



# Indigenous Perspectives on Conservation Offsetting: Five Case Studies from Ontario, Canada



“This is our home.  
We have a responsibility.”

— Clint Jacobs, President,  
Walpole Island Land Trust



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# A. Introduction

Conservation offsetting is gaining attention around the world as a promising yet risky means of compensating for the negative impacts of development on biodiversity. Simply put, conservation offsetting involves a trade-off: accepting harm to a species or an area of conservation value on the condition that beneficial actions will be undertaken to counterbalance any losses to biodiversity or to affected communities. Fraught with uncertainty, conservation offsetting is viewed with both hope and apprehension, especially in light of its poor track record to date. Indeed, according to the International Union for Conservation of Nature, conservation offsets “have the potential to provide net gains in biodiversity in the right context, but this has rarely yet been realised in practice.”<sup>1</sup>

Since 2013, Ontario Nature has worked with multiple partners across the private, public and voluntary sectors to build collective understanding of the risks and benefits of conservation offsetting.<sup>2</sup> This work has entailed research, workshops and other fora to explore key issues and opportunities, the outcomes of which are summarized in three reports, available online.<sup>3</sup> Ontario Nature has endeavoured to involve Indigenous communities from the outset of this initiative, and since 2015, with the generous support of MEC, has been able to focus its efforts on this important area of engagement.

The purpose of this work has been to learn from and raise awareness among Indigenous communities and organizations and to develop tools to support decision making about conservation offsetting at the community level, building the capacity to achieve positive community outcomes. A secondary objective has been to build understanding of Indigenous perspectives and interests among non-Indigenous parties, and to inform offsetting standards, protocols and practices across sectors as these emerge locally, provincially and nationally.

A significant first step was to work with members of several Indigenous communities to develop a set of principles intended to provide important reference points for communities considering involvement in conservation offsetting (see “Guiding Principles for Engagement in Conservation Offsetting,” page 3). These principles champion high standards and are meant to support decision making so that conservation offsetting initiatives serve to safeguard species, ecosystems and Indigenous cultural values while creating opportunities for community-led restoration, conservation initiatives and the development of cultural capacity. Once drafted, they were refined in light of substantial and insightful feedback from members of the Walpole Island Heritage Centre Advisory Committee during a one-day meeting in June 2016.

## **Method**

In the summer of 2016, Ontario Nature commissioned Larry McDermott, executive director of Plenty Canada and a member of Shabot Obaadjiwan First Nation, to conduct the case study research. The case studies involved in-depth interviews with several members of the First Nations involved. Through the interviews a number of topics were explored, including details of the offsetting project; the reasons for involvement; the challenges faced and efforts made to overcome them; intentions and outcomes; and overall satisfaction with the conservation offsetting experience.

The case study findings were presented and discussed at a gathering held in Peterborough, Ontario, from October 17 to 18, 2016, co-hosted with the Indigenous Environmental Studies and Sciences Program at Trent University, the Walpole Island Land Trust and Plenty Canada. Seventeen members of 11 Indigenous communities and organizations attended the gathering, as well as 23 non-Indigenous representatives from government and non-profit organizations, and staff and students from Trent University. Several of the participants in the case studies were present to elaborate on their experiences with conservation offsetting. The conversations over those two days have helped to shape and inform this report, especially in terms of key points of emphasis in the discussion section.

### **Toward reconciliation**

Like other elements of society, Indigenous communities hold a variety of views on conservation offsetting and how or whether to participate in it. As the case studies illustrate, many issues must be considered, including food sovereignty, access to traditional medicines, maintenance and renewal of cultural practices, the protection of sacred sites and the responsibility for the continuation of all life. Choices are neither straightforward nor easy, especially given imbalances in decision-making power, the all-too-common failure to integrate Traditional Knowledge, and the lack of information available on Indigenous experiences with conservation offsetting. On one hand, many Indigenous people are troubled by the prospect of the compromises that offsetting entails. On the other, there is hope that, under certain conditions, offsetting can offer opportunities to restore healthier relationships with the earth, in accordance with traditional values. Certainly there is evidence of both desirable and undesirable outcomes in the case studies that follow. Regardless, the need to respect Indigenous responsibilities to the land and the associated Traditional Knowledge, cultural values, and Indigenous rights and interests are all critical components in the process of reconciliation between mainstream society guided by Western values and the Indigenous peoples who share this land called Canada.



## **Guiding Principles for Engagement in Conservation Offsetting**

The guiding principles below are meant to set high standards and support community decision making so that conservation offsetting initiatives serve to safeguard species, ecosystems and Indigenous cultural values while creating opportunities for community-led restoration and conservation initiatives and the development of cultural capacity. These principles are to be understood as a work in progress, to be further tested and refined with broader input from Indigenous communities.

### **1. Free, prior and informed consent**

The right to free, prior and informed consent is one of the key principles of international and domestic human rights law to protect Indigenous peoples from destruction of their lives, cultures and livelihoods.<sup>4</sup> A community has the right to give or withhold its consent to proposed projects that may affect the lands it customarily owns, occupies or otherwise uses. To ensure effective participation of Indigenous communities in decision making about conservation offsets, this internationally and nationally recognized right must be honoured in principle and in practice. This includes, but is not limited to, the evaluation, selection, design, implementation and monitoring of conservation offsetting projects. All Indigenous communities affected by a proposed project must have the opportunity to give or withhold their consent.

### **2. Limits to offsetting**

Some sites, features and habitats should be off limits to offsetting on the basis of, for example, their vulnerability, irreplaceability and their cultural significance for Indigenous peoples. In determining which sites should be off limits to development, Indigenous knowledge and sound science must be considered and applied, according to protocols the community establishes.

#### **2.1 Cultural Significance (Values)**

In determining limits to offsetting, cultural significance for Indigenous peoples must be respected and determined on a community-by-community basis unless otherwise directed by the community. Cultural significance may include access by Elders; hunting, fishing and gathering relationships; sacred sites; economic importance and ceremonial values, for example.

## **2.2 Vulnerability**

In determining limits to offsetting, the vulnerability of the natural features or systems affected must be taken into account. Vulnerability may also have to do with the vulnerability of community relationships with the features or systems involved, including the relationships of the knowledge keepers. Age, health, economics and the number of knowledge keepers all factor into these relationships and the risk that offsetting might sever or damage the relationships.

## **2.3 Irreplaceability**

Some types of natural features or systems cannot in any way be compensated for through offsetting. In such cases, the development proposal should not proceed.

## **3. Mitigation sequence**

Offsetting should be set within a clear mitigation sequence, the first step being to define areas that are off limits to development and are to be protected from negative impacts as defined through both Indigenous Traditional Knowledge and sound Western science. The next step is to ensure that even where offsetting is allowed to occur, negative impacts are avoided wherever possible. Following this, any unavoidable negative impacts must be minimized. Offsetting then offers a means to deal with residual impacts that cannot be addressed through avoiding or minimizing harm. In implementing the mitigation sequence, Indigenous community protocols must be respected and used. Western science that is trusted by the community can be used.

## **4. Net gain**

Offsetting should require achievement of an overall net gain for biodiversity calculated on the basis of in situ (on-the-ground), measurable conservation outcomes for the earth and all of its parts. If the proposed development negatively affects cultural values, any negative impacts must also be offset on a net gain basis, according to protocols established by the community and in a culturally appropriate manner that satisfies community interests and needs.

## **5. Calculating equivalence**

In a fundamental sense, the destruction of a natural system or any of its components is never “equivalent” to their restoration elsewhere. Nevertheless, offsetting proceeds on the assumption that such trade-offs can be justified in some circumstances when they result in a net benefit for nature and communities. In establishing equivalence between the impacts and the offset, the offset must take into account not only quantity (size), but also quality with respect to the condition and biodiversity values of both the impact site and the offset site, as well as their landscape contexts. The full range of Indigenous cultural values and interests

must be integrated into the determination of equivalence, according to protocols established by the community.

#### **6. Duration of offset**

The beneficial outcomes secured through an offset should extend beyond the project's impacts and ideally should last in perpetuity. Impacts to be considered include harm to biodiversity, as well as harm to Indigenous cultural values and interests.

#### **7. Location of offset**

The offset location should be determined on the basis of the desired biodiversity conservation outcomes and cultural values, including the potential for long-term success and viability. The offset agreement should include ecological and cultural capacity benefits to communities that are negatively affected by the development, especially if the offset location is not close to the disturbed site.

#### **8. Equity and cooperation**

A conservation offset should be designed and implemented in an equitable and cooperative manner, according to protocols established by the Indigenous community and with the effective participation of the community and other interested parties in all aspects of decision making (e.g., planning, implementation, monitoring and evaluation).

#### **9. Transparency and communication**

Both the development proponent and the offset provider (i.e., the parties involved in negotiating, designing, implementing and overseeing offsets) should share information in a transparent manner and according to an established timeline. They should openly communicate project plans and results with each other, with their communities, with other partners and with the public. Communication about Indigenous values, mitigation and other Indigenous viewpoints must be either generated or delegated by the Indigenous representatives who are involved.

#### **10. Full-cost accounting of offsets**

The development proponent should cover the cost of the offset, based on a full-cost accounting approach. For Indigenous communities, this would include the full cost of raising awareness and engaging the community (e.g., communication, education, relationship building), of entering into an agreement (e.g., research, legal fees), of creating and maintaining the offset (including in most cases community, cultural and scientific capacity building), and of monitoring and reporting.

## B. Case Studies

### 1. Bkejwanong (Walpole Island) First Nation: “This is our home. We have a responsibility.”

#### Research participant:

*Clint Jacobs, President, Walpole Island Land Trust*

Since 2010, Bkejwanong First Nation, also known as Walpole Island First Nation, has received several invitations to provide conservation offsets for development projects occurring in southern Ontario. The community has agreed to participate in some but has turned down others. The choice is never easy. Clint Jacobs, president of the Walpole Island Land Trust, notes that conservation offsetting represents “another way to enable us to protect, conserve and restore our habitats.” Yet compensating for losses, he advises, is not always possible: “We can’t just recreate something that was there for millennia.”

Two development projects for which the community agreed to provide offsets involved the restoration of grassland habitat for bobolink, a songbird listed as threatened under Ontario’s Endangered Species Act, 2007 (ESA). In April 2015 and in March 2016, the Walpole Island Land Trust<sup>4</sup> agreed to enhance and maintain 3.9 hectares and 2.9 hectares of native grassland suitable for bobolink on its properties on Bkejwanong. The offsets are to compensate for subdivision development of an agricultural hayfield and pasture land in the Greater Toronto Area (Milton and south Brampton).

#### Negotiating the offset agreements

Bkejwanong’s involvement in the two projects began when the manager of a consulting firm offered to assist the First Nation in its habitat-restoration efforts by helping it to become a conservation mitigation bank.<sup>5</sup> The community’s lack of experience with conservation offsetting posed a challenge, and the consultants had little to offer in terms of examples of other offsetting agreements that could be used as reference points. The community had difficulty evaluating whether the offer being put forward was fair. Since the proposed development sites were in the Greater Toronto Area, where land values are high, Walpole Island Land Trust, which negotiated the agreement, worried that the developers might be looking for a bargain deal. “Was what they were offering fair?” asks Jacobs. “Was it on the high end, middle, or on the low end? We consistently stated in our discussions that we did not want to be the Bargain Harold’s in the offsetting mitigation banking business.”

