



Tides Canada

Indigenous Guardian Training Needs Scan

April 5, 2019

Executive Summary

Blyth & Bathe conducted research and stakeholder engagement in preparation for Tides Canada's Northern Guardian Training workshop, which will be held April 30 to May 2, 2019. This environmental scan is the culmination of the stakeholder interviews that were held over the month of March. The goal of this scan is to provide some insight into the training programs utilised by the numerous guardian programs operating in Canada's north, with the hopes that this insight will provide a kick-start for the discussions at the workshop. In our discussions we heard about that there are a number of strengths and best practices in existing programming such as the prevalence of on-the-land hands on training, mentorship and an increased focus on personal wellness. At the same time, many programs struggle with funding and the piecemeal development of programming which can lead to little or no evaluation and improvement of future deliveries.

It is now evident that there is broad support for collaboration, but there is a lack of on how such collaboration would work in practice. At the moment, many of the groups face human resources and technical skill shortfalls and funding gaps that leave them struggling to maintain their current activity levels. Many of the stakeholders suggested that they would like to see a third party provide support for collaboration.

Background

Blyth & Bathe was retained by Tides Canada to conduct interviews with Northerners who are involved in Indigenous guardian programs across northern Canada. The primary goal of these interviews was to identify the various processes and programs by which guardians are trained, with the hopes of drawing some broad insights into best practices, knowledge/skills gaps, and the possibility of collaboration among the various groups on future guardian training programs.

Across northern Canada, Indigenous communities are exercising important leadership in the management and care of their territories' environmental health and sustainability. In many cases, following examples set in other parts of Canada and the world, these initiatives have taken the form of community-based "Guardian" or "Steward" programs. Often these Community Guardians/Stewards (hereafter, "Guardians") are described as the community's eyes and ears on the land – watching, anticipating, and protecting the natural systems on which we all rely. As such, the role of the guardian has been framed as a kind of indigenous environmental monitor. This characterisation is seen as too limiting by most groups as the activities that Guardians are engaged in are not limited to monitoring the physical environment. Many of the groups we spoke to are focused on supporting and expanding cultural programs with guardians acting as leaders and role models. One of the criticisms, that we heard about some existing training programming

is that it sometimes emphasises environmental monitoring skills while just barely touching on important cultural and traditional skills.

Throughout the north, the vision for guardian programming is as varied as the landscapes and communities that they service. The required expertise and know-how of Guardians is expansive – ranging from water to air to land, from caribou to fish, and from policy to practice. At the same time, Guardians are often expected to be cultural leaders for their communities, acting as the facilitators in language and on the land programming.

We have heard, for example, that the best training experiences have resulted from programs that are flexible enough to meet the local priorities for monitoring and stewardship and that focus considerable energy to hands-on, land-based learning. We have also consistently heard the importance placed on programming that includes training in personal wellness.

Survey of training needs

Stakeholder Engagement

In the lead-up to the April workshop, Blyth & Bathe interviewed as many of the attendees as possible. We used the following questions as the basis of the training needs survey:

1. What are competencies that are important for Guardians to have?
2. What are the most effective approaches and best practices being taken to train Guardians?
3. How, and by whom, is Guardian training being delivered?
4. Are there opportunities to collaborate and share resources in the interest of training Guardians?

Perhaps highlighting the human resources shortfall that a number of groups faced, many of the interviews needed to be pushed to the end of March or even into the first weeks of April, as the pressures of the March 31 fiscal year end almost universally consumed the available time of everyone involved. Once we were able to talk, there were some themes that ran through each of the conversations. These included:

- Land-based education as a priority;
- Technical vs cultural skills;
- The desire to seek enforcement powers and the hope to learn from any others who have done so already;
- Wellness as a foundation of stewardship; and
- Funding and organisational support.

Each of these will be discussed in the *Common Themes* section below. These are the main items that we heard, and they will provide some direction to the core discussions at the workshop. It should be noted that this list is not exhaustive; the training needs vary from group to group and there are other areas of overlap that may be further fleshed out in the discussions at the workshop.

