigenous peoples and their potential role in sustainable development in the report *Our Common Future* (WCED, 1987). As the report states, 'These communities are the repositories of vast accumulations of traditional knowledge and experience that links humanity with its ancient origins. Their disappearance is a loss for the larger society, which could learn a great deal from their traditional skills in sustainably managing very complex ecological systems' (pp.114–115). As much subsequent research has demonstrated, the body of knowledge and wisdom created through generations of living in a place and using its resources in a sustainable way is an invaluable resource when seeking solutions to modern environmental problems. Traditional

ecological knowledge, otherwise known as indigenous knowledge (IK), is a valuable tool that can help scientists and policy makers accomplish their environmental objectives, just as it has helped Native peoples survive for countless millenia in their respective environments.

There is growing international recognition that traditional knowledge is both scientific in nature and an invaluable resource for environmental protection. At the 1992 UN Conference on the Environment in Rio de Janeiro (the 'Earth Summit'), it was declared that 'Indigenous people and their communities have...developed over many generations a holistic traditional scientific knowledge of their lands, natural resources and environment' (Agenda 21, Chap. 26, sec. 1). Further, the Agenda called on national governments and NGOs to develop processes leading to greater empowerment of indigenous peoples through recognition of their 'values, traditional knowledge and resource management practices'; and through 'capacity-building...based on the adaptation and exchange of traditional experience, knowledge and resource-management practices.' In a similar vein, the Convention on Biological Diversity called on its signatories to 'respect, preserve and maintain knowledge, innovations, and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity' (UNEP, 1992, Article 8j).

In the United States and Canada, indigenous communities have undergone significant changes as a result of long-term social and economic pressures, cultural assimilation, and forced destruction of their language, customs, and religious beliefs. Nevertheless, many Indian Nations have survived these changes, and some have even entered a new age of prosperity thanks to revenue from gambling and other forms of development. A few Nations, either through geographic isolation or their own careful protection of their physical and cultural boundaries, have managed to retain important elements of their social and cultural identities over the centuries. This often includes their traditional ecological knowledge, as well as the ethical values that help them to protect and manage their natural resources. As the threats to their environments have increased due to neighboring development and industrialization, however, many Nations find that their traditional knowledge and practices are being pushed to their limits, and in some cases cannot compete with external pollution and other pressures.

For such communities, it is sometimes advantageous to form relationships with non-Native government agencies, universities, non-government organizations, and other groups or individuals who share their concerns about environmental protection and restoration. Such partnerships often make it possible to respond more effectively to modern environmental problems,

especially those which pose clear and immediate threats to human health. Federal and state agencies often have the funds, technical skills, and equipment needed to address immediate problems, while universities and other institutions possess the research facilities, personnel and experience to deal with long-term issues, such as assessing the health effects of toxic contaminants. Other groups and individuals may be able to offer information, education, funding, political support, and other tools necessary for solving environmental problems that affect Native American Nations. For their part, the Nations generally possess detailed ecological knowledge and histories of their territories which can prove vital in identifying and responding to environmental problems. Many also now have offices, policies, and trained staff to develop and implement environmental programs.

The challenge is in finding practical ways to blend the knowledge, skills and other resources of Indian Nations and non-Native institutions to solve important environmental problems. The partnerships created must, according to Native standards and principles, raise the value of indigenous knowledge and give it recognition and respect as a science of Native peoples. They must also recognize the equity that aboriginal peoples can bring to the environmental protection process. They must empower Native peoples while improving the prospects for sustained environmental protection by providing other resources, tools and perspectives. They must respect the special status of Native Americans vis-à-vis outside governments and institutions, which means supporting treaty rights, indigenous rights, and political sovereignty. Finally, they should reflect the fact that Native American Nations are each unique entities, with specific historical, social, economic and cultural contexts. This is perhaps particularly important when working with traditional Native governments, which unlike elected tribal governments retain their 'pre-European patterns of organization and may have little or no contact with the United States' (Jarding, 1999, p. 224). This applies to several of the Haudenosaunee Nations, including those that work most directly with the Haudenosaunee Environmental Task Force, as described below.

3. The Haudenosaunee Nations

The Haudenosaunee (People of the Longhouse), sometimes referred to as the Iroquois or Six Nations Confederacy, is one of the oldest Native American groups in North America. It was created hundreds of years ago by five linguistically-related Nations in the eastern Great Lakes region: the Mohawks, Oneidas, Onondagas, Cayugas, and Senecas. In the early 1700s, the Tuscaroras became the sixth Nation of the Confed-

eracy. Today, the Haudenosaunee live in fifteen communities. The Mohawk Nation, or People of the Flint, are located in New York State, Ontario, and Quebec, and its Council fire resides at Akwesasne. The Oneida Nation, or People of the Standing Stone, are located in New York State, Wisconsin and Ontario. The Onondagas are located in central New York State and Ontario. The Cayuga Nation has no land base of its own, but the Cayuga people make their home amongst the other Nations of the Haudenosaunee. The Tuscaroras are less known to Haudenosaunee history. They are located in western New York State and Ontario. The Senecas are located in western New York State, Oklahoma, and Ontario.