Bkejwanong had a consultation/accommodation protocol in place, which the land trust used to ensure that the community’s rights and interests were respected. The people negotiating the agreement shared information with the community, sought input from the board of the land trust and involved lawyers to review the terms of the agreements. Still, the negotiations were trying, as they took years to complete. “It was quite a waiting game,” notes Jacobs. “And I do mean game as they hurriedly pushed us to answer questions relating to the offsetting projects (such as what properties we had available, plant compositions of the habitats, etc.) and then made us wait, and wait, and wait for a follow-up response. A number of years went by before we finalized agreements.”

The terms of the agreements reflected the conditions required by the ESA,<sup>6</sup> including the location of the offset (i.e., within the same ecoregion), the size of the offset site, the mix of forbs and grasses to be planted, the maintenance and monitoring activities to be undertaken, and the length of the agreements. More specifically, the agreements require:

- a 1:1 replacement ratio (hectares lost:hectares replaced);
- the planting of at least three different native grass species, as well as forbs or legumes;
- the control of invasive species using a variety of methods, including controlled burns;
- habitat maintenance for five years;
- periodic inspections to determine whether remedial measures are required;
- the provision of updates to the developer and the provincial government (Ministry of Natural Resources and Forestry).

According to the agreement, the development proponent is covering the costs of enhancement and maintenance for five years. This includes funds for equipment (e.g., gloves, tools, safety equipment) and for some contractors (e.g., for herbicide applications to control invasive phragmites). Jacobs advises other Indigenous communities considering involvement in offsetting projects to ensure that the developer is required to cover costs for maintenance and monitoring.

### **Benefits**

The land trust is using the funds generated through the offsetting projects to develop management prescriptions, restore grassland habitats, reduce invasive species, conduct controlled burns and make the offset sites more attractive for bobolink. Because community volunteers are doing much of the work, the land trust is able to use some of the funds to protect, steward and restore other properties at Bkejwanong.

In addition to the biodiversity benefits, important cultural and community benefits are arising from the projects, though they are not written into the agreements. “The offset sites are available to the community for beneficial uses, such as gathering (berries, medicines, sweetgrass, etc.), hunting (deer, game birds, etc.), spiritual connectivity, and educational outings,” Jacobs explains.

### **Challenges**

Though generally satisfied with the land trust’s involvement in conservation offsetting to date, Jacobs recognizes that there are areas for improvement. Being in a position to determine whether agreements are fair is a key issue. “People wave a big cheque, but is that cheque fair?” he asks. It would have been helpful to have had full information about the market value of the lands that were being developed in the Greater Toronto Area.

Another challenge was determining the offset ratio (habitat lost:habitat restored). Though the community initially asked that the ratio be 1:5, and then 1:3, the consultants would not move from the bare minimum 1:1 ratio required under the ESA. When it comes to addressing biodiversity loss, “one-to-one offsets are not going to do it,” remarks Jacobs. Nevertheless, the biodiversity values

of the offset sites at Bkejwanong far exceed the biodiversity values of the development sites, and so there has been a net gain in terms of quality of grassland habitat.

### **Further reflections**

To ensure that conservation offsetting succeeds, Jacobs recommends that the people involved take into account the quantity, quality and market value of the development and offset sites. Because the offset site may never fully replace the values lost at the development site, he contends that the replacement ratio should be at least 1:3 or even 1:5. Government policies should be changed to require that such standards be met. Consideration of the condition and landscape context of both sites should also be required. To create a more level playing field, information about land prices in the relevant areas (e.g., Walpole Island versus the Greater Toronto Area) should be integrated into offsetting agreements.

The duration of the offset is another matter the community needs to consider and determine. “If the developer’s project has a life expectancy of 25 years,” explains Jacobs, “then the offset compensation should extend for that duration.” This means that the development proponent should cover the full cost of the offset, including the cost of raising awareness and engaging the community, of entering into an agreement, of creating and maintaining the offset, and of monitoring and reporting.

Jacobs offers several suggestions to more effectively and fairly engage Indigenous communities in offsetting initiatives. He underlines the importance of a more holistic perspective, and the need to educate the government and other non-Indigenous parties. “Policy-makers and bureaucrats need to know that there are other ways to look at things. Governments follow their own rules, based on making money and industrial interests. They are one-sided. We need to let them know that this is our home, so don’t mess it up. We have a responsibility. If you are going to move things around in our home, talk to us first.”

Community protocols are important in fostering understanding. Accordingly, Jacobs recommends that communities build on their own traditions and listen to Elders: “Our laws are our laws. We have to follow our own laws, not reinvent the wheel. We need to learn our languages and teachings to support and maintain what we have. Everything we need is around us. This is about education and hearing from Elders. The next generation needs to be equipped with the tools so that we can carry on with our own traditions.”

Given the distance between Indigenous communities and the general lack of familiarity with conservation offsetting, opportunities to network and learn from other people’s experiences are extremely beneficial. “Rather than standing on soap boxes, what can we learn from each other?” asks Jacobs. Assistance with organizing and sponsoring First Nations to get together to share, network, learn and help one another is appreciated. “It is important to enable exchanges among Elders in different communities, so that we can look forward and pass on our teachings to the next generation.”



Allies are needed, he notes, not just people who want to fix things. “We do not need somebody charging ahead and asking us to sign on. We are capable of doing what we need to do to take care of our own. We hope that others will see value in our processes. We have to protect and tend this fire.”

*I will not forget the Great Spirit by whom all things exist. I feed my fire, it will not go out.*  
– Chief Oshawana at Walpole Island, 1844

## 2. Alderville First Nation: Setting the Table for Positive Change

### Research participants:

*Rick Beaver, biologist, founder of Alderville First Nation's Black Oak Savanna, and globally recognized artist*

*Jeff Beaver, Williams Treaty Natural Resources Representative*

*Skye Anderson, Lands and Resources Liaison, Alderville First Nation*

In 2009, Alderville First Nation initiated a solar farm project on the south shore of Rice Lake. The Ontario Power Authority granted a 20-year Feed-In-Tariff contract in 2010.<sup>7</sup> Completed and operational in 2013,<sup>8</sup> the five-megawatt solar farm was built on 20 hectares<sup>9</sup> of marginal farmland the First Nation purchased. Consisting of 23,000 ground-mounted solar panels, it is the first and only solar farm in Canada to be 100 percent First Nation owned.<sup>10</sup>

Interestingly, there was no legal requirement to offset the impacts of the development, which took place on marginal farmland that was no longer in production. Though a coldwater trout stream ran through the property, Alderville sited the project so as to avoid any adverse effects that would have required an offset. Nevertheless, the community will be providing a voluntary offset by restoring a 100-metre buffer of native plants along the stream to further improve and protect it.

As an offsetting project involving a First Nation, this one is also distinct in that Alderville is both the development proponent and the offset provider. Furthermore, the development took place off reserve, under the provincial – as opposed to federal – regulatory regime.

Overall the community is pleased with the project, originally expected to generate an estimated \$56 million for the First Nation over the next 20 years.<sup>11</sup> Based on performance so far, however, which has already exceeded expectations, revenues are likely to be considerably higher. They will be used to provide funding for the Alderville Community Trust, “a long term investment fund designed to assist the community of Alderville First Nation and its membership in the 5 areas of community and economic development, health, education and culture.”<sup>12</sup> Revenues for the trust fund must come from sustainable development that “meets the needs of the present without compromising the ability of future generations to meet their own needs.”<sup>13</sup>

### Traditional Knowledge

As the development proponent, Alderville First Nation was required to provide an environmental impact statement (EIS) on the expected impacts of the project and ways to minimize and compensate for them. Under the leadership of Rick Beaver, the community prepared an extensive assessment, which included Traditional Knowledge gathered through a questionnaire. The Ontario government, however, rejected the assessment and hired an environmental consulting firm to complete a more conventional evaluation, based on Western science.

In an interesting turn of events, the firm hired Rick Beaver, the recognized local expert, to conduct the assessment. This time, however, Beaver was required to follow the conventional EIS template,

a model relying on short-term observations, measurements and theoretical projections as opposed to the deep Traditional Knowledge of the community, based on multi-generational experience. The provincial government readily accepted the new assessment.

Beaver questions the government's confidence in Western science and the accuracy of its projections. Trained as a biologist, he knows very well how to collect information according to the Western science tradition. But he has grown skeptical about the data and the conclusions they lead to. "It's arrogant to think we can come to complex conclusions in just six months. Often, they don't pan out. That's one of the reasons why we're in the mess we're in," he remarks. "Western science is not dynamic enough and politics erode its strength."

Among other things, Beaver believes that large areas should be set off limits to development. "We don't know enough to assume that we can mitigate or offset the damage. We shouldn't mess with things we don't understand. We should take only what we need."

Traditional Knowledge, he explains, is based on survival. To disrespect the experience of several generations is to risk death or suffering. "What happens if a species is lost?" The question is highly relevant, considering that Alderville's black oak savanna is one of the most critically endangered habitats in the world. "Traditional Knowledge takes a holistic view. The first principle is that we are all connected so there cannot be one winner and some losers. We all win or we all lose."

Simply put, when a species is lost, everyone loses. Hence the importance of attempting to do right by the land. Beaver reminds us that "our first duty is to take care of this place, the Earth, and the blessings that it gives."

The work is not always easy. "We offered our knowledge, but the government resisted. So we decided to proceed independently with many of the recommendations that arose from our own original assessment," says Beaver. "For example, we are going ahead with stream improvements that were not addressed in the official EIS. We would have been able to do even more for nature if the provincial government had been more supportive."

"Traditional Knowledge is always treated as a poor cousin of Western science," adds Beaver. "But that must change. The greatest biodiversity in the province is found on First Nations land. This is no coincidence. First Nations have been very careful."

Yet pressures to develop on First Nations lands are mounting, and communities must prepare themselves. According to Beaver, mainstream governments are not sufficiently motivated to arrest the destruction of the environment in a significant way. They either have no respect for Indigenous ways of knowing or don't have the capacity to overcome the institutional resistance to doing things differently. "First Nations will have to rely on themselves to fully and accurately assess development impacts," he maintains. "We will have to continue to build capacity to defend our ways of knowing in circumstances where Western science continues to dominate."

The does not mean forgoing one way of knowing for the other, he explains, but rather drawing equitably on both, for the sake of humans and all other life. “As the destruction of life continues to accelerate it becomes more important to all of our children that we develop concrete meaningful ways to bring our best ways of knowing both Indigenous and Western together – and urgently.”

### **Positive outcomes**

Based on Alderville’s original EIS, the community relocated the solar project away from a nearby stream and has begun preliminary site assessments and inventory work on invasive and native species for the stream restoration. The community has also enhanced wildlife corridors with restorative plantings and developed medicinal plant gardens. The aim is to fully offset negative impacts and to do more than the government required. Management approaches have involved traditional skills, as well as the broader community, including partnerships with academic institutions such as the Indigenous Environmental Studies and Sciences Program at Trent University.