Survey Respondents

- Kristen Tanche – Dehcho First Nations
- Kelsey Wrightson – Dechinta
- Clare Kines – Parks Canada Agency
- Mike Low – Dehcho AAROM
- Kristielyn Jones – Smith's Landing First Nation
- Patrick Riley – K'atl'odeeche First Nation
- Harry Harris – Fort Good Hope Renewable Resources Council
- Joshua Barichello – Ross River Dena Council
- Deborah Simmons – Sahtú Renewable Resources Board
- Corrine Porter – Dena Kayeh Institute
- Mary Denniston – Nunatsiavut Government
- Stephen Kakfwi – Indigenous Leadership Initiative
- Morgan Voyageur – ACFN - Dene Land & Resource Management
- Bruce McLean – McLean Consulting on behalf of ACFN - Dene Land & Resource Management
- Tamara Tarasoff – Erebus and Terror Guardian Program, Gjoa Haven

What are competencies that are important for Guardians to have?

Nature United publishes “[The Indigenous Guardians Toolkit](#)” as an online reference for communities (and other stakeholders) interested in developing guardian programs. This is an excellent tool and we have used it as the foundation for the skills training discussion. In the toolkit, the training elements are broken into the following five categories:

1. Safety & Outdoor Skills (four sub-categories)
2. Monitoring & Technical Field Skills (eight sub-categories)
3. Cultural & Community Knowledge and Skills (four sub-categories)
4. Communication Skills (five sub-categories)
5. Computer, Data Collection, and Data Management Skills (three sub-categories)

We have included the toolkit’s training elements as Table 1 and provided an indicator of where groups either feel that their organisation lacks skills (**) or that there is a gap in available training (††). Skills respondents mentioned that were not in the

table have been added to the relevant categories in the table.

Table 1: The Indigenous Guardians Toolkit Training Elements

Training Element	Training / Skills Gap
1. Safety & Outdoor Skills	
1.1 Vehicle operations – boat safety, driver's licences, ATV/snowmobile safety and repair	
1.2 First Aid Training – wilderness first aid, basic first aid, wilderness first responder	**
1.3 Safety Training – chainsaw safety, predator defence, wilderness survival and crisis management, firearms, ice rescue	**
1.4 Land Skills	
2.0 Monitoring & Technical Field Skills	
2.1 Environmental Monitoring – water quality, construction/development sites, contaminated sites	**
2.2 Fisheries – electrofishing, fish identification, fish habitat, stream restoration, water monitoring	
2.3 Wildlife – wildlife ecology, wildlife monitoring techniques, habitat survey, population survey	
2.4 Forestry – forest inventory, vegetation, soil sampling, riparian inventory, habitat restoration	
2.5 Restoration – stream restoration, habitat restoration	**
2.6 Compliance Monitoring – relevant Indigenous laws, relevant Canadian laws and regulations, observe-record-report procedures, note-taking, evidence-gathering	**,††
2.7 Archaeology and Cultural Heritage – archaeological inventory, culturally modified tree inventory, cultural site protection	**,††
2.8 Natural Resource Management – land-use planning, marine-use planning, wildlife management, fisheries management, forest management, protected area management	**
3.0 Cultural & Community Knowledge and Skills	
3.1 Indigenous Knowledge – cultural sites, harvesting sites, species information	
3.2 Language – local language, place names, subjective meanings	**,††
3.3 Cultural Protocols – protocols for harvesting, protocols for visiting areas in territory, knowledge of family areas, protocols for sacred sites, protocols for interacting with neighbouring communities, etc.	
3.4 Indigenous Laws – local Indigenous stewardship laws and policies	**
3.4 Indigenous Stewardship Plans and Agreements – existing plans/agreements/protocols signed by Indigenous community (land-use plan, marine-use plan, wildlife plans, chapters of settlement agreements, etc.)	
4.0 Communication Skills	
4.1 Interpersonal Communications – communication styles and approaches	**,††
4.2 Conflict Resolution – dealing with conflict in the field, including between team members or with visitors.	**,††
4.3 Public Speaking – speaking with resource users in the field, presenting at community events, outreach with youth and community members, increased familiarity and confidence talking about topics related to stewardship.	**
4.4 Writing and Reporting – taking good field notes, daily/weekly activity logs, report writing.	**

4.5 Leadership – team-building, leadership styles, group dynamics

5.0 Computer, Data Collection, and Data Management Skills

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|--|----|
| 5.1 Microsoft Office – Excel, Word and PowerPoint | ** |
| 5.2 Filing and Information/Data Management – file systems, downloading data, saving data, transferring data, inputting data, GIS | ** |
| 5.3 Monitoring Protocols – recording observations, data collection and input | ** |

6.0 Other skills

- | | |
|------------------------|----|
| 6.1 Personal Wellness | ** |
| 6.2 Community Wellness | |

What are the most effective approaches and best practices being taken to train Guardians?