In spite of the long-term influence of non-Native governments and society, the Haudenosaunee Nations retain many aspects of their traditional social structures and cultural elements. Several still maintain their traditional (non-elected) governments based on matrilineal clan representation through hereditary clan mothers and appointed chiefs. Even within those Nations with elected tribal governments, there are strong traditional factions which continue to support the laws and practices of the Haudenosaunee Confederacy, including the Great Law of Peace. It is this aspect of contemporary Haudenosaunee society which leads such communities to search for models of interaction which reflect traditional ideals and values, including such concepts as peace, harmony, and mutual respect. These are the concepts on which the Haudenosaunee Confederacy was founded, and which have guided it through the ages in its relationships with other nations, both Native and non-Native. We suggest that these concepts should also apply to models of environmental cooperation between the Haudenosaunee and government agencies or other non-Native institutions.

The Constitution of the Haudenosaunee Confederacy is the *Kaianeraserakowa* or 'Great Law of Peace'. Based on the principle of strength through union, this legal and spiritual document created a representative government of the Haudenosaunee people, with checks and balances, which preceded the US Constitution by centuries. In 1987, the US Senate even passed a resolution acknowledging the contributions of the Haudenosaunee to the development of the United States Constitution. In particular, the Resolution cites the concepts, principles, and governmental practices of the Haudenosaunee. As with treaties and other important documents, the Great Law of Peace was recorded by the Haudenosaunee on a series of wampum belts, mnemonic devices consisting of shell beads sewn on cloth or animal hide. Some of these belts still survive and are powerful symbols of the strength, complexity, and perseverance of the Haudenosaunee Confederacy.

4. The *Kaswentha*: a symbol of mutual respect and cooperation

The *Kaswentha* (pronounced Gus-wén-ta) is a treaty belt created in the 17th century to record an agreement between the Haudenosaunee Confederacy and Dutch settlers in eastern New York. Also known as the Two-Row Wampum, the belt consists of alternating rows of purple and white wampum running the length of the belt. The two purple rows symbolize two vessels traveling the river of life together, side-by-side. One vessel, a ship, is for the Dutch. The other vessel, a birch bark canoe, is for the Haudenosaunee. Inside each vessel is what defines it as a society — its customs, laws and way of life. The three white rows, which both separate and surround the vessels, symbolize the Haudenosaunee principles of *skennen* (peace), *kariwiio* (good mind), and *kasastensera* (strength).

The Two-Row Wampum Treaty, which the *Kaswentha* documents, is a mutual recognition by the treaty signatories that their two societies are distinct and should remain so, as symbolized by the ship and the canoe. These vessels are meant to travel the river of life together, side-by-side, but with each people in their own vessel. Native and non-Native peoples are to help each other from time to time, as people are meant to do, and their respective knowledge systems, or sciences, are tools to be used in this partnership. The Two-Row Wampum Treaty therefore calls for cooperation to serve common interests even as it recognizes the vast differences between the two parties in the treaty, and their inherent right to sovereignty in their own affairs.

As in the past, when our two societies would come together to face a common enemy or scourge, the key to success in forming partnerships lies in focusing on the river that we travel, not on the vessels and their differences. With respect to contemporary environmental problems, the *Kaswentha* provides a useful and powerful image for partnerships based on protection of the natural world. Both Native (canoe) and non-Native (ship) societies share a clear common interest in protecting and restoring the environment for present and future generations. From the Haudenosaunee perspective, this means bringing out the Two-Row Wampum Treaty belt and polishing it, an act which both preserves the object and reminds us of its continued relevance to Native affairs. In the next section, we show how this act of ‘polishing’ the *Kaswentha* applies to environmental policy. Specifically, we describe some cooperative structures and processes which respect Haudenosaunee sovereignty and cultural identity while responding effectively to critical environmental problems. Our examples include (1) a regional organization representing traditional Haudenosaunee Nations on environmental issues; (2) an action plan for environmental restoration; (3) a proposal to create culturally-based

environmental protection processes; and (4) guidelines for environmental research in Haudenosaunee territories.