In addition to the revenue that the solar farm will generate, the project will generate enough electricity for 600 homes. It also provided “on the job training for 18 Alderville citizens as welders and solar [racking] installers who will be able to find work anywhere in Canada.”<sup>14</sup>

### **Further reflections**

How to protect biodiversity in the face of ongoing development is a difficult question that many Indigenous communities must try to answer. According to Beaver, it’s a balancing act that requires being able to see where you need to go and having the tools to get there. It also requires attending to small things that need to be done and doing them with the right intention. “Doing nothing is not an option,” he maintains. “Something has to be done, and compromise will not be enough.” Evaluating things according to dollars, he believes, is a misleading exercise. “The capitalist system has no logic. We are trying to grow in a finite world.”

Yet, despite the challenges and impediments, he remains hopeful. “We need to set the table for positive change,” he advises. “The warrior’s way is not fighting all the time; it’s choosing your battles when necessary and doing everything you can to avoid confrontation.” Integration and cooperation are essential. “A solution has to belong to all of us. Our intent has to be aligned. That might be scary to some people who wonder where we might go. Where are the doorways and where is there room for advancement? We have a lot in common. We need to see all life through a lens of equitability.”

### 3. Mohawk Council of Akwesasne: Two-eyed Seeing

#### Research participants:

*Peggy Pyke-Thompson, Assistant Director, Department of the Environment, Mohawk Council of Akwesasne*

*Curtis Lazore, Environmental Assessment Officer, Department of the Environment, Mohawk Council of Akwesasne*

*Chris Craig, Senior Forestry Technician, South Nation Conservation Authority, and member of Algonquins of Pikwàkanagàn First Nation*

June 26, 2015, marked the official opening of a new marine terminal in the Port of Johnstown,<sup>15</sup> the centerpiece of a \$35 million port expansion on the St. Lawrence River in the traditional territory of the Mohawk and Onondaga people. At the ceremony, Dr. Henry Lickers, environmental science officer with the Mohawk Council of Akwesasne's (also referred to in this report as "Akwesasne") Department of Environment, provided the opening Thanks Giving Address and greeting.<sup>16</sup>

The story of the port expansion project that follows illustrates some of the rewards and deep-seated challenges of working across cultures to plan and implement conservation offsets.

The objective of the Port of Johnstown project, initiated in 2008, was to expand and deepen the port to accommodate larger ships and improve efficiency through infrastructure upgrades.<sup>17</sup> Because these activities would have a negative impact on fish habitat, an offset to compensate for the damage was required under the federal Fisheries Act. The Province of Ontario granted an order declaring that the Environmental Assessment Act did not apply to the project. Nevertheless, both the Ministry of Natural Resources and the Ministry of the Environment at that time set conditions requiring a salt pad runoff management plan and an aquatic species removal plan, and stipulating that the government be kept informed of proposed mitigation measures, as well as hydraulic changes arising from construction.<sup>18</sup>

The Township of Edwardsburgh/Cardinal, which owns and operates the port, worked with South Nation Conservation Authority (SNC) to prepare the reports and meet the offset requirements by protecting and enhancing aquatic and riparian habitat.<sup>19</sup> This involved the creation of 3.83 hectares of fish habitat along property that the township and the St. Lawrence Parks Commission owned.<sup>20</sup>

The Mohawk Council of Akwesasne became involved in the development of the offset proposal at the insistence of Dr. Lickers. The First Nation council worked with the conservation authority to weave together Traditional Knowledge and Western science through the process of Two-eyed Seeing.<sup>21</sup> Chris Craig, senior forestry technician at SNC, played a key role in helping to bridge the two cultural perspectives and build understanding within the conservation authority of Indigenous rights and responsibilities.

## **Duty to consult**

Before SNC had even been notified about the project and the role it was to play in leading the development of the offset proposal on behalf of the port owners and managers, an Indigenous employee at another organization notified Craig about the proposed port expansion. He told Craig that if Akwesasne was not brought into the process from the outset, “the project would not proceed.” Craig then informed his superiors of the need to talk with Akwesasne and work together. “I advised them that a Traditional Knowledge report was not good enough, that we needed Two-eyed Seeing to bring together both Western science and Traditional Knowledge,” recalls Craig.

Shortly thereafter, Akwesasne notified SNC of its intent to be at the table and sit as an equal partner in the development of all aspects of the plan for the Port of Johnstown expansion. Craig took on the role of answering SNC managers’ questions about how their relationship with the First Nation worked and the responsibilities they needed to fulfill with regard to Akwesasne specifically and to Indigenous peoples generally. Discussions covered everything from the constitutional rights of Indigenous peoples to Akwesasne’s environmental assessment protocols to proper ways to address a First Nation (i.e., not as a user group or stakeholder).

Significant progress was made in developing understanding within SNC. Over several meetings, representatives from Akwesasne took the time to explain to SNC staff how to incorporate Indigenous values into the port expansion project and how, as equal partners, they could complete the monitoring of all the phases of construction. They opened meetings with the “words before all else” expressing both gratitude and responsibilities to all of creation. This simple but important cultural protocol raised the bar at each meeting in terms of building understanding that relatively short-term economic objectives must respect the duties to continue life in the long term.

Akwesasne representatives stressed the equal importance of all aspects of the web of life: nothing should be undervalued and no shortcuts should be taken. Together, the partners commissioned a marine archaeological survey, conducted electrofishing and “reviewed every study ever completed around the port area,” says Craig. This included assessments of water quality and the potential impacts on fish spawning habitat of sediment being released from the construction site. Akwesasne also provided relevant research from the US side of the St. Lawrence River.

Unfortunately, even though Akwesasne and SNC reached agreement on acceptable methods to implement the offset on the basis of a Two-eyed Seeing approach, the federal and provincial governments intervened and undermined their efforts. As the port expansion proceeded, “many short cuts were taken and many changes were made without consent by either SNC or Akwesasne,” observes Craig. “Federal agencies and their provincial counterparts would overrule our decisions and side with the port owners, allowing them to make huge concessions and short cuts that would have significant effects on this fragile marine environment without any thought of our concerns.”

This intervention included limiting the offsets to port lands and government lands that, according to the First Nation, were insufficient to fully compensate for the damage, including adverse impacts on species at risk such as the endangered American eel. “Nature is extremely complex



and complicated,” explains Craig. “We have to face reality; we really don’t know how to replicate nature and to believe that a one-to-one compensation ratio will succeed is foolish and naïve.”

Akwesasne proposed to do additional habitat improvements closer to the reserve as part of the compensation, but the proposal was denied. “This is a common failure of projects where First Nation values take a back seat or are just thrown to the side and discarded,” says Craig. “Bureaucracy got in the way, saying no to things of value to Akwesasne. I’ve seen this many times. It’s the way colonialism works.”

The system is not designed for fairness, explains Peggy Pyke-Thompson. “It favours a cozy relationship between government and industry as opposed to appropriate accommodation of Indigenous responsibilities, rights and interests.”

### **Outcomes**

The partnership between Akwesasne and SNC resulted in habitat improvements above and beyond those the municipal, provincial and federal government authorities contemplated. Admittedly, however, these fell short of what Akwesasne deemed necessary to meet its obligations to the rest of the web of life.

Another significant outcome of the partnership was the working relationship itself. “Despite challenges, this is an encouraging example of cooperation between a conservation authority and a First Nation in engaging federal and provincial governments and a development proponent,” remarks Pyke-Thompson. “Chris Craig played a unique and important role for the conservation authority, encouraging his fellow staff members to look at the impacts on biodiversity holistically and increasing their understanding of their responsibilities to First Nations and the environment.”

### **Further reflections**

Weaving together Indigenous Traditional Knowledge and Western science is key to successfully negotiating offsets. As Craig points out, treating both sources of knowledge as equal and with full respect is the only way to have fully engaged people: “Any power imbalance will have negative results on the duty to continue life. This is a human duty not just an Indigenous duty.” He maintains that good communication is essential and requires patience and a true commitment to learning about other cultural ways of knowing and other cultural governance models and protocols.

Gender bias can complicate the ability of a matrilineal and matriarchal Indigenous nation to educate participants who are not committed to looking outside of the patriarchal comfort zones. Pyke-Thompson recalls that when she would make recommendations or comments at meetings with port officials and contractors, they would look to the nearest male from Akwesasne or SNC to seek their opinion: “I had to slip Henry [Lickers] notes to get him to ask my questions because they would not take me seriously even though I was the senior representative from Akwesasne.”

Including Traditional Knowledge carriers and supporting them is also essential, as is a commitment to educate youth in Western sciences while investing in time and learning with Traditional Knowledge carriers. Both of these factors played vital roles in this project and are part of

Akwesasne's strategic direction moving forward. "Our youth are getting good science-based educations," says Curtis Lazore, "and they are working with the Traditional Knowledge carriers to anchor our science in our Traditional Knowledge systems. We have become stronger in our capacity to deal with developers and government."

Youth must be prepared, however, for the dilemmas that arise when wearing two hats. "We need people on the inside who understand the rights of Indigenous peoples," notes Craig, but it's difficult. "Non-Indigenous people have questioned why a forestry technician, like me, gets involved in issues about American eel and wild rice. Yet, from a First Nations perspective, the connections are obvious. Everything is connected, and I try to bring that understanding to my work."

The challenge is ongoing. Even after years of working together, partners like SNC and Akwesasne find it difficult to achieve Two-eyed Seeing. "In the end, you have to do what is in your heart, what's right," advises Craig. "If we sit back and do not participate, there will be more loss and more destruction. It's a matter of recognizing your capacity, knowing when to give room through patience, and picking which battles to fight and which ones to walk away from in order to achieve the best results."

To that end, cultural protocols are vital and serve the community well. In this case, the protocols were not formal instruments specific to offsets. Rather, they had to do with ceremony and with the involvement of Traditional Knowledge carriers

In addition, Akwesasne has been developing capacity and sharing information through the Eastern Ontario First Nation Working Group, partnering with SNC and Plenty Canada originally and then with other conservation authorities and First Nations to develop a network that shares experiences to achieve the best results for the continuation of all life.

#### 4. Algonquin First Nations: “Our first responsibility is to protect the land.”

##### **Research participant:**

*Chris Craig, Senior Forestry Technician, South Nation Conservation Authority, and member of Algonquins of Pikwàkanagàn First Nation*

On April 29, 2010, Ontario’s Minister of Natural Resources entered into an agreement with the City of Ottawa under the provincial Endangered Species Act, 2007 (ESA) to enable an extension of Terry Fox Drive.<sup>22</sup> According to the agreement, the city was obliged to minimize the adverse effects of the road extension on American ginseng, an endangered species in Ontario.<sup>23</sup>

The proposed road would cut through the March Highlands, an area rich in biodiversity and Indigenous cultural features. Several Algonquin First Nations and environmental organizations and thousands of citizens opposed the highly controversial development.<sup>24</sup> Long before the road was approved, none other than Algonquin Elder William Commanda, Officer of the Order of Canada, raised concerns about the road and other development that might destroy this important place, which he referred to as an “ancient and sacred site for the Indigenous people of the Ottawa River Watershed.”<sup>25</sup>

The road extension was authorized under the Municipal Class Environmental Assessment prior to June 30, 2008, when the ESA came into force. Nevertheless, the ESA agreement required an offset, stipulating that the ginseng plants were to be removed from the site and transported to a facility in Delhi, Ontario, in order to propagate at least 100 additional plants from the source material. The original plants, as well as the seedlings, were then to be replanted at a new and suitable site. The City of Ottawa was obliged to ensure that the plants were tended and that at least 10 percent survived after three years of monitoring. If these plants did not survive, then the city was obliged to plant another 100 seedlings from another source and tend them for three years as well. Essentially, the city was required to report annually to the ministry and to ensure that at least 10 plants survived.