There was very little in the way of consensus on this topic. The respondents, for the most part, stated that training programs were developed on an ad-hoc basis, and in the case of training that was not part of an accredited curriculum, courses were often given as one-off deliveries, leaving little opportunity for evaluation and improvement of future deliveries. They hoped to learn more about best practices through the workshop.

With that said, there were a few things that stood out in the interviews; universally it was recognised that hands-on, on-the-land programs worked best. Students did well when classroom time was limited, and training was focused on their immediate project needs. Respondents from the K'atl'odeeche First Nation, for example, highlighted the fact that trainee's that spent time on the land with a mentor were more likely to succeed as guardians. Similarly, the Erebus and Terror Guardian Program has found that including intergenerational learning experiences to be helpful in both sharing community knowledge and developing pride and support for their Guardian program.

Some respondents also commented on the need for trauma-informed instruction/management as well as the need for wellness training to be incorporated into all aspects of a training program, not just as a stand-alone course. This was particularly emphasized by the respondents from the Sahtú region, where the recent on the land training camp included a strong wellness component. Participants in the program referenced the wellness teachings in discussions during the following weeks and reiterated their support for wellness programming in the follow-up meetings a month after the training camp.

How, and by whom, is Guardian training being delivered?

This summary includes an overview of institutions providing training for guardians that was previously undertaken on behalf of Aurora College, which is currently investigating the demand for an Environmental Stewardship certificate, coupled with the input provided by the stakeholders during the interviews mentioned above.

ECO Canada BEAHR Environmental Monitor Training Program

In its own words, ECO Canada's mission is to "ensure an adequate supply of people with the demonstrated skills and knowledge required to meet the environmental human resource needs of the public and private sectors." Further, BEAHR exists to "increase awareness about environmental careers and build environmental capacity within Indigenous communities. ECO Canada's training division maintains and administers community-based environmental training programs designed to provide introductory skills to those who want to work or pursue further education in the environmental field. Programs are delivered by ECO Canada or third-party trainers approved and licensed through the BEAHR Training Programs." Until recently, Blyth & Bathe was the only licensed training provider of BEAHR programs in Northern Canada. Presently, Arctic Response also offers some BEAHR courses.

It should be noted that there is a consensus that the BEAHR offerings are too narrowly focussed on technical environmental techniques and do not give meaningful consideration to the community-driven cultural and other needs unique to Guardian-type programs. When these courses are taught for Guardians in the NWT, the delivery has to be modified by trainers who are well-versed in the needs of the local program and who are willing to work beyond the standard curriculum to include non-technical aspects of stewardship.

Vancouver Island University: Coastal First Nations Great Bear Initiative & Nanwakolas Council

Vancouver Island University (VIU) delivers two Guardian training programs: one in partnership with the Coastal First Nations Great Bear Initiative, and another with the Nanwakolas Council.

These two programs both train an annual cohort through one-week sessions delivered in-community, with the module deliveries spaced out over two years. Students assemble every couple of months in their local or nearby communities to participate in the modules, which are delivered by a variety of institutional and contract instructors. The program is a total of 14 weeks in length with some independent work also required. In conversation with the VIU program coordinator, it appears the key to these programs' success has been the regional training coordinators employed full-time in each community to support the students on their educational journeys, both in their studies and their employment.

Keyano College Environmental Monitoring Certificate Program

Keyano College, based in Fort McMurray, Alberta, has recently launched an Environmental Monitoring Certificate Program that is based on a "holistic approach that reflects Indigenous perspectives and worldviews". It reflects both the technical and cultural aspects of a "Guardian"-type program and has much to offer. The program includes a suite of courses similar to ECO Canada's existing Environmental Monitor Training Program, but in a more comprehensive manner: it is designed to take into account seasonal land changes, among other local aspects, and includes significant "on the land" time.

At the time of writing, the Keyano program is in its first delivery. As such, it is impossible to fully assess its success yet. Initial reviews of the program were quite enthusiastic, but it has reportedly faced some significant challenges. In particular, the program has struggled to include on-the-land and collaborative cross-cultural learning experiences.

Aurora College – Environmental Stewardship Certificate

In September 2018, Aurora College contracted Blyth & Bathe to assess the demand for an Environmental Stewardship Certificate. While the stakeholders involved in the engagement sessions were enthusiastic about the promise of the potential program, there was some distance between Aurora College's initial vision and the needs described by the stakeholders. There was unanimous support for a pilot launch that would prioritize training of Guardian Coordinators (rather than Guardians themselves). Coordinators are the women and men in each community who oversee, manage, and are otherwise responsible for the Guardian programs in their community. It remains to be seen if the college will revamp their proposed program or eliminate it.

