

## Global Water Futures 2021 Operations Team Meeting – Project Reporting Template

Instructions: All GWF projects are asked to provide a summary update on their activities and accomplishments in preparation for the upcoming Operations Team meeting. **Please submit these by email to [chris.debeer@usask.ca](mailto:chris.debeer@usask.ca) by no later than December 2.** These will be used to help guide discussions and breakout synthesis activities and will be made generally accessible on our website in advance of the meeting.

<b>Project Name:</b>	<i>Ohneganos – Indigenous Ecological Knowledge, Training and co-creation of mixed method tools</i>
<b>Our major accomplishments to date are:</b>	
<p><b>Indigenous Knowledge/Traditional Ecological Knowledge Team: Lead Dawn Martin-Hill</b></p> <ul style="list-style-type: none"> <li>● Virtual Reality Working group of Indigenous knowledge holders, linguist, tech and production team, developed Skyworld story water teachings script in Mohawk, hired actors and artist</li> <li>● Ohneganos YouTube video show <i>Let's Talk Water</i>, hosted by Makasa Looking Horse, was named Winner of David Suzuki Foundation People's Choice Award 2021</li> <li>● Grade 9/10 framework with Kawenni:io (Six Nations) Private School completed for a bilingual textbook building on existing Haudenosaunee sciences and ecological sciences with Indigenous stories, interactive maps and other educational resources with apps and governance materials</li> <li>● Training community youth with turtle trackers and sensors (shared with GWF Co-Creation and Sensor team)</li> <li>● Winner of Princeton University Book Development Grant 2021 for proposed book titled <i>Ohneganos: Co-Creating Holistic Knowledge of Water, Environment, and Indigenous Health</i></li> <li>● Established Virtual Reality (VR) development script, gaming prototypes, and committee of mothers and speakers for Haudenosaunee cultural engagement and learning</li> <li>● Birthing Centre co-developed survey for new mothers on water access, 54 completed by midwives and co-publishing 'Impact of Water Insecurity on Mental Health of Young Mothers of Six Nations of the Grand River, Frontiers, Water-Gender-Migration: The Complex Nexus and Interlinkages, submitted</li> <li>● Youth lead has engaged local high schools, developed webinar on Indigenous water issues for Waterlution, invited to cyber - present in Sweden, Germany, Mexico, Watershed Convention Global Climate Strike, on Vice news, Chatelaine magazine, COP26 Changemakers book, and</li> <li>● Publications, APTN series, Indigenous foods, Interviewed for film 'Indigenous Waters' APTN/Red Productions</li> <li>● Mapping Lead Chris Martin organized and lead Haldimand Tract Workshop/Symposium, and Indigenous Mapping Workshop 2021 - Terrastories with Rudo Kemper from Digital Democracy</li> <li>● <b>Publications</b></li> <li>● Dawn Martin-Hill and contributions from the team: book chapter titled "Haudenosaunee Women's Water Law: Reclaiming the Sacred" to be published in an upcoming volume titled "Indigenous Water and Drought Management in a Changing World" edited by Miguel Sioui (Assistant Professor, Wilfrid Laurier University)</li> <li>● Martin-Hill, "Doctrine of Discovery: A Mohawk Feminist Response to Colonial Domination and Violations to Indigenous Lands and Women," Rowman and Littlefield Handbook, Women Studies 2021</li> <li>● Dawn Martin-Hill, "Water is life: Haudenosaunee responses to climate change and water security" in Indigenous Cultural/Spiritual Practices and Freedom of Religion, University of Toronto Press 2022</li> </ul>	

**Water Governance Team: Lead Dr. Beverly Jacobs, University of Windsor**

- Knowledge mobilization of SN on Nestle/Blue Triton groundwater extraction
- Youth lead secured cease and desist from Haudenosaunee Confederacy  
TEK committee secured network for youth SHAD Academy, Indigenous Studies and SNP  
STEAM academy to host youth awards, Indigenous futurisms
- Developed a Canadian Water Agency Indigenous governance SN response
- Developed a network of scientist, university senior administration working group with elected  
Council to advance Indigenous management of waters