4.1. The Haudenosaunee Environmental Task Force (HETF)

The Haudenosaunee Environmental Task Force (HETF) is a regional organization composed of delegates from Haudenosaunee communities in New York State and the Canadian provinces of Quebec and Ontario. Since its founding in the early 1990s, HETF has become a major coordinating body for environmental issues affecting the Haudenosaunee Nations. Its primary responsibility is to those Nations with traditional clan-based leadership, which HETF assists by organizing staff training, obtaining and managing funding, and otherwise helping them develop local environmental capacity and programs. HETF members meet on a regular basis, usually at the Onondaga Nation, the traditional center of the Haudenosaunee Confederacy. Decisions are reached using a consensus-based approach which reflects the structure of the traditional Grand Council.

In terms of the Two-Row Wampum model, HETF helps to develop cooperative arrangements with outside agencies, researchers, and funding institutions. In some ways this role is similar to that of the original Confederacy: to strengthen the Haudenosaunee Nations in their dealings with outsiders by providing a unified voice. In practical terms, HETF reviews all proposals by outside agencies, institutions, and individuals wishing to collaborate with one or more of the Haudenosaunee Nations on environmental research or protection projects. The benefits of this review process are substantial: stronger local control over projects and their outcome; more comprehensive analysis of the costs and benefits of individual projects; greater coordination of work at the regional level; and greater opportunities for consensus-building between communities. It also allows outsiders to increase their knowledge of Haudenosaunee culture, history and protocol before entering into relationships with individual Nations. All of these functions aid in the development of collaborative partnerships which respect and support Haudenosaunee sovereignty and cultural identity while addressing critical environmental problems.

4.2. The Haudenosaunee Environmental Restoration Plan

In 1992, the Haudenosaunee sent a delegation to the United Nations Earth Summit in Rio de Janeiro, Brazil to spread the words of the Thanksgiving Address, the philosophy of the Haudenosaunee. The United Nations Environment Program (UNEP) responded to a specific

appeal made by the Haudenosaunee at this gathering to assist in the exploration of environmental hazards in their territories with the intent of formulating a strategy for the restoration of native lands. UNEP encouraged the Haudenosaunee to identify for themselves critical issues, evaluate these on the basis of available science and research, and formulate a plan of action which UNEP would consider and assist in its implementation. The product of this effort was the *Haudenosaunee Environmental Restoration Plan: An Indigenous Strategy for Human Sustainability* (Annunziata et al., 1995). In July of 1995, the Haudenosaunee presented this document to the United Nations at the Summit of the Elders.

A significant aspect of the report is that the Haudenosaunee (the canoe) developed their own strategy for action, with support and encouragement from the United Nations (the ship). The report describes the environmental challenges facing the Haudenosaunee Nations and the values and principles that underlie traditional responses to these challenges. Included in the Plan are Haudenosaunee perspectives on relationships with outside researchers and institutions working on environmental protection and restoration. The following principles, expressed in the report (pp. 4–5), relate specifically to the type of collaborative relationships that the Haudenosaunee Nations support:

Any project dealing with environmental pollution in indigenous territories must recognize and cooperate fully with the affected indigenous residents and community, and in the process show due respect to indigenous culture and tradition.

Councils of individual Nations of the Haudenosaunee must play a primary role in the restoration and development process on indigenous lands. Partnership and collaboration are essential in redressing environmental disasters.

Haudenosaunee have a fundamental right and responsibility to participate in policy and decision-making processes affecting any aspect of the environment impacting on their territories. Haudenosaunee should have a respected voice and more influence regarding these environmental issues.

As sovereign governments, the Haudenosaunee have complete jurisdiction over native territories. The Haudenosaunee jurisdiction should extend cooperatively to the surrounding areas that impact the ecosystem of the native territories.

Fundamental human rights and intellectual property rights of the Haudenosaunee people must be protected.

These statements suggest a dual emphasis, with Haudenosaunee sovereignty and identity concerns balanced by a willingness to cooperate with outside communities and governments to solve common problems. This reflects the fundamental concept of the *Kaswentha* — the ability to preserve one's identity and autonomy while working with allies in response to common interests.

4.3. Creation of a Haudenosaunee environmental protection process

HETF is currently engaged in developing a culturally-based set of standards and processes for environmental protection (Ransom, 1999). Using this approach, the Haudenosaunee Confederacy would develop its own modern-day culturally based environmental protection processes on the basis of indigenous laws, knowledge and values. In addition to being culturally relevant, this process would reinforce the sovereign status of the Haudenosaunee Nations by asserting certain indigenous and treaty rights, such as the ability to require environmental assessments and permits for activities on the territories.