Aurora College – Environment and Natural Resources Technology Program

The Environment and Natural Resources Technology Program is a two-year Diploma program which links opportunities to learn from experience in the field with academic coursework in the classroom and skill training in the laboratory. Graduates of the program will possess the ability needed to succeed as technicians and officers in natural resource and environmental management careers including wildlife, forestry, marine and freshwater fisheries, planning, water resources, environmental protection, parks, land claim resource management, oil and gas, and mining. The program places emphasis on learning through experience.

Arctic College - Environmental Technology Program

This two-year diploma program incorporates classroom and practical lab and field experiences to develop student skills. Graduates of the program will possess the necessary skills to be environmental practitioners in such fields as resource development and management, fish and wildlife conservation, environmental protection, parks management, environmental assessment, waste management, environmental research, and environmental education.

Yukon College - Environmental Monitoring Certificate

This program equips students with technical skills and knowledge to conduct environmental monitoring tasks associated with entry-level positions. This program is designed to allow for participation while maintaining existing employment and family life.

The Environmental Monitoring certificate program provides students with a comprehensive understanding of the biophysical environment, introduces First Nation traditional knowledge, and teaches technical skills such as environmental sampling techniques and navigation and data collection with GPS.

Throughout the program, students develop solid technical skills and learn how environmental monitoring activities connect to regulatory processes and resource management.

Yukon College - Northern Environmental and Conservation Sciences (ENCS)

The ENCS program integrates natural and social sciences to investigate the unique ecosystem and cultural issues of the North.

In collaboration with the University of Alberta, Yukon College offers years three and four of a Bachelor of Science (B.Sc.) degree in ENCS, with a major in Northern Systems.

The ENCS curriculum integrates natural and social sciences as related to issues such as:

- wildlife conservation
- land use
- resource management under modern treaties
- energy
- global climate change
- northern and aboriginal studies,
- local environmental, economic and social context

The program provides students with the knowledge and skills to understand environmental conditions and evaluate impacts on plants, soils, water and animals. The structure and function of ecosystems are explored as students learn to develop, assess and implement conservation and restoration measures for natural and managed ecosystems.

Dechinta Centre for Research and Learning

The Indigenous Boreal Guardians training program, launched in 2015, is designed to identify and develop new leaders who understand the complex challenges facing the future of the land – leaders who can advocate for management practices based on indigenous knowledge, community values, and scientific methods. The course features an interdisciplinary curriculum accredited by the University of Alberta, taught by a variety of experts, elders, and university professors at the land-based Dechinta.

Dechinta Centre for Research and Learning delivers land-based, Indigenous-led and community co-developed university accredited programming. Dechinta has delivered programming in Chief Drygeese Territory, along the Dehcho and Peel Rivers, as well as the Mackenzie Mountains with local communities and knowledge keepers. In fall 2018, Dechinta launched the certificate in land and community-based research in partnership with the University of British Columbia. This 5-credit certificate is developed to meet community needs, but can include courses in Indigenous law and governance, language and culture, traditional knowledge and ecological monitoring. All programming centres Indigenous knowledge and land-based skills.

Public & Private Trainers

Companies such as Blyth & Bathe and Arctic Response have been offering safety, cultural, and environmental skills training throughout the north for years. Companies such as this can provide readymade or custom courses. Most of the survey respondents had partnered with one of these companies at some point and suggested that they can sometimes provide value and flexibility over some of the larger institution-based programs. Respondents mentioned that even for safety courses, such as a wilderness first aid course, it was important to work with a provider that is comfortable with alternative and cross-cultural learning situations.

Similarly, various public agencies and individual researchers have been offering courses. These tend to be very specialised and locally focussed, potentially leaving little room for collaboration.

Current training programs vs current training needs

Throughout the survey interviews, we heard that while the currently available training programs do provide training that is relevant and needed, there remains a noticeable gap as the programs provided by the larger institutions struggle to incorporate relevant cultural and on the land skills. This gap is partially being addressed by the smaller institutions, private companies and through in-house mentorship. During the interviews a number of respondents were hopeful that the new Environmental Stewardship Certificate from Aurora College and the upcoming programming at Dechinta would be step in the right direction for addressing these gaps.

Are there opportunities to collaborate and share resources in the interest of training Guardians?