**Mental Wellness Team: Leads Lori-Davis Hill and Dr. Werkele**

- Established the Ohneganos Six Nations Youth Mental Wellness Advisory and Research  
Development Committee to inform and guide our work
- Created new items to develop a culturally-relevant survey of youth water anxiety and water-  
related resilience factors
- Adapting JoyPop app to integrate water-related elements to bolster resilience, making it the  
first Indigenous youth-oriented mental health app of its kind
- Secured a CIHR-GHI development grant with Water Governance lead, Dr. Bev Jacobs
- **Publications**
- Co-published findings from workshops, Kawenni:io immersion school, youth and mental  
health advisory committee: Jacobs, N., Martin-Hill, D., & Wekerle, C. (2020). Indigenous youth  
resilience: Water protectors. *Open Access Government, October*(28), 82–83. See:  
<https://www.openaccessgovernment.org/indigenous-youth-resilience/94336/>
- Kim, K., Au-Yeung, A., Dagher, D., Wekerle, C., & Six Nations Youth Mental Wellness Advisory  
Committee. (n.d.). Indigenous youth mental wellness and the adaptation of the JoyPopTM  
app. *Manuscript submitted for publication.*
- Noronha, N., Balakumar, S., Toy, K., Smith, S., Wekerle, C., Martin-Hill, D., Looking Horse, M.,  
Avarino, A., Drossos, A., Niec, A., Jacobs, B., Thomasen, K., & Lokker, C. (n.d.). Mental Health  
Mobile Applications developed for Indigenous Communities in Canada: A Scoping Review.  
*Manuscript submitted for publication.*
- Noronha, N., Smith, S. J., Martin Hill, D., Davis Hill, L., Smith, S., General, A., McQueen, C.,  
Looking Horse, M., Drossos, A., Lokker, C., Bilodeau, N., & Wekerle, C. (2021). The Use of  
Mobile Applications to Support Indigenous Youth Wellbeing in Canada. *International Journal  
of Child and Adolescent Resilience, 8*(1). See: <https://ijcar-rirea.ca/index.php/ijcar-rirea/article/view/269>

**Our current activities are:**

**Indigenous Knowledge/Traditional Ecological Knowledge Team:**

- The Ohneganos Team is utilizing the Terrastories software mapping application to conduct a  
community-led digitized Indigenous Map of Haudenosaunee knowledge, history and stories  
(shared with GWF Co-Creation and Sensors) lead by Mapping Lead Chris Martin, with Rudo  
Kemper from Digital Democracy
- Mapping Lead Chris Martin is training youth in Environmental Assessments, GIS Mapping,  
TEK, and more through Six Nations Polytechnic STEAM Academy
- Formed Haudenosaunee Digital Arts group to collaborate on expressing and disseminating  
mixed media arts related to Haudenosaunee and other Indigenous relations to water, culture,  
and histories
- Working with Six Nations Health Services to develop the Haudenosaunee wellness model
- Formed a Traditional Ecological Knowledge (TEK) Education Committee to develop  
accreditation for current, ongoing and future mixed methods, forward reach, diploma and  
water management training

- TEK Education Committee are working on finalizing CE for STEAM Academy students to translate 90 hours for a university credit
- TEK Education Committee is working on developing an open access course on TEK with CE
- Creating a Grandmothers Council to advise all aspects of the IK/TEK project work
- Continued development of Haudenosaunee VR scripts and game interfaces
- **Publications in progress**
- “Ohneganos: Portaging the Kaswentha” in *Polishing the Covenant Chain, Living the Two Row: A Collection of Essays*. Authors: Dawn Martin-Hill, Lori Davis Hill, Sara Smith, Colin Gibson, Makasa Looking Horse, Bonnie Freeman, Nidhi Nagabhatla, Caner Sayan
- Makasa Looking Horse invited by Formac Lorimer Publishing to author a children's book

**Water Governance Team:**

- Youth outreach secured support from Haudenosaunee Confederacy Council to serve a Cease & Desist on water extraction on Haudenosaunee land
- Engaging with McMaster University, Six Nations Elected Council, and GWF to develop research support with Indigenous Canadian Water Agency policy

**Mental Wellness Team:**

- Forming a committee (community youth and adults, and mental wellness team) who will meet monthly via online chat
- Youth water-resilience digital story workshops
- Article based on health survey information

**The main accomplishments expected by the end of the project are:**

**Indigenous Knowledge/Traditional Ecological Knowledge Team:**

- Create an IK/TEK holders with language speakers/codification/identify sub-committee to advance priorities for co-creation of materials required for curriculum of WS/IK sciences, maps, digital storytelling and online material accessible in bilingually
- Online website with TEK Mixed methods resources globally and locally
- Established pathways for secondary and post-secondary environmental water focused applied and research informed credits and diploma, with pathways to the sciences
- Create and compile digital stories archives
- Outreach programs sustaining recruitment into the programs through science and sports camps for youth, art/science exhibits with local cultural centres, museums, and art galleries
- Establish an ecological health and water management office at Six Nations, building on existing services
- Bilingual Mohawk Cayuga and English Haudenosaunee science textbook building on existing Haudenosaunee sciences and ecological sciences with Indigenous stories, interactive maps and other educational resources with apps and governance materials