The process would incorporate key principles found in traditional Haudenosaunee teachings such as the *Deihaenihyawaikhon* (Myth of the Earth Grasper), the Haudenosaunee Creation Story; the *Kaianeraserakowa* (Great Law of Peace); the *Ohen:ton Karihwaterhkwen* (Words That Come Before All Else, or Thanksgiving Address); the *Kariwio* (The Good Word); and the *Kaswentha*. Together, these cultural legacies form the backbone of Haudenosaunee traditional law and ecological knowledge, and provide an excellent foundation on which to build a culturally based environmental protection process. They allow for the development of community environmental processes to protect traditional ways of life, the natural world, and future generations while being consistent with the sovereignty of the Haudenosaunee.

As part of this process, both Haudenosaunee tenets and doctrines and federal laws would be assessed to compare how each would approach environmental protection. The purpose is to identify common ground between the two systems, focusing on identifying a bridge between the 'canoe' and the 'ship'. In other words, once there is clear internal consensus about how environmental programs and standards should be based on and support Haudenosaunee cultural values and sovereignty, then there can be dialogue regarding the proper relationship between Haudenosaunee Nations and outside agencies. This process reflects the symbolism of the *Kaswentha* in that respect for Haudenosaunee culture and autonomy is preeminent, while cross-cultural relations are contingent upon this condition.

4.4. ATFE protocol for review of environmental research proposals

The Akwesasne Task Force on the Environment (ATFE) was established in 1987 in response to local concern about the health and ecological effects of industrial pollution near the Akwesasne Mohawk Nation. Following a flood of requests from researchers to work with the Nation, ATFE published a set of requirements for scientists wishing to engage in research on the territory (ATFE, 1996). The protocol emphasizes full disclosure of objectives, methodology, and funding sources; true collaboration with the community; clear benefits to the Nation; local ownership of data; protection of intellectual property rights; empowerment of local residents through hiring and training; fair compensation for assistance; and an ongoing review process that assures local control over the research process and dissemination of findings. In addition, the ATFE protocol identifies 'guiding principles' built around the concepts of *skennen* (peace), *kariwiio* (good word) and *kasastensera* (strength). By following these principles, researchers and community members can 'channel the inherent good will of humans to work towards peace, justice and unity to prevent the abuse of human being and mother earth' (ATFE, 1996, p.1).

In practical terms, the ATFE research protocol provides detailed explanations of what the community expects from both researchers and research projects. This includes the creation of a 'Good Research Agreement', one which 'promotes collaboration within a framework of mutual trust and cooperation' and which ensures 'that studies proceed in a manner that is culturally sensitive, relevant and beneficial to the participants and community of Akwesasne'. Other terms defined in the protocol include 'empowerment', 'equity', and 'respect'. Such definitions make clear the expectations of ATFE and HETF (which supports the protocol) for those wishing to collaborate on environmental projects. While the protocol is similar to others developed in recent years (e.g. American Indian Law Center, 1994; Mihesuah, 1993), there are clear references to Haudenosaunee concepts that form the basis for decision-making within the Confederacy. In other words, outsiders wishing to work with Haudenosaunee Nations must accommodate and abide by indigenous institutions and customs. At the same time, the protocol recognizes the needs of the researcher and emphasizes cooperation and consensus between the researcher and the community.

5. Partnerships in practice: relicensing the St. Lawrence–FDR Power Project

To demonstrate the practical application of Hau-

denosaunee concepts such as those embodied in the *Kaswentha*, we will use a recent example from the Akwesasne Mohawk Nation. Residents of the Nation, located along the St. Lawrence River near Massena, New York and Cornwall, Ontario, have been exposed to high levels of PCBs, heavy metals and other contaminants from an automotive parts plant, a paper mill, and other heavy industries near the territory. In addition, Akwesasne was severely impacted by the St. Lawrence–FDR Power Plant, the US part of an international hydroelectric facility on the St. Lawrence River just a few miles upstream from the Akwesasne Mohawk Territory. Besides reducing local fish stocks in the river, the power plant fueled industrialization in the region, leading to major environmental and health impacts.

For several years, Akwesasne has been involved with the federal relicensing process for the power plant. The original permit expires in 2003, and relicensing by the US Federal Energy Regulatory Commission (FERC, 1997) requires both an environmental impact study and a New York State water quality certificate to assure the plant is meeting current standards. As the first community downstream from the project, Akwesasne will play an important role in helping to determine whether the plant will receive renewed federal authorization, be decommissioned, or be required to make changes in order to continue operating.