##### **Duty to consult**

With respect to relevant expertise, the ESA agreement required that the ginseng plants be propagated according to methods determined by the Ontario Ginseng Innovation & Research Consortium, an Ontario-based research and innovation network funded by the Ontario government and the industrial/agricultural sector.<sup>26</sup> The agreement further stipulated that the tending requirements (e.g., weed control, watering) were to be carried out by the South Nation Conservation Authority American Ginseng Recovery Program or an alternative qualified professional.<sup>27</sup> It did not address the duty to consult with First Nations, despite the Algonquin peoples’ evident interest in the matter. Nor did it require the integration of Traditional Knowledge.

Unfortunately, the plans to propagate and transplant ginseng from the original source failed miserably. By the time the City of Ottawa contacted Chris Craig, the senior forestry technician at South Nation Conservation Authority (SNC) and a member of the Algonquins of Pikwàkanagàn

First Nation, it was too late. “I visited the transplant site with Larry McDermott<sup>28</sup> and an MNR [Ontario Ministry of Natural Resources and Forestry] ecologist.<sup>29</sup> There was nothing there, just one or two plants clinging to life. We couldn’t draw from the native stock because the road had already gone in. There was nothing left. Had the City consulted with Indigenous people from the start, the outcome would have been different. Instead, we lost an endangered species and its habitat at this site.”

### **Further reflections**

“This is one of many examples of the duty to consult not being taken seriously,” remarks Craig. “It demonstrates the need for First Nation vigilance to protect Mother Earth. Our first responsibility is to protect the land.” It also underscores the need, acknowledged by many Algonquin First Nations, to build community capacity to effectively participate in development decisions, including offsets.

Craig maintains that successful project outcomes occur when respectful relationship building is considered an essential part of sharing the land and achieving truly sustainable development.

“Appropriate relationship-building starts early in the process not when the developer or government authority realizes that it can’t get away without proper consultation.”

Craig points to the Forest Stewardship Council (FSC) certification system<sup>30</sup> as a promising example of the way to build relationships. “FSC brings First Nations, companies and stakeholders together around the table to learn about Indigenous rights and values and how to work with us,” says Craig. “People learn that if they need our support on a proposal, they have to ask us.” He considers FSC “a perfect teaching tool” in that regard, but notes that in the end, First Nations have to step up to the plate: “We have rights. We can make partnerships and talk with anyone. We don’t need to go through a government agency. We need to work strategically to build the understanding that when Indigenous peoples thrive, we all thrive. We need to help others understand that we are all connected.”

## 5. Six Nations of the Grand River Territory: Ecological Restoration and Cultural Restoration Go Hand in Hand

### Research participants:

*Paul General, Wildlife Manager, Six Nations*

*Meagan Hamilton, graduate student engaged in restoration work for the Red Hill Valley project, and member of Six Nations*

In November 2007 the City of Hamilton<sup>31</sup> opened the Red Hill Valley Parkway, an eight-kilometre four-lane highway connecting the Lincoln Alexander Expressway<sup>32</sup> on the Niagara Escarpment to the Queen Elizabeth Way in lower east Hamilton. This \$245 million undertaking<sup>33</sup> took place within the asserted traditional and treaty territories of the Six Nations of the Grand River and the Mississaugas of the New Credit.<sup>34</sup> First proposed in 1957, the controversial project elicited significant opposition over the years from the two First Nations, as well as environmental and community groups.<sup>35</sup>

The Red Hill Valley is an environmentally significant public open space,<sup>36</sup> with numerous identified archaeological sites, including burial sites and an ancient Iroquoian (Haudenosaunee) village with longhouses, which was thought to have been destroyed. The village shows use of the area by Indigenous people just after the retreat of the glaciers, over 10,000 years ago, and is one of only four such sites from the Paleo-Indian era in Ontario.<sup>37</sup> Excavation of the village has uncovered over 56,000 artifacts.<sup>38</sup>

The highway project entailed paving over about 65 hectares of the 365-hectare valley, relocating seven kilometres of a creek, and installing 23 stormwater management ponds and a 2.8 kilometre combined sewer overflow pipe.<sup>39</sup>

### Duty to consult

First Nations began to register concerns in the mid-1980s about the proposed realignment of the Red Hill Creek and the destruction of Indigenous burial sites along route of the expressway. In 2002, representatives of the Six Nations asserted treaty rights.<sup>40</sup> It became evident, given ongoing protests, that the project would not proceed unless the City of Hamilton engaged with and accommodated the interests of the First Nation.<sup>41</sup> The consultation that ensued with Six Nations Elected Council and the Haudenosaunee Confederacy Council at Grand River (separately from the general public consultations) led to several agreements between the city and the Haudenosaunee Confederacy Council in 2003 and 2004.<sup>42</sup>

It is important to acknowledge that at Six Nations of the Grand, there is both an elected governance system (imposed in 1924 under the Indian Act) and a traditional governance system, the Haudenosaunee Confederacy Council. For the purpose of negotiation, Six Nations Elected Council invited the Confederacy Council Chiefs to take a lead role in the resolution of key concerns with the understanding that Elected Council representatives would be kept informed and have input in the progress being made. This was confirmed in correspondence dated August 22, 2003,

wherein the Six Nations Elected Council stated its “willingness to work cooperatively with the Confederacy Council on this matter, as it is critical that our people speak with one voice.”<sup>43</sup>

According to the Haudenosaunee Confederacy Council, “the intent of the agreements with the city “was to foster long-term relationships and to create a plan for the Valley that reflects the best thinking of both peoples.”<sup>44</sup> They include an Agreement About Facilitated Negotiations, September 19, 2003; an Agreement Concerning Respect for and Protection of Human Burials in the Red Hill Creek Valley and Assurances Concerning Archaeological Work in the Red Hill Creek Valley, October 22, 2003; a General Agreement, November 17, 2003; an Agreement About Hunting, Fishing, Trapping and Gathering, November 17, 2003; an Agreement on Tolls, November 17, 2003; a Joint Stewardship Agreement, December 18, 2003 (ratified 2005); an Agreement on Medicine Plants and Other Significant Plants, December 18, 2003; an Agreement on Economic Opportunities in the Red Hill Valley, January 9, 2004; and an Agreement Respecting the Human Heritage of the Red Hill Valley, January 9, 2004.<sup>45</sup> These agreements serve as a “model for other municipal–First Nations agreements.”<sup>46</sup>

The consultation also led to the creation of the Joint Stewardship Board, made up of equal representation from the City of Hamilton and from Six Nations.<sup>47</sup> Guided by the agreements, the board’s responsibility has been to ensure cooperation and oversee rehabilitation and protection of the Red Hill Valley according to environmental management plans.<sup>48</sup> Importantly, the relationship between the city and the Six Nations, defined by the written agreements, is also legitimized by Haudenosaunee tradition, specifically the “Fire of the Valley” wampum whose three strings of beads signify respect, trust and friendship. Sheri Longboat, a member of Six Nations who coordinated the board for several years, explains that “the wampum is brought to all regular JSB meetings which are opened and closed by a Haudenosaunee Thanksgiving Address (Ohen:ton Karihwaterhkwen), meaning the ‘Words Before All Else: Greetings to the Natural World.’”<sup>49</sup>

Among other things, the board has overseen environmental monitoring, species-at-risk assessments, tree planting, removal of invasive species, deer inventories, and the development of a plan to protect and recover medicinal plants such as sweet fern and sassafras.<sup>50</sup> This work also included inventorying plants in the Red Hill Valley with Six Nations Elders, and listing them in Haudenosaunee languages, as well as in English. Community volunteers played a key role in the translation efforts. Though the board met monthly in the early years, it now meets quarterly.

Over the years, the board has had to deal with fundamental cultural differences, remarks Paul Williams, a board member and one of the original Six Nations negotiators: “When it comes to planning, the Haudenosaunee think seven generations ahead. Your average municipality plans for the next 25 years. We have to meet somewhere in the middle.”<sup>51</sup>

According to researchers Clara MacCallum and Leela Viswanathan, the City of Hamilton ultimately fulfilled its duty to consult, though only after protests occurred and it realized it had no choice.<sup>52</sup> “It took a great deal of determination and strategic engagement,” recalls Paul General, wildlife manager for Six Nations Elected Council. “Chief and Council worked with community experts to initiate claims of Treaty rights and to provide environmental assessments that brought both



Haudenosaunee Traditional Knowledge and Western science to bear on a number of issues including deer management, plants, traditional medicines, urban forestry, wildlife habitats and water management.” According to Longboat, a “conscious decision was made to focus on shared responsibilities” rather than debate rights and jurisdiction.<sup>53</sup> Overall, the Six Nations community was extremely influential in improving the environmental outcomes of the project. Without the community’s expertise and persistence, the level of protection for nature in the valley would not have been as high as it is.

### **Biodiversity outcomes**

The compensatory measures included the planting of indigenous species of trees, stream mitigation, and improvements to flying squirrel habitat. Fourteen thousand trees were felled to make room for the parkway, but 195,000 seedlings have been planted to replace them.<sup>54</sup> As General observes, however, comparing the value of mature trees and seedlings is difficult: “How do you compensate for cutting down 10 trees that are 200 years old?” The plan to plant 1 million trees over five years<sup>55</sup> is nevertheless a significant step.

The relocation of Red Hill Creek is likewise an important offset. Before the development, little of the creek followed its natural path due to rerouting in the 1950s and 1960s. It suffered from erosion, buried spawning beds and clogged lower sections.<sup>56</sup> In light of watershed studies, the city agreed to change its initial plans and take a more holistic approach to stream crossing and flood control, resulting in a natural, meandering channel design and a net gain in fish habitat.<sup>57</sup> The 23 stormwater ponds that were added help to treat stormwater before it is discharged into the creek, improving water quality.

Yet the improvements did not go as far as some people had hoped. General was disappointed, for example, with the deer management system. Too much habitat was destroyed and the offset was inadequate. “Too many deer for too little land,” he explains. For a few years, members of Six Nations were asked to cull deer, though this was a contentious issue, especially with non-Indigenous hunters.