**Water Governance Team:**

- Legal framework on water governance that incorporates Indigenous law with international and Canadian Laws for Six Nations
- Training of 4 Indigenous youth in Indigenous human rights, U. N. human rights systems and water governance
- A citizen’s guide to ecocentric water protection rooted in Haudenosaunee and Western legal traditions

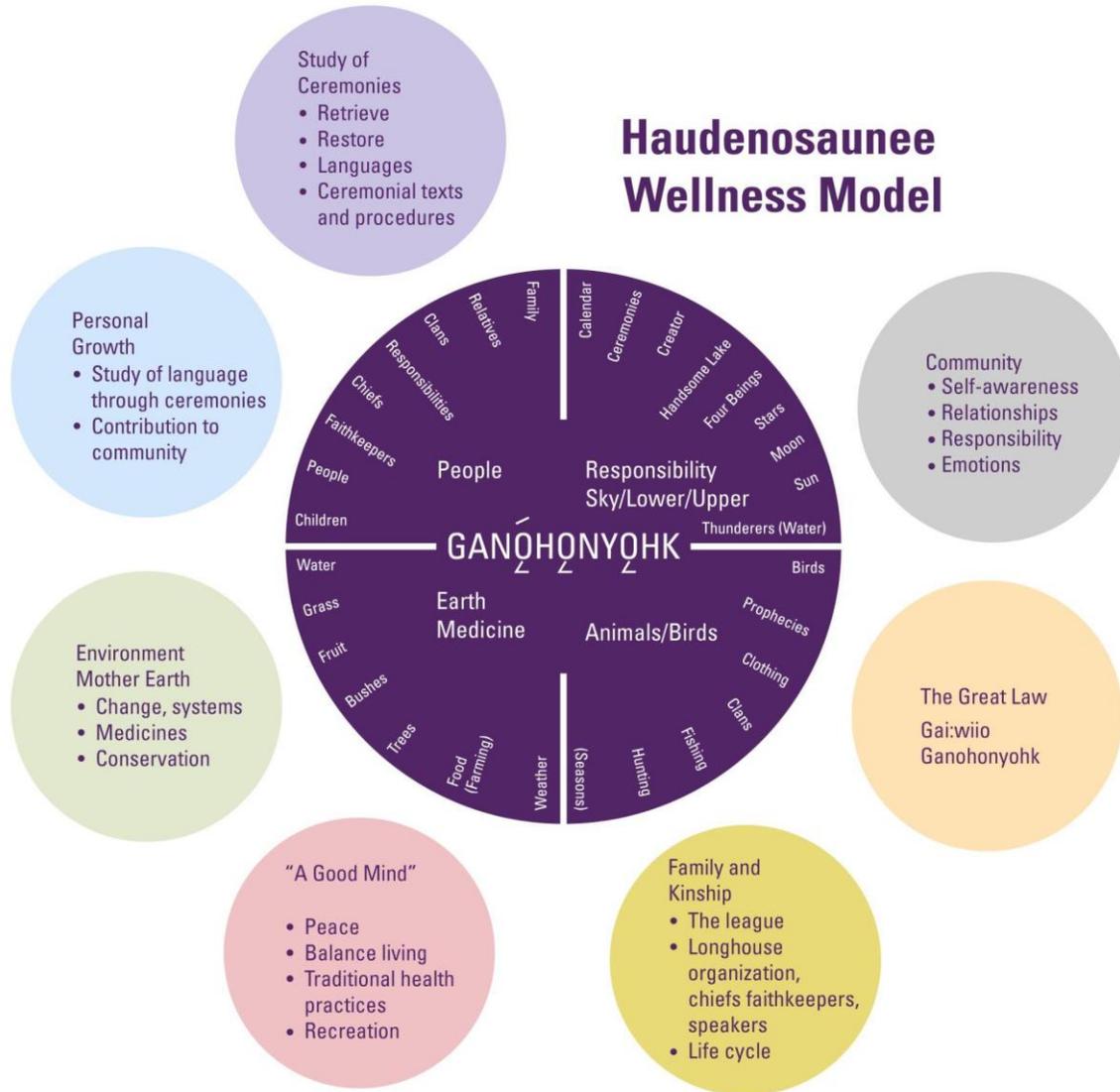
**Mental Wellness Team:**

- Completion of Indigenous holistic mental health app that includes youth digital stories about water resilience
- Online #ResilienceInWater art exhibit
- Guidelines on water resilience for professionals working with Indigenous youth

- Community hosted event with youth speakers

**Here is a key visual from the project** (figure, photo, table, graph, etc.)

# Haudenosaunee Wellness Model



**Kawenní:io/Gawení:yo Private School**