Initial involvement in the relicensing process came when the New York Power Authority (NYPA), which owns and operates the plant, invited Akwesasne leaders to take part in a 'Cooperative Consultation Process' (CCP). The St. Lawrence–FDR CCP included over one hundred representatives from local and regional (non-Native) governments, natural resource agencies, non-governmental organizations, and the general public. Unfortunately, there was no recognition in the CCP of the special status accorded to Indian Nations as the result of their sovereign relations with the federal government, or based on treaty rights. Instead, the governments (authority in Akwesasne is shared between three different Councils) and residents of Akwesasne were simply seen as another 'community group' or 'interested party', with no more stake in the issue of relicensing than any other community or organization in the region. Furthermore, as the Mohawk governments argued, Akwesasne had been impacted by the power project to a far greater degree than any other community, due both to its proximity and to the fact that traditional subsistence activities like fishing had been drastically affected by the project. For these reasons, the people of Akwesasne chose not to participate in the CCP. Instead, they insisted on a process that respected the inherent sovereignty of the Akwesasne Mohawks and which better reflected the social and cultural values of the community.

NYPA was therefore asked to cooperatively engage in a parallel consultation process for Akwesasne based on the model of the Two-Row Wampum Belt. After two years of negotiation, in early 1997, NYPA agreed to the parallel process. Over the next four years, substantial accomplishments were achieved by the Mohawk governments. NYPA provided funding to the Mohawk governments to develop issues for the scoping document for the project. In three months, working together, the Mohawk Councils accomplished what had taken the CCP Team one year to accomplish. In the official Scoping Document (p. B54-63), the Akwesasne Mohawk issues and concerns about relicensing the project are presented in their own words (i.e. the canoe's perspective). All other issues are presented in the standard format of the CCP (the ship's perspective).

A public hearing was then held at Akwesasne as part of the review of the Scoping Document. There were more presenters at the Akwesasne hearing than at the other two hearings for the project combined. In addition, a Mohawk Working Group was established to guide the collection of further testimony from Akwesasne residents regarding the cultural and environmental impacts of the St. Lawrence–FDR Power Project, using the Thanksgiving Address as a guide in these efforts. In all of these activities, the focus was on the river itself, not on the two sides in the dispute. In other words, the process that Akwesasne chose reflected the model offered by the *Kaswentha*, where cultural differences are set aside in order to solve a common problem. In this case, the common interest was the need to protect and restore the St. Lawrence River by undoing some of the damage done by the original St. Lawrence–FDR Power Project.

6. Cultural barriers to true collaboration: the question of local knowledge

The cooperative approach developed in response to Akwesasne's concerns about the St. Lawrence–FDR relicensing process was a step in the right direction. But like many attempts at collaboration, it was not without its problems, showing how scientific and cultural biases of non-Native participants can sometimes interfere with true partnerships. During the local review of research conducted on the impacts from the project, for example, past interviews of Akwesasne Mohawk elders were reviewed. One elder's transcript revealed that he remembered barges coming down the St. Lawrence River at night and dumping dredged material on top of his father's night fishing lines during the late 1950s. This information was provided to the consultants working for FERC. Their response was shocking. They determined that the traditional knowledge of this elder, because it was orally provided, was only an 'allegation',

not a fact. It was therefore deemed to be unusable in the review of the project's impacts.

Unsatisfied with this response, the community itself conducted further research, finally uncovering a 1952 map from the New York Power Authority. The map clearly indicated that there was to be a disposal area in the St. Lawrence River at almost the exact location the elder had identified when recalling the barges dumping their materials. Suddenly, the 'allegation' became fact. The printed map, the science of non-Native society, carried more weight than the science of Native society, the oral knowledge of the elders.

Such bias reflects one of the fundamental flaws in many models of cooperation: the tendency to view indigenous knowledge as anecdotal, unreliable, or 'unscientific'. Even if there are mechanisms in place for collecting IK for the purpose of environmental protection, this is often done in a way which suggests that, unless such knowledge can be 'documented' (i.e. proven according to the standards of western scientific testing), it is invalid. From a Native American perspective, there is a fundamental flaw in models that focus mainly or exclusively on scientific interpretation of local knowledge, even if the ultimate purpose is to benefit Native communities. Such processes permit western-trained scientists to draw conclusions about indigenous knowledge systems based upon their own cultural experiences and frames of references, rather than those of the community or culture that holds that particular body of knowledge.

While cultures and institutions must adapt to changing conditions, one system of knowledge should not subsume another, just as one culture must not subsume the other. Applying local and scientific knowledge to environmental problems therefore requires that methods be found that protect the sovereignty and autonomy of each society (the ship and canoe) while allowing for the sharing of information and ideas and the creation of mutually acceptable solutions. This is easier said than done, however. Differences in worldview, in decision-making styles, and in institutional structures can lead to tension between participants, or to dominance of one paradigm over another. More often than not, indigenous institutions and processes are relegated to secondary status in this relationship. Western science and decision-making processes tend to hold sway, due to deference to presumed superiority, or to unequal power relations grounded in historical, political, legal, financial or other factors. Sometimes it is simply a matter of convenience, since the language of western science and policy is often spoken quite easily by Native participants in cooperative structures and research partnerships. In other words, the canoe understands the ship, but not the other way around.