Hydro One’s cutting of a 1.6-kilometre-long by 32-metre-wide swathe of trees along the parkway in 2016 was also a disappointing setback, according to Meagan Hamilton. Both Six Nations and the City of Hamilton opposed the clearcutting, but it went forward regardless, as Hydro One has an easement on the land. Hundreds of mature trees were lost.<sup>58</sup>

### **Cultural benefits**

A significant positive outcome of the negotiations and planning was the establishment of Kayanase, a native plant and seed nursery on the Six Nations reserve in 2010. Funded by the City of Hamilton to offset the adverse impacts of the parkway, Kayanase takes a holistic approach to restoration based on science and Traditional Knowledge, involving the collection, processing and propagation of native seeds and the planting and monitoring of native plants.<sup>59</sup> Kayanase successfully planted all the trees, shrubs and herbaceous plants during the restoration efforts in Red Hill Valley.

Meagan Hamilton, a Mohawk who was doing a master's degree in environmental education at the time, was one of the First Nation youth who were brought into the project. She was able to respectfully and effectively merge Western science with Traditional Knowledge to improve project outcomes, while researching the social and cultural implications of this work for Indigenous people. "Restoration of biodiversity goes hand in hand with cultural restoration," notes Hamilton. "There's an equivalency between building our capacity to restore land with native plants and building our cultural capacity to restore our identity."

Kayanase supplied the Bear's Inn, a local Six Nations business owned by Lisa and Tim Johnson, with native trees to restore over two hectares of their property. Tim Johnson was associate director for museum programs at the Smithsonian's National Museum of the American Indian in New York. He chaired the museum's "Living in the Anthropocene" initiative, which involved the sharing of information among Indigenous Traditional Knowledge bearers and Western scientists about human impact on the natural world and information about appropriate mitigation. Invited to comment on the environmental insights of Indigenous peoples, he responded:

More than 30 years ago, I heard a great deal of concern from tribal elders about the state of the Earth. Back then, of course, climate change wasn't as understood as it is today and, therefore, was rarely discussed, yet there were already observations by culture bearers within our communities that the environment was changing—of acid rain killing trees "from the top down," of insects migrating into new regions, and of animal behaviors changing ... we've come to realize that these knowledge bearers in Native communities, these cultural practitioners, had it right. What they were speaking about actually has come to pass. Infused within their expressed consciousness was also a cultural or societal perception that recognized the voracious nature of the modern world and that certain practices and behaviors were inconsistent with sustainability and ran counter to the cultural narratives and teachings of many, many indigenous cultures.<sup>61</sup>

Hamilton looks at her involvement in the project as part of a positive trend: "There are quite a few Six Nations youth who are taking environmental programs," she says. "For example, two now hold management positions at Kayanase and a few work at HDI," the Haudenosaunee Development Institute, a not-for-profit body created by the Haudenosaunee Confederacy Chiefs Council to represent their "interests in the development of lands within areas of Haudenosaunee jurisdiction."<sup>60</sup>

The Joint Stewardship Board has undertaken a tangible approach to facilitating "a deeper connection to the cultural landscape of the Red Hill Valley watershed" through the creation of the

Bear Meeting Place. Opened in 2014, this architectural feature along the Red Hill Valley Trail was designed to represent, with large rocks and plantings, the image of a bear's footprint.<sup>61</sup> Three more such meeting places are to follow – the Turtle, the Nest and the Eel. The Turtle Meeting Place is scheduled to open in 2017. "It's inspiring," says Longboat, "because it really represents a combined commitment between the Haudenosaunee and the city on what they can work on together" and "raises awareness of the indigenous presence in the valley."<sup>62</sup>

Six Nations and the Mississaugas of the New Credit have participated in the development of the City of Hamilton's Archaeology Management Plan.<sup>63</sup> The plan outlines the city's role and responsibilities and describes the significant role and interests of First Nations.<sup>64</sup> Work to date has involved raising awareness of and showcasing cultural artifacts from the archaeological dig that preceded the highway construction. Among these artifacts, some of which date back 12,000 years, are stone tools, pottery, polished bone implements and smoking pipes.<sup>65</sup>

### **Further reflections**

The Red Hill Valley development highlights a critical question for Indigenous communities: does the duty to consult extend to municipalities? Longboat notes that "the role of Indigenous consultation and engagement in land use planning and development continues to evolve in response to a changing legal and policy landscape."<sup>66</sup> MacCallum and Viswanathan,<sup>67</sup> writing in 2013, maintain that municipalities are "creatures of the Province" and as such do not owe a legal duty to consult First Nations. However, "they do hold statutory obligations since the Crown can delegate its procedural duties to third parties (as noted in the law and interpreted for the most part to be municipalities)."<sup>68</sup> The position of Ontario's Ministry of Municipal Affairs and Housing is that "municipalities have a duty to consult in some circumstances."<sup>69</sup> In 2014, at the urging of Indigenous people, Ontario's Provincial Policy Statement under the Planning Act was revised in a way that clarifies municipal responsibilities with respect to land use planning: "This Provincial Policy Statement shall be implemented in a manner that is consistent with the recognition and affirmation of existing Aboriginal and treaty rights in section 35 of the Constitution Act, 1982."<sup>70</sup>

It is to be hoped that this change to the Provincial Policy Statement will help to address a fundamental problem that MacCallum and Viswanathan describe as "little legislative incentive for municipal governments to put in the financial and personnel resources that are needed to build ongoing working relations with First Nations, and to create a space for positive, proactive engagement."<sup>71</sup> These authors claim that "Aboriginal and treaty rights, even in municipal contexts, have been continually undermined and neglected," as evidenced by land use conflicts and the "habitual destruction of First Nations heritage due to municipal growth and construction."<sup>72</sup> Despite the call for provincial policy and guidance, "land use developments continue to be approved that would harm First Nations sacred sites located on traditional territories encompassed within municipal boundaries."<sup>73</sup>

Better engagement of Indigenous communities is critical to the success of conservation offsetting, says Meagan Hamilton. "We have to be involved in decisions. We will lose out if we aren't." But this requires respectful and culturally appropriate communication. Though such communication

may be time-consuming, the time invested will result in better outcomes for nature and communities.

Commenting on the role of Indigenous liaisons within organizations to help bridge the divide between different world views or knowledge systems, Hamilton notes that more is needed. “The entire organization must buy into learning about Indigenous cultures and protocols. One or even a few individuals within a large organization are put in an impossible situation if expected to do this work without institutional capacity and support. Education across cultures is difficult and requires commitment, patience and creativity.”

Involvement in conservation offsetting initiatives is part of the risk taking that Hamilton believes is necessary to address biodiversity loss, especially in the face of climate change. “We have to be extremely innovative and creative because we are running out of options. We need to take more risks and we need to have back up plans.” Long-term adaptive strategies have to be part of effective offsets. “The tough part in terms of offsetting,” she adds, “is that protecting the natural world goes hand in hand with the complete opposite, destroying the natural world.”

Overall, Hamilton is pleased with her Indigenous community’s involvement in the Red Hill Valley initiative. “I know of nothing like it before, though I suppose my expectations were low from the start. I think of my grandparents’ generation and what they had to deal with. Any chance of respecting and integrating Indigenous Traditional Knowledge and priorities and putting them in action is an improvement. Just to be asked is a step forward; however given the increasing destruction and decline in the health of our traditional territories, we must come to the point of demanding our people’s traditional land rights. There were mistakes but there will always be. We have only begun.”

Many Indigenous communities in Ontario are involved in some aspect of conservation offsetting, and the roles they play are varied. While the circumstances in each of the case studies presented here are unique in key respects, some issues, challenges and opportunities are common to many if not most communities. These have to do with the duty to consult, relationship building, Traditional Knowledge, Two-eyed Seeing, and the engagement and education of youth.

### **Duty to consult**

The Crown owes a legal duty to consult Indigenous peoples when “considering a decision that may adversely affect established or asserted Aboriginal or Treaty rights.”<sup>74</sup> In Ontario, however, consultation and accommodation of rights are not always adequately addressed, to say the least. Three of the case studies help to illustrate a range of experiences and challenges with respect to the duty to consult and conservation offsetting.<sup>75</sup>

At one end of the spectrum, the Algonquin case study exemplifies the unfortunate results of an offset that was approved without adequate consultation, to the detriment of biodiversity. At the other end, the Six Nations case study shows the benefits that can be achieved for nature and communities when consultation occurs and agreements are reached on key interests. It must not be forgotten, however, that years of protest and an assertion of rights forced the municipality’s hand in the Red Hill Valley situation described in the Six Nations case study.

Indeed, meaningful consultation may often occur only when a First Nation has the capacity to corner authorities. This was the situation in the Port of Johnstown, where Akwesasne insisted on being at the table when decisions about the offset were being made. Nevertheless, as development approvals had already been granted, the First Nation’s interests were only partially addressed.

Many Indigenous communities lack the capacity to engage in consultations and negotiations about land use and development. Generally speaking, they are “inundated” with notifications, “creating an overwhelming amount of paperwork to be dealt with, even before talking can begin,” explain researchers MacCallum and Viswanathan. They note, for example, that all interview participants (Indigenous and non-Indigenous) in their study “commented on this capacity issue as being a roadblock to better relations.”<sup>76</sup> The Ontario Ministry of Municipal Affairs and Housing also highlighted this capacity issue in its summary of lessons learned from its case studies on municipal-Aboriginal relationships: “Be aware that there are many competing demands for communities with limited resources ... Be mindful that Aboriginal communities may be dealing with many notices from various organizations and governments.”<sup>77</sup>

Furthermore, communities are typically dealing with tight timelines and a cadre of well-paid experts and lawyers committed first and foremost to the financial interests of industry and government. Kathleen Ryan, strategic advisor at Mississaugas of the New Credit First Nation, describes the burden this places on communities: “First Nations must put more resources than should be the case in defending nature for all of humanity and must draw from resources already under heavy demand as a result of centuries of colonization.”<sup>78</sup> In a time-is-money economic system these circumstances create an unlevel playing field that works against equitable

negotiations and respectful relationships. For the time being, free, prior and informed consent, one of the key tenets of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP), seems to lie beyond reach.

It is to be hoped, nevertheless, that a more equitable future lies ahead. Since the release of the final report of the Truth and Reconciliation Commission of Canada in 2015, the federal government has committed to adopting and implementing UNDRIP.<sup>79</sup> How these internationally recognized rights, including free, prior and informed consent, will be enshrined in Canadian law and policy remains to be seen.<sup>80</sup>

In the meantime, the case studies highlight the importance of protocols to set the stage for effective engagement in conservation offsetting. Bkejwanong had a consultation and accommodation protocol in place to ensure that the community's rights and interests were respected. For Akwesasne, cultural protocols provided the foundation for building a respectful working relationship with South Nation Conservation. In the Red Hill Valley negotiations, "the clearest guidelines for consultation came from communities themselves."<sup>81</sup>

### **Relationship building**

The case studies illustrate the vital importance, as well as the difficulty, of building relationships of trust and respect as a cornerstone for engagement with First Nations. Time and care must be invested in developing cross-cultural understanding of Indigenous histories, protocols, rights, responsibilities and ways of knowing. In the case of Akwesasne, for instance, the working relationship that emerged between the First Nation and the conservation authority is considered a significant outcome in and of itself. With respect to the Six Nations, the need for sustainable relationships emerged as one of the most common points that both Indigenous and non-Indigenous interviewees raised in MacCallum and Viswanathan's study of the Red Hill Valley.<sup>82</sup> Fittingly, the establishment of the Joint Stewardship Board, as well as the wampum (signifying respect, trust and friendship) and the agreements reached with the City of Hamilton, provided a formal structure intended to foster long-term relationships. These were further supported, as Sheri Longboat explains, by the development of other formal processes such as "the co-development of Terms of Reference, routine monthly meetings (rotating between communities), a City staff liaison and the adoption or adaptation of existing procedures proven effective in practice."<sup>83</sup>

Elsewhere, however, the experience was less positive. Attention paid to developing respectful relationships was minimal to non-existent.