Based on the considerable input from the participants in our survey, we feel that there is significant support for the idea of collaborating on training, but there is a lack of consensus on how best to go about working together. As such, it may be prudent to place added focus on the development of a system for sharing in Guardian training rather than the individual training elements at the April 30 workshop. The following section covers some of the main topics that respondents referred to when discussing opportunities for working with other groups.

Common Themes

Land-based education

While some training can happen in a traditional classroom setting, the importance of being on the land was highlighted in almost all of the interviews, although it was recognised that this is often logistically and financially challenging. For example, Keyano College has reportedly been able to offer high-quality classroom sessions during the pilot year of the Guardian training program but has been unable to deliver

on the hands-on/on-the-land element. They have faced issues overcoming liability concerns coupled with finding an instructor who is comfortable with both the technical and cultural aspects of the course. In their original vision Keyano had planned to have a technician and elder co-teach, but that has also turned out to be challenging.

In the Sahtú region, an on-the-land camp was recently held and would appear to have been a success. During the planning stage of the camp, stakeholders considered the costs and benefits of holding three separate camps or one regional camp. It was found that by pooling resources, students could be offered 21 days of instruction rather than just 10 if separate camps were held. In the end the cost savings were high enough that some local training could be funded for the smaller community groups. This will be an important consideration in the discussions on collaboration for training amongst Guardian groups, as it may take some experimentation to find out which courses are best delivered locally, and which work best at the regional level.

Technical vs cultural

Across the groups surveyed, it would appear that most of the technical training needs are being served by public and private training programs. Guardian programs are about more than the environment and any training needs to reflect this. To most, environmental training is secondary to training and participation in cultural elements such as community governance, history, language, wellness, land skills, life skills, and leadership. It appears that there is significant desire to see new and creative methods for developing these skills. For the most part, the expectation is that the best Guardians have developed these skills through a lifetime of immersion in land-based cultural activities. Recognising that many potential Guardians lack that experience, most groups are using a mix of formal and informal training to build up these skills. On-the-job and on-the-land mentorship seems to be working well in more than a few programs. Some of the survey respondents remarked that they would like to see similar training systems for their coordinators but struggled to make it work, as staff in those positions often had limited time available for skill development.

One of the often-overlooked technical skills that was mentioned in the interviews was the Guardian's capacity to understand and incorporate traditional knowledge and language. In many cases, these aspects are taught in a manner that fails to understand the subjective nature of these topics. This further highlights the importance of including cross-cultural experiences in as many aspects as possible of a Guardian's training. As one respondent said, "You don't just collect data for traditional knowledge. Research is ceremony."

Enforcement powers

Throughout the surveys there was significant interest in acquiring enforcement powers for Guardians. Respondents were interested to hear about the Ross River Dena's experience with issuing hunting permits to any non-Kaska hunters who wanted to hunt in their territory. Some of the groups hope to see at least some, if not all, of the responsibilities of the conservation officers transferred to the Guardians. This would

necessitate a significant training program that would probably be best delivered at a regional or national level. It is critical to not underrepresent the true complexity of actually pursuing and implementing enforcement measures. Recognising this, some survey respondents envisioned an incremental approach where Guardians work in close partnerships with management authorities until local capacity is developed. This would allow for time to assess the significant liability considerations and to navigate the myriad intergovernmental agreements that would need to be reached.

Wellness as a foundation for stewardship

We repeatedly heard variations of the phrase “to care for the land, you have to care for yourself.” There have been a number of wellness-related courses for Guardians, but most of these courses seem to have been developed by individual practitioners, and there has been little in the way of discussions on best practices and minimal inter-group assessments on what wellness training works best for Guardians. A possible avenue for collaboration would be the development of a more standardised wellness program that provides the tools needed to succeed in both the remote land-based situations as well as in the community.

Funding and organisational support

Lastly, every respondent commented that their program coordinators need to spend a significant amount of time chasing funding. This considerable time sink results in program staff needing to prioritise tasks and leaving other important tasks neglected, especially for new or understaffed programs. Some of the respondents remarked that they would like to explore the possibility of a secretariat that could provide technical and administrative support to the various Guardian programs. This organisation could facilitate collaboration on training as well.

Conclusion

While we feel there is strong backing for collaboration on Guardian training, there has been a clear articulation of how groups can more effectively work together. Considerable effort is going into bringing attendees from all over northern Canada to the April 30 workshop. For attendees to feel that their time is well spent, developing a working vision for collaboration will be one of the main hurdles that we will have to overcome.