According to Haudenosaunee tradition, indigenous knowledge and western science are analogous tools

developed and used by their respective societies. The former is used by Native people to help them fulfill their responsibilities given to them by the Creator. It is their science, and part of how the canoe navigates the river. Western science is the tool used by the environmental agencies responsible for achieving the goals of the ship. It is how the ship navigates the river. Furthermore, the Haudenosaunee believe that their indigenous knowledge cannot be properly understood without discussing the other elements of their culture, because Native culture is built on the interrelationship between all of its elements. Indigenous knowledge works with the other elements, not isolated from them.

From this perspective, there is a strong link between collaborative processes that protect indigenous knowledge and those that respect Native American sovereignty. Protecting rights to and control over local knowledge is one way to help guarantee that Indian Nations maintain their cultural identity, social integrity, and political autonomy. For this reason many Indian Nations, including the Haudenosaunee, are working to develop models that encourage strong local control over the way indigenous knowledge is interpreted, used and managed. This can be difficult to achieve, however, when working with scientists, agencies and research institutions whose approaches to data collection and analysis are based firmly on western standards. Convincing such partners of the need to consider issues of Native political sovereignty and cultural identity in their research and/or policy agendas can be a challenging and frustrating task for Native peoples.

While outside institutions work to improve their policies to more clearly reflect Native cultural and political rights, Indian Nations themselves can play a major role in creating empowering partnerships. By developing strong indigenous institutions and processes based on cultural values and traditional law and knowledge, Indian nations can essentially set their own terms for relationships with outsiders, which in the end is an assertion of their sovereign status. As the Onondaga artist and faithkeeper Oren Lyons has noted (Lyons, 1980, p. 171), 'The action of a people in a territory, the ability and willingness of a people to defend that territory, and the recognition of that ability by other nations: that's a definition of the practical application of sovereignty. It's very simple'. This is the philosophy behind many Native efforts to codify their goals with respect to environmental protection and partnerships.

7. Some practical implications for environmental policy

Applying the lessons of the *Kaswentha* to environmental policy requires that some accommodations and

adjustments be made in the way that agencies work with Indian Nations. For example, funding requirements that specify that monies be distributed to individual Nations may need modification to allow for working with regional tribal consortia or, in cases like the Haudenosaunee, pre-existing Confederacies. The US Environmental Protection Agency has undertaken just such an effort as evidenced by a recently revised definition of 'Intertribal Consortium' for General Assistance Program (GAP) grants. The definition (Anonymous, 2001) now states: 'an Intertribal Consortium will be eligible if...a majority of the Consortium's members meet the eligibility requirements for the grant'. The old definition, in contrast, had required that all of the members of a consortium be federally recognized tribes. This made indigenous organizations like HETF ineligible for funding, at least in principle, since several of the communities represented on the Task Force do not have official federal status as tribes, including those from Canada.

Another example of a Native American coalition struggling with current federal policy comes from the northern and central plains. The Mni Sose Intertribal Water Rights Coalition, a consortium of over two dozen Indian nations located along the Missouri River and its tributaries, has identified several major flaws in current federal and state policies (MSIWRC, 1997, pp. 5–7). These include the fact that state and federal policies largely exclude tribes from management of the Missouri River, while the 'complex infrastructure' of federal agencies makes it difficult for tribes to even negotiate the relevant bureaucracies. In addition, current state and federal laws are seen as 'extremely threatening to tribal sovereignty', according to the Coalition. Currently, tribes are charged with implementing federal regulations with neither sufficient funding to support them nor the skills to carry them out. If they cannot meet the requirements, they are subject to imposed standards and codes from state and federal agencies.

In response to this threat to their sovereignty, Mni Sose has developed an indigenous 'model code' for water management that would allow individual tribes to develop their own water laws, supplanting the current state and federal laws that restrict Indian development and conservation activities. Like HETF's culturally based environmental protection processes, these tribal water codes are based on respect for both indigenous knowledge and the laws of outside governments, at least where these are compatible. The resource use and management strategies thus established 'fit within the framework of state, federal, and tribal laws, eliminating the need for costly litigation' (MSIWRC, 1997, p. 7).

Clearly, the Haudenosaunee are not the only Native Nations interested in developing environmental codes

and standards that respect indigenous knowledge and Native sovereignty; incorporate relevant information and technology from outside sources; and integrate effectively with external institutions and processes. The challenge from a policy perspective is in finding ways to support such indigenous efforts without imposing unnecessary, restrictive, and ultimately self-defeating rules and expectations on Native peoples. There must be sufficient flexibility in the administration of state and federal regulations to allow for individual Nations to develop and implement culturally based approaches to environmental protection and restoration. While many Indian Nations share certain concerns and objectives, each has a different culture, history, and modern context which shapes its perspectives and responses to environmental concerns. Respecting the cultural uniqueness and political autonomy of individual Nations is essential for fostering well-designed and locally implementable solutions.