Appropriate relationship building must start early in the process, insists Chris Craig. But even then, short-term, project-by-project engagement is insufficient. As MacCallum and Viswanathan explain, "project-by-project engagement, though perhaps initially less costly than long-term planning, is limiting in that it does not establish a stable working relationship upon which to ground progressive collaboration, and prevent potential conflict between municipalities and First Nations. This kind of temporary measure maintains the engagement process as a reactionary, defensive, or mitigative one."<sup>84</sup> At the municipal level, staff capacity for more proactive engagement is limited and, when it occurs, tends to be initiated by individuals who deem it to be important. Different cultural



perspectives on timelines present another hurdle.<sup>85</sup> As long as there is institutional resistance to doing things differently, respectful relationships will remain elusive. Recognizing the challenge, the Ontario Ministry of Municipal Affairs and Housing recommends proactive, early and frequent engagement of Indigenous communities and notes that relationship building may take time and requires flexibility to accommodate different governance models.<sup>86</sup>

### **Traditional Knowledge**

Institutional resistance to the integration of Indigenous Traditional Knowledge is widespread, as the Algonquin, Akwesasne and Alderville case studies illustrate. Even where Traditional Knowledge had been gathered (Alderville) or where agreement had been reached between Indigenous and non-Indigenous partners (Akwesasne), decision makers failed to adequately integrate Traditional Knowledge into decisions about offsetting. In sharp contrast, the chief and council of the Six Nations worked with community experts to provide environmental assessments that brought both Mohawk Traditional Knowledge and Western science to bear on a number of issues in the Red Hill Valley.

Both Chris Craig and Rick Beaver suggest that the time-honoured, holistic approach of Indigenous Traditional Knowledge provides a much-needed antidote to the arrogance and short-term horizons of Western science. Kathleen Ryan maintains that from an Indigenous perspective, everything in nature is significant, and that offsetting efforts must attend not only to individual species, but also to the relationships among them. “We need to scrutinize development rather than play off one ‘significant’ part of the environment against another,” she advises. Dan Longboat, a Mohawk from the Six Nations and director of the Indigenous Environmental Studies and Sciences Program at Trent University, conveys the depth and richness of Traditional Knowledge in these words:

When we talk about understanding, knowledge and engagement, the communities are at the centre. It’s what our ancestors have been able to pass on to us, thousands of years of knowledge. Unlike the West, our knowledge has come from a place of spirit. It’s about messengers that came forward, animals, plants, beings. We are accessing a body of knowledge that has the ability to call the thunders out of a clear blue sky, not a power over nature or thunder. It is the power of what it means to be a human being, accessing our knowledge which comes from the communities. A life energy force is all around us that we need to understand and appreciate and engage with. It’s about a reciprocal relationship that manifests itself in the unfolding of creation. We need to use our minds, hearts and spirits to get things done.<sup>87</sup>

### **Two-eyed Seeing**

The importance and promise of developing cross-cultural capacity was a theme common to all of the case studies. It is a matter not only of building understanding, but also of broadening horizons and seeing more fully the situation and the possibilities at hand. Some communities and organizations have taken meaningful steps in this direction. Akwesasne and the South Nation Conservation Authority made deliberate efforts, for example, to bridge the two cultural perspectives through professional development and observance of cultural protocols. The Six Nations and the City of Hamilton went a step further by formally establishing a structure for cross-



cultural interaction and exchange, the Joint Stewardship Board, with equal representation from both parties.

Two-eyed Seeing would benefit all who depend on shared lands and waters. To more fully access its potential, however, will require investment, cooperation and sustained commitment from governments and other parties involved in conservation offsetting. A major hurdle is the general illiteracy of Canadians about the shared history and contemporary circumstances of Indigenous peoples. This lack of awareness has undermined respect for the rights of Indigenous peoples that have flowed since contact with Europeans (as identified, for example, in the Proclamation of 1763, the Niagara Treaty of 1764, the Canadian Constitution and several Supreme Court of Canada decisions) and that have been affirmed internationally in UNDRIP. It is to be hoped that the federal and provincial governments' endorsement of UNDRIP and commitments to reconciliation will provide the motivation needed to begin to address the large education gap identified by the Truth and Reconciliation Commission of Canada.

The task is not an easy one, and responsibility for it cannot be placed solely on the shoulders of individuals. It must be embraced broadly within organizations to ensure sustained commitment and understanding. Both hope and determination are needed to bring together the best of Indigenous and Western ways of knowing, for the sake of continuation of all life.

### **Youth engagement and education**

Change is in the air. As our case studies indicate, young Indigenous men and women, educated in Western science, are playing an increasingly significant role in land use planning and decision making within traditional territories, thereby enhancing community capacity to deal with developers and government. Following in their footsteps, Indigenous youth are learning from both Western science educators and Traditional Knowledge carriers, opening their eyes to more than one perspective.

Learning from Elders is deemed essential to equipping the next generation and anchoring science in Traditional Knowledge systems. More than a technological fix is needed, explains Dan Longboat. "We either become enlightened or we face catastrophe." Hence the urgency of connecting youth with Elders, in a spiritual context, to support the transmission of Traditional Knowledge and to ready youth for the challenges ahead.

Opportunities are improving for Indigenous students and for other students wishing to learn more about Indigenous peoples and issues through postsecondary education. In the past two years, the number of academic programs designed for Indigenous students or focusing on Indigenous issues has increased by 33 percent; 233 undergraduate and 62 graduate-level programs are now offered.<sup>88</sup> In June 2015, Canadian universities adopted a set of 13 principles intended to close the education gap between Indigenous and non-Indigenous students.<sup>89</sup> Trent University's Indigenous Environmental Studies and Sciences Program, created in 2009, provides a unique and outstanding example of a program designed to prepare students for the field of Indigenous environmental issues, such as conservation offsetting, by bringing together both Indigenous Traditional Knowledge and Western science.

# D. Conclusion: Benefits, challenges and opportunities

Choosing whether to participate in conservation offsetting is never easy. It is a trade-off, involving both destruction and restoration of the natural world. The choice has troubling implications succinctly conveyed in Paul General's simple yet haunting question: "How do you compensate for cutting down 10 trees that are 200 years old?"

It is to be expected that Indigenous communities would offer diverse responses to this question. For many, if not most, the response would be grounded in a profound sense of responsibility to protect the land, in accordance with traditional teachings. Jeff Beaver of Alderville First Nation underlines the need for caution: "It's easy to take and destroy land and water, but takes a very long time to get it back. I would like to see more resources go towards restoration of sites that have been polluted or destroyed rather than mess up more territory."

As the case studies indicate, Indigenous communities are not willing to sit back while the loss and destruction of their fellow beings and sacred places continue. The appetite for engagement and setting the table for positive change is strong. For some communities, conservation offsetting may fit within a broader strategy for ecological and cultural restoration.

The following lists of potential benefits and challenges, based on the five case studies, are offered to help inform decisions about whether and how best to participate in conservation offsetting.

## Potential benefits

**1. Habitat improvements.** In four of the five case studies, conservation offsetting led to habitat improvements (including stream, grassland and fish habitat restoration, tree planting and enhanced wildlife corridors). The participation of the First Nation consistently ensured better outcomes for biodiversity than would have been achieved otherwise.

**2. Revenue for biodiversity conservation.** Participation in offsetting can provide much needed revenue for biodiversity conservation initiatives. For instance, as an offset provider, Bkejwanong is using funds received to restore and manage grasslands (e.g., prescribed burns), to remove invasive species and to develop management prescriptions for land trust properties.

**3. Maintenance of traditional practices such as hunting and gathering.** Sites restored through conservation offsetting can support traditional practices. At Bkejwanong, for instance, the restored offset sites are available to the community for gathering berries, medicines and sweetgrass, and for hunting deer and game birds. At Alderville, the offset included the creation of medicinal plant gardens. Deer inventories and the development of a plan to protect and recover medicinal plants (e.g., sweet fern, sassafras) are part of the offset for the Six Nations.

**4. Education and spiritual connectivity.** The restoration and use of offset sites provide opportunities for hands-on learning and reconnecting with traditional practices, including stewardship. At Bkejwanong, for example, the restored offset sites are available for educational outings and reconnecting with the land.

**5. Enhanced cultural capacity.** Through involvement in planning for and delivering offsets, there may be opportunities to build capacity for cultural restoration. For example, the establishment of Kayanase, a native plant and seed nursery at Six Nations, has gone hand in hand with the translation and recording of species names in Indigenous languages.

**6. Enhanced awareness and understanding among governments, development proponents, non-Indigenous organizations and the public.** Through effective engagement in offsetting, Indigenous communities can create or leverage opportunities to educate others about responsibilities, rights and interests. This may occur, for example, through the integration of cultural protocols into negotiations and other proceedings (e.g., Six Nations, Akwesasne). It may also include broader public outreach to the nearby non-Indigenous communities through presentations, exhibits, local media, sites visits and so on.

## Challenges

**1. Lack of Indigenous representation at the table.** Getting a place at the decision-making table is not easy, as several of the case studies show. Communities struggle with an overwhelming number of notices, as well as late notification about development proposals. Once at the table, the power to influence decisions is not guaranteed and may be seriously constrained, as Akwesasne's experience demonstrates.

**2. Lack of community experience.** Conservation offsetting is emerging nationally and internationally as an option for tempering the negative impacts of development, yet little information exists about First Nations' experiences and models for proceeding. In deciding whether to engage as an offset provider, for example, Bkejwanong had no reference points for determining what was fair or acceptable.

**3. Unlevel playing field.** Indigenous communities are typically at a disadvantage when decision-making frameworks privilege Western science and operate according to tight, inflexible timelines and procedures that prohibit adequate consultation with communities, exclude diverse viewpoints and do not allow for consensus building. Such was the experience of Alderville, for example, when the provincial government refused to consider anything but the standard EIS. Indigenous cultures have methods, ceremonies and other tools to cultivate empathy and spiritual connectivity, considered fundamental to stepping away from fear, greed and selfishness, and arriving at acceptable decisions. Unless these are integrated, working respectfully across cultures is not possible.