Finally, policies must be designed in ways that place tribal sovereignty as a priority, not an afterthought. Recent legal decisions with respect to water rights suggest that this is possible, and that courts may be willing to protect Native sovereignty even when it imposes restrictions on non-Native governments (Williams and Montoya-Lewis, 2000). In terms of regulatory agencies, there also seems to be movement toward greater respect for tribal sovereignty, at least on paper. A recent *Executive Order on Consultation with Indian Tribal Governments* (Clinton, 1998, Sec. 2) stated: 'In formulating policies significantly or uniquely affecting Indian tribal governments, agencies shall be guided, to the extent permitted by law, by principles of respect for Indian tribal self-government and sovereignty, for tribal treaty and other rights, and for responsibilities that arise from the unique legal relationship between the Federal Government and Indian tribal governments'. An even more recent Executive Order (Clinton, 2000, Sec. 3 [c]) further strengthened and clarified these terms, respecting an even greater level of authority and autonomy on the part of the Nations: 'When undertaking to formulate and implement policies that have tribal implications, agencies shall: (1) encourage Indian tribes to develop their own policies to achieve program objectives; (2) where possible, defer to Indian tribes to establish standards; and (3) in determining whether to establish Federal standards, consult with tribal officials as to the need for Federal standards and any alternatives that would limit the scope of Federal standards or otherwise preserve the prerogatives and authority of Indian tribes'. For their part, agencies like the EPA have demonstrated a certain willingness to make allowances for the needs and concerns of Indian Nations, at least on a limited basis, and current discussions suggest that this trend will increase (EPA, 1998, 2000).

8. Conclusions and recommendations

The Two-Row Wampum Treaty is a mutual recognition on the part of the two signatories that they represent two different societies. For their part, Native peoples have an inherent respect for the natural world. Their traditional subsistence activities, still practiced by many today, rely on a healthy environment because the natural world serves as their primary food source. If the environment is not healthy, the natural world cannot fulfill its responsibilities as given to it by the Creator. People in turn suffer, as their sources of nourishment are contaminated. Thus, it is everyone's responsibility to restore and maintain the physical, biological, and spiritual integrity of the natural world. Federal and state environmental agencies, for their part, are given the responsibility by their respective governments to carry out a similar task. Thus, on the surface, there is a common interest between the federal and state agencies and Tribes/Nations in restoring and protecting the natural world for future generations. This common interest has the potential to serve as the basis for cooperation, for effective partnerships to occur.

The greatest challenge for Native Nations and those who wish to work with them on environmental issues is how to establish partnerships that respect each side's needs and interests while allowing for a two-way flow of information, ideas and assistance. We therefore offer the following recommendations:

1. Both parties should enter into a Memorandum of Agreement or other instrument. This would be akin to taking out the *Kaswentha* or Two-Row Wampum Treaty belt and polishing it;
2. This Memorandum of Agreement or similar instrument should enshrine the principles of *skennen* (peace), *kariwiio* (good mind), and *kasastensera* (strength);
3. The common interest in protecting the environment should serve as the basis for entering the partnership;
4. The partnership should reflect the language of the Convention on Biological Diversity, especially Article 8(j), which states the importance of:
 - 4.1. preserving traditional knowledge and promoting its wider application;
 - 4.2. involving Native people in meaningful ways within the environmental protection process; and
 - 4.3. equitably sharing the benefits arising from the use of traditional knowledge; and
5. The partnership should include provisions for cultural sensitivity training of the non-Native partners so they can better understand the perspective of the Native partner (the canoe).

The *Kaswentha*, or Two-Row Wampum Belt, provides a powerful image to hold while building such

relationships and working to solve common problems. The Belt commemorates an historical agreement which recognized and defined the relationship between two distinct societies which nevertheless saw the value in maintaining peaceful relations. The *Kaswentha* therefore offers an approach to collaborative environmental protection based on a relationship of mutual respect and cooperation, and the desire to work together to solve commonly held problems.