**4. Insufficient government standards.** Though communities may wish to operate at a higher standard with respect to conservation offsetting, this can be difficult if not impossible to negotiate when governments set a low bar. Bkejwanong initially asked the development proponents to offset their impacts at a ratio of 1:5 (hectares lost:hectares gained through restoration). When this was refused, the community then proposed a 1:3 replacement ratio, but the developers would not move from the bare minimum of 1:1 required by law. Similarly, in the case of both Akwesasne and Alderville, government bureaucracies resisted proposals by the communities to do additional habitat improvements beyond the minimum requirements.

## **Opportunities**

Plants and animals, including species at risk, abound on the lands of Indigenous peoples. This fact alone suggests that First Nations have unique opportunities to engage in species and ecosystem recovery efforts and associated development through conservation offsetting. To support decision making within Indigenous communities about whether or how to participate in conservation offsetting, it will be important to enable the sharing of information and experiences among communities through meetings and networking. There are models to build from, including the Eastern Ontario First Nation Working Group. Respectful alliances with non-Indigenous groups that wish to support (but not manage or direct) Indigenous efforts are also welcome. Connecting – and helping others to connect – with the gifts bestowed by the earth will be critical to understanding the implications of and making good decisions about conservation offsetting.

<sup>1</sup> International Union for Conservation of Nature, *Biodiversity Offsets Technical Study Paper* (Gland, Switzerland: IUCN, 2014), p. 2.

<sup>2</sup> The terms “biodiversity offsetting” and “conservation offsetting” are both widely used to refer to the same compensation mechanism. Ontario Nature has used “biodiversity offsetting” in all past reports and communications. However, as that term may suggest an approach that separates humans from nature and may exclude consideration of cultural impacts, Ontario Nature now uses the term “conservation offsetting.”

<sup>3</sup> *Insights into Biodiversity Offsetting in Ontario: Summary of Ontario Nature’s 2013–2014 Project* (Toronto: Ontario Nature, August 2014).

[www.ontarionature.org/discover/resources/PDFs/reports/Biodiversity\\_Offsetting\\_Ontario.pdf](http://www.ontarionature.org/discover/resources/PDFs/reports/Biodiversity_Offsetting_Ontario.pdf); *Key Issues in Biodiversity Offset Law and Policy: A comparison of six jurisdictions* (Toronto: Ontario Nature, June 2015).

[www.ontarionature.org/protect/habitat/PDFs/Key\\_Issues\\_In\\_Biodiversity\\_Offset\\_Law\\_and\\_Policy\\_A\\_Comparison\\_of\\_Six\\_Jurisdictions\\_Final.pdf](http://www.ontarionature.org/protect/habitat/PDFs/Key_Issues_In_Biodiversity_Offset_Law_and_Policy_A_Comparison_of_Six_Jurisdictions_Final.pdf); and *Biodiversity Offsetting in Ontario: Issues, accomplishments and future directions – Summary of Ontario Nature’s 2014–2016 Project* (Toronto: Ontario Nature, October 2016).

[www.ontarionature.org/discover/resources/PDFs/reports/Biodiversity\\_Offsetting\\_in\\_Ontario\\_Summary%20of\\_Ontario\\_Nature's\\_2014-2016\\_Project\\_Report.pdf](http://www.ontarionature.org/discover/resources/PDFs/reports/Biodiversity_Offsetting_in_Ontario_Summary%20of_Ontario_Nature's_2014-2016_Project_Report.pdf).

<sup>4</sup> In August 2008, the Walpole Island Land Trust was the first Indigenous land trust to receive charitable status in Canada. “In addition to conserving land the Walpole Island land trust aims to maintain and reconnect the community’s cultural ties to the land thereby ensuring community investment in the natural beauty that is found within ...” <http://walpolelandtrust.com/about-us/>.

<sup>5</sup> “Conservation banking refers to the restoration and protection of lands that serve to offset adverse impacts to species or habitats elsewhere through the use of conservation credits. It involves undertaking conservation actions prior to any particular corresponding development and creating credits to be applied at a later date to development projects needing offsets.” See Ontario Nature, 2016, pp. 44–45.

<sup>6</sup> Section 23.6 of Ontario Regulation 242/08 under the ESA.

<sup>7</sup> Joey Krackle, “100%-owned solar farm in Canada in Alderville First Nation,” Anishnabek News.ca (December 7, 2015). [anishnabeknews.ca/2015/12/07/100-owned-solar-farm-in-canada-in-alderville-first-nation/](http://anishnabeknews.ca/2015/12/07/100-owned-solar-farm-in-canada-in-alderville-first-nation/).

<sup>8</sup> [alderville.ca/our-offices-services/solar-farm/](http://alderville.ca/our-offices-services/solar-farm/).

<sup>9</sup> Carey Marsden, “First Nation owned solar farm built northeast of Toronto,” Global News (June 19, 2013). [globalnews.ca/news/655969/first-nation-owned-solar-farm-built-northeast-of-toronto/](http://globalnews.ca/news/655969/first-nation-owned-solar-farm-built-northeast-of-toronto/).

<sup>10</sup> Krackle.

<sup>11</sup> Ibid.

<sup>12</sup> See Alderville Community Trust Strategic Investment Plan, 2010, Section 1, Purpose. [alderville.ca/alderville-community-trust/strategic-investment-plan/](http://alderville.ca/alderville-community-trust/strategic-investment-plan/).

<sup>13</sup> Ibid., Section 2.

<sup>14</sup> Krackle.

<sup>15</sup> Formerly known as the Port of Prescott, owned and operated by the Township of Edwardsburgh/Cardinal, it was officially renamed Port of Johnstown on January 1, 2014. “Port of Prescott Formally Renamed Port of Johnstown,” Marine Link (December 10, 2013). [www.marinelink.com/news/johnstown-prescott361855](http://www.marinelink.com/news/johnstown-prescott361855).

<sup>16</sup> Jan Murray, “Expanded port of Johnstown seen as regional economic driver,” *Inside Brockville* (June 29, 2015). [www.insidebrockville.com/news-story/5701523-expanded-port-of-johnstown-seen-as-regional-economic-driver/](http://www.insidebrockville.com/news-story/5701523-expanded-port-of-johnstown-seen-as-regional-economic-driver/)

<sup>17</sup> Ronald Zajac, “Expanded Johnstown port open for business,” *Brockville Recorder and Times* (June 26, 2015). [www.recorder.ca/2015/06/26/expanded-johnstown-port-open-for-business](http://www.recorder.ca/2015/06/26/expanded-johnstown-port-open-for-business).

<sup>18</sup> Ministry of the Environment, Province of Ontario. Order to declare that the Environmental Assessment Act (EAA) does not apply to the planning and construction the Port of Prescott Expansion, Rehabilitation and Future Development Area. Regulation decision notice, November 24, 2010. [www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTA5OTA3&statusId=MTY3MDE1&language=en](http://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTA5OTA3&statusId=MTY3MDE1&language=en).

<sup>19</sup> South Nation Conservation, “Berm gets technicians up close to St. Lawrence fish species,” media release (May 4, 2012). [www.ourhometown.ca/news/NL1176.php](http://www.ourhometown.ca/news/NL1176.php). Note that the Township of Edwardsburgh/Cardinal is a member municipality of SNC.

<sup>20</sup> Zajac.

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- <sup>21</sup> For an explanation, see Institute for Integrative Science & Health, Cape Breton University, [www.integrativescience.ca/Principles/TwoEyedSeeing/](http://www.integrativescience.ca/Principles/TwoEyedSeeing/).
- <sup>22</sup> The agreement was required under an ESA regulatory exemption, Section 23 of the Ontario Regulation 242/08. See Environmental Registry information notice “Agreement under Section 23 of Ontario Regulation 242/08 of the Endangered Species Act for removal and transplanting of Butternut trees and transplanting and propagation of American Ginseng by the City of Ottawa to enable a road extension.” [www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTA4OTY1&statusId=MTYzNjlx&language=en](http://www.ebr.gov.on.ca/ERS-WEB-External/displaynoticecontent.do?noticeId=MTA4OTY1&statusId=MTYzNjlx&language=en).
- <sup>23</sup> The agreement also applied to the removal of butternut trees, though these are outside the scope of this case study.
- <sup>24</sup> Denise Deby, “Ottawa groups race to save South March Highlands from developers’ bulldozers,” *This Magazine* (March 22, 2011). [this.org/2011/03/22/south-march-highlands-ottawa/](http://this.org/2011/03/22/south-march-highlands-ottawa/).
- <sup>25</sup> Ibid.
- <sup>26</sup> The Ontario Ginseng Innovation & Research Consortium (OGIRC). [www.uwo.ca/physpharm/ogirc/about-us/index.html](http://www.uwo.ca/physpharm/ogirc/about-us/index.html).
- <sup>27</sup> From 2006 until 2013, Craig received funding to work on the Eastern Ontario American Ginseng Recovery and Restoration Program, which he designed. In 2010, the Ontario Ministry of Natural Resources and Forestry (MNR) awarded SNC a Species at Risk Stewardship Fund grant for the project. [news.ontario.ca/mnr/en/2010/08/species-at-risk-stewardship-fund-projects-2010.html](http://news.ontario.ca/mnr/en/2010/08/species-at-risk-stewardship-fund-projects-2010.html).
- <sup>28</sup> McDermott, one of the authors of this report, is an Algonquin from the Shabot Obaadjiwan First Nation.
- <sup>29</sup> The MNR ecologist was a species-at-risk specialist for ginseng.
- <sup>30</sup> “FSC is an international certification and labeling system dedicated to promoting responsible forest management of the world’s forests.” At FSC Canada, decisions are made by members of four chambers, Environmental, Social, Economic and Aboriginal, and each chamber has equal voting power. [ca.fsc.org/en-ca](http://ca.fsc.org/en-ca).
- <sup>31</sup> In 2001 the Region of Hamilton amalgamated and became the City of Hamilton.
- <sup>32</sup> The Lincoln Alexander Parkway, opened in 1997, was the first section of the Parkway to be completed south and east of Hamilton. See City of Hamilton, “City of Hamilton – Parkway and Red Hill Valley – Sustainability Plan” (June 5, 2007). [www2.hamilton.ca/NR/rdonlyres/F286A18C-BC21-4675-A09B-6CA0181C62DD/0/rpt\\_parkway\\_finalversion.pdf](http://www2.hamilton.ca/NR/rdonlyres/F286A18C-BC21-4675-A09B-6CA0181C62DD/0/rpt_parkway_finalversion.pdf).
- <sup>33</sup> “Nov. 17, 2007: Red Hill Valley Parkway opens,” *Hamilton Spectator* (September 23, 2016). [www.thespec.com/community-story/6868754-nov-17-2007-red-hill-valley-parkway-opens/](http://www.thespec.com/community-story/6868754-nov-17-2007-red-hill-valley-parkway-opens/).
- <sup>34</sup> Clara MacCallum & Leela Viswanathan, “The Crown Duty to Consult and Ontario Municipal–First Nations Relations: Lessons Learned from the Red Hill Valley Parkway Project. *Canadian Journal of Urban Research*, 22:1, Supplement 2013. [www.queensu.ca/pwip/sites/webpublish.queensu.ca.pwipwww/files/files/publications/crown-duty-to-consult.pdf](http://www.queensu.ca/pwip/sites/webpublish.queensu.ca.pwipwww/files/files/publications/crown-duty-to-consult.pdf).
- <sup>35</sup> Samantha Craggs. “5 years later, was the Red Hill Valley Parkway worth it?” CBC News (January 2, 2013). [www.cbc.ca/news/canada/hamilton/news/5-years-later-was-the-red-hill-valley-parkway-worth-it-1.1275560](http://www.cbc.ca/news/canada/hamilton/news/5-years-later-was-the-red-hill-valley-parkway-worth-it-1.1275560). See also MacCallum & Viswanathan, p. 10.
- <sup>36</sup> Chris Murray, “Red Hill Valley: More Than a Road Project,” City of Hamilton (March 31, 2004), p. 1. [conf.tac-atc.ca/english/resourcecentre/readingroom/conference/conf2004/docs/s18/hamilton.pdf](http://conf.tac-atc.ca/english/resourcecentre/readingroom/conference/conf2004/docs/s18/hamilton.pdf).
- <sup>37</sup> Murray, p. 5.
- <sup>38</sup> John Bacher, “On Red Hill: A quarter-century scrap over controversial expressway opens a legal hornet’s nest,” *NOW* (August 21, 2003). [nowtoronto.com/news/on-red-hill/](http://nowtoronto.com/news/on-red-hill/).
- <sup>39</sup> *Hamilton Spectator*, September 23, 2016. See also “The Red Hill Valley Project Wins Second National Environmental Award,” City of Hamilton media release, March 17, 2006. [www2.hamilton.ca/NR/rdonlyres/75C9922D-255A-4D5F-82A1-5028C688F47A/0/MediaReleaseCCAMarch172006.pdf](http://www2.hamilton.ca/NR/rdonlyres/75C9922D-255A-4D5F-82A1-5028C688F47A/0/MediaReleaseCCAMarch172006.pdf).
- <sup>40</sup> Murray, p. 2.
- <sup>41</sup> MacCallum & Viswanathan, p. 11.
- <sup>42</sup> Carmela Fragomeni, “Red Hill Valley stewardship shared by city and Six Nations,” *Hamilton Spectator* (March 26, 2014). [www.thespec.com/news-story/4430533-red-hill-valley-stewardship-shared-by-city-and-six-nations/](http://www.thespec.com/news-story/4430533-red-hill-valley-stewardship-shared-by-city-and-six-nations/); Matthew Van Dongen, “Slow going on Red Hill Valley protection plan,” *Hamilton Spectator* (February 29, 2012).