References

- American Indian Law Center, 1994. The Model Tribal Research Code: With Materials for Tribal Regulation for Research and Checklist for Indian Health Boards. American Indian Law Center, Albuquerque, NM.
- Anunziata, J.W., and the Haudenosaunee Environmental Task Force, 1995. Haudenosaunee Environmental Restoration: An Indigenous Strategy for Human Sustainability. Indigenous Development International, Cambridge.
- Anonymous, 2001. Environmental Program Grants for Tribes: Final Rule. Federal Register, January 16, 2001, Volume 66, Number 10, 3784.
- ATFE, 1996. Protocol for Review of Environmental and Scientific Research Proposals. Akwesasne Task Force on the Environment, Hogansburg, NY.
- Clinton, W.J., 1998. Executive Order 13084 of May 14, 1998, Federal Register (Presidential Documents), May 19, 1998, Volume 63, Number 96, 27655–27657, Washington, DC.
- Clinton, W.J., 2000. Executive Order: Consultation and Coordination with Indian Tribal Governments. Press Release dated November 6, 2000, Office of the Press Secretary, The White House, Washington, DC.
- EPA, 1998. Protecting Public Health and Water Resources in Indian Country: A Strategy for EPA/Tribal Partnerships. United States Environmental Protection Agency, Washington, DC.
- EPA, 2000. Working Draft Guide on Consultation and Collaboration with Indian Governments and the Public Participation of Indigenous Groups. United States Environmental Protection Agency, Washington, DC.
- FERC, 1997. Scoping Document for Relicensing the St. Lawrence-FDR Power Project (FERC No. 2000-010). Ecological Issue No. 20, B-54-63. Federal Energy Regulatory Commission, Washington, DC.
- Grenier, L., 1998. Working with Indigenous Knowledge: A Guide for Researchers. International Development Research Centre, Ottawa, Canada.
- ICC, 1993. The Participation of Indigenous Peoples and the Application of their Environmental and Ecological Knowledge in the Arctic Environmental Protection Strategy: A Selective and Annotated Bibliography, vol. 2. Inuit Circumpolar Conference, Ottawa, Canada.
- ICC, 1996. Recommendations on the Integration of Two Ways of Knowing: Traditional Indigenous Knowledge and Scientific Knowledge. Inuit Circumpolar Conference, Ottawa, Canada.
- Jarding, L.J., 1999. The Department of the Interior's appeals process and Native American natural resource policy, 1970–94. *Policy Studies Journal* 27 (2), 217–241.
- Kleymeyer, C.D., 1994. Cultural traditions and community-based conservation. In: Western, D., Wright, R.M. (Eds.), *Natural Connections: Perspectives in Community-Based Conservation*. Island Press, Covelo, CA, pp. 323–346.
- Lacy, M.G., 1985. The United States and American Indians: political relations. In: Deloria, V. Jr. (Ed.), *American Indian Policy in the Twentieth Century*. University of Oklahoma, Norman, OK.
- Lyons, O., 1980. An Iroquois perspective. In: Vecsey, C., Venables, R.W. (Eds.), *American Indian Environments: Ecological Issues in Native American History*. Syracuse University Press, Syracuse, NY.
- Mihesuah, D., 1993. Suggested guidelines for institutions with scholars who conduct research on American Indians. *American Indian Culture and Research Journal* 17 (3), 131–139.
- MSIWRC, 1997. Briefing Document on the Mni Sose Intertribal Water Rights Coalition, Inc. Mni Sose Intertribal Water Rights Coalition, Rapid City, SD.
- NRI/ITC, 1998. Negotiating Research Relationships: A Guide for Communities. Nunavut Research Institute/Inuit Tapirisat of Canada, Ottawa, Canada.
- Ransom, J., 1999. Creation of a Haudenosaunee Environmental Standard: Proposal to the Administration for Native Americans. Haudenosaunee Environmental Task Force, Rooseveltown, NY.
- SFIC, 1996. Co-Managing Natural Resources with First Nations: Guidelines to Reaching Agreements and Making Them Work. Saskatchewan Federated Indian College and Department of Indian Affairs & Northern Development, Ottawa, Canada.
- UNEP, 1992. Convention on Biological Diversity. United Nations Environment Program. <http://www.unep.ch/bio/conv-e.html>
- WCED, 1987. Our Common Future. Report of the World Commission on Environment and Development. Oxford University Press, Oxford.
- Williams, S.M., Montoya-Lewis, R., 2000. Federal Indian water rights: fundamentals and new developments in federal Indian water law. *Native Americas* XVII (2), 20–27.

Jim Ransom, a member of the Wolf Clan of the Mohawk Nation, is Director of the Haudenosaunee Environmental Task Force. He has a B.S. in civil and environmental engineering, an A.A.S. in civil technology, and over 20 years of experience working on environmental issues affecting indigenous communities in the US and Canada.

Kreg Ettenger is an independent research consultant specializing in environmental anthropology and indigenous knowledge, and works mainly with Native communities in the US and Canada. He has a B.S. in geophysics, an M.S. in environmental science, and is currently completing his Ph.D. in cultural anthropology at Syracuse University. He can be reached at (315) 424-0706 (phone/fax).