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[www.thespec.com/news-story/2233585-slow-going-on-red-hill-valley-protection-plan/](http://www.thespec.com/news-story/2233585-slow-going-on-red-hill-valley-protection-plan/).

<sup>43</sup> See letter from Chief Roberta Jamieson to the Confederacy Council (August 22, 2003) at [jointstewardshipboard.com/wp-content/uploads/2016/02/HaudenosauneeAgreements-Joint-Stewardship-Agreements-Long-form.pdf](http://jointstewardshipboard.com/wp-content/uploads/2016/02/HaudenosauneeAgreements-Joint-Stewardship-Agreements-Long-form.pdf).

<sup>44</sup> Haudenosaunee Confederacy. Joint Stewardship Board. [www.haudenosauneeconfederacy.com/jsb.html](http://www.haudenosauneeconfederacy.com/jsb.html).

<sup>45</sup> Haudenosaunee Confederacy.

<sup>46</sup> MacCallum & Viswanathan, p. 10.

<sup>47</sup> Joint Stewardship Board, Working Together for Future Generations. [jointstewardshipboard.com/](http://jointstewardshipboard.com/).

<sup>48</sup> Haudenosaunee Confederacy; Van Dongen.

<sup>49</sup> Sheri Longboat, “Beyond Consultation: Lessons from Joint Stewardship,” *Plan Canada*, (Winter 2016), p. 36.

<sup>50</sup> Van Dongen; Fragomeni, 2014; Longboat, p. 35.

<sup>51</sup> As quoted in Van Dongen.

<sup>52</sup> MacCallum & Viswanathan, p. 11.

<sup>53</sup> Longboat, p. 35.

<sup>54</sup> “Nov. 17, 2007: Red Hill Valley Parkway opens,” *Hamilton Spectator*, Sept. 23, 2016.

<sup>55</sup> *Ibid.*

<sup>56</sup> *Ibid.*

<sup>57</sup> Murray, p. 3.

<sup>58</sup> Chris Seto, “Tree-planting program takes root in Hamilton after Hydro One clear-cut: City of Hamilton to put \$400,000 aside to fund a tree planting program for Ward 5,” CBC News (July 5, 2016). [www.cbc.ca/news/canada/hamilton/news/tree-planting-program-takes-root-in-hamilton-after-hydro-one-clear-cut-1.3665168](http://www.cbc.ca/news/canada/hamilton/news/tree-planting-program-takes-root-in-hamilton-after-hydro-one-clear-cut-1.3665168); Chris Seto, “City, Six Nations fighting Hydro One clear-cut of Red Hill corridor: Hamiltonians and Haudenosaunee fighting to keep trees from being cleared,” CBC News (March 20, 2016). [www.cbc.ca/news/canada/hamilton/news/city-six-nations-fighting-hydro-one-clear-cut-of-red-hill-corridor-1.3497414](http://www.cbc.ca/news/canada/hamilton/news/city-six-nations-fighting-hydro-one-clear-cut-of-red-hill-corridor-1.3497414).

<sup>59</sup> For more information on Kayanase, see the organization’s website, [kayanase.weebly.com/](http://kayanase.weebly.com/).

<sup>60</sup> For more information on the Haudenosaunee Development Institute, see the Haudenosaunee Confederacy website, [www.haudenosauneeconfederacy.com/hdi.html](http://www.haudenosauneeconfederacy.com/hdi.html).

<sup>61</sup> Joint Stewardship Board, “The Bear Meeting Place, Red Hill Valley.” [jointstewardshipboard.com/wp-content/uploads/2014/09/FINAL\\_BearBrochure\\_Sep2014.pdf](http://jointstewardshipboard.com/wp-content/uploads/2014/09/FINAL_BearBrochure_Sep2014.pdf).

<sup>62</sup> As quoted in Fragomeni.

<sup>63</sup> MacCallum & Viswanathan, p. 11.

<sup>64</sup> A 2012 draft of the City of Hamilton Archaeology Management Plan is available at [www2.hamilton.ca/NR/rdonlyres/F34C5182-DF62-4AB7-9E3E-32615E111D03/0/AMPDraftPolicies.pdf](http://www2.hamilton.ca/NR/rdonlyres/F34C5182-DF62-4AB7-9E3E-32615E111D03/0/AMPDraftPolicies.pdf).

<sup>65</sup> Fragomeni.

<sup>66</sup> Longboat, p. 33.

<sup>67</sup> MacCallum & Viswanathan, p. 9.

<sup>68</sup> *Ibid.*, p. 3. Jody Johnson and Scott Stoll of Aird & Berlis LLP similarly distinguish between the Crown’s “constitutional” duty to consult and “statutory obligations” of municipalities as third parties to whom the Crown has delegated its procedural duties. They note that the issue of municipalities’ duty to consult has not yet been decided in Ontario. Jody Johnson & Scott Stoll, “The Municipal Duty to Consult First Nations,” AMCTO Annual Conference and Professional Development Institute (June, 2015). [www.amcto.com/imis15/Documents/Conference/2015%20Conference/3%20Working%20with%20Aboriginal%20Communities-%20Jody%20Johnson.pdf](http://www.amcto.com/imis15/Documents/Conference/2015%20Conference/3%20Working%20with%20Aboriginal%20Communities-%20Jody%20Johnson.pdf).

<sup>69</sup> Ontario Ministry of Municipal Affairs and Housing, *Municipal-Aboriginal Relationships: Case Studies* (last modified October 25, 2015). [www.mah.gov.on.ca/Page6054.aspx](http://www.mah.gov.on.ca/Page6054.aspx).

<sup>70</sup> Ontario Ministry of Municipal Affairs and Housing, Provincial Policy Statement 2014, section 4.3. Further, section 4.6 states: “This Provincial Policy Statement shall be implemented in a manner that is consistent with the Ontario *Human Rights Code* and the *Canadian Charter of Rights and Freedoms*.”

<sup>71</sup> MacCallum & Viswanathan, p. 3.

<sup>72</sup> *Ibid.*, p. 5.

<sup>73</sup> *Ibid.*, p. 3.

<sup>74</sup> Ontario Ministry of Municipal Affairs and Housing, 2015, p. 1.



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<sup>75</sup> Two case studies are not particularly relevant. Alderville was the development proponent in one case. In the other, the development did not occur within the traditional territory of Bkejwanong.

<sup>76</sup> MacCallum & Viswanathan, pp. 13, 14. Sheri Longboat similarly identifies the need to address capacity as one of the four key lessons learned from the Red Hill Valley situation. She notes that the City of Hamilton made a financial commitment to support the work of the Joint Stewardship Board, which has reaped many benefits, including attracting potential partners and funding opportunities, p. 36.

<sup>77</sup> Ontario Ministry of Municipal Affairs and Housing, 2015, p. 11.

<sup>78</sup> Kathleen Ryan, personal communication (September 7, 2016).

<sup>79</sup> See Prime Minister Justin Trudeau's renewed commitment to advance reconciliation:

[pm.gc.ca/eng/news/2016/12/15/statement-prime-minister-canada-advancing-reconciliation-indigenous-peoples](http://pm.gc.ca/eng/news/2016/12/15/statement-prime-minister-canada-advancing-reconciliation-indigenous-peoples).

<sup>80</sup> Frank Iacobucci, "The path to reconciliation with indigenous peoples starts with consent," *Globe and Mail* (July 13, 2016). [www.theglobeandmail.com/opinion/the-path-to-reconciliation-with-indigenous-peoples-starts-with-consent/article30888197/](http://www.theglobeandmail.com/opinion/the-path-to-reconciliation-with-indigenous-peoples-starts-with-consent/article30888197/). Iacobucci is senior counsel at Torys LLP and was chief negotiator of the Indian Residential Schools Settlement Agreement.

<sup>81</sup> MacCallum & Viswanathan, p. 14.

<sup>82</sup> *Ibid.*, p. 13.

<sup>83</sup> Longboat, p. 36.

<sup>84</sup> *Ibid.*, p. 12.

<sup>85</sup> *Ibid.*, p. 13.

<sup>86</sup> Ministry of Municipal Affairs and Housing (2015), p. 11.

<sup>87</sup> Dan Longboat, Peterborough, October 17, 2016.

<sup>88</sup> Paul Davidson, "Education is the key to reconciliation," *The Hill Times* (June 20, 2016).

[www.univcan.ca/media-room/media-releases/education-key-reconciliation/](http://www.univcan.ca/media-room/media-releases/education-key-reconciliation/).

<sup>89</sup> Universities Canada, "Universities Canada principles on Indigenous education." [www.univcan.ca/media-room/media-releases/universities-canada-principles-on-indigenous-education/](http://www.univcan.ca/media-room/media-releases/universities-canada-principles-on-indigenous-education/).





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