

## **Summary of the Global Water Futures (GWF) Winter 2019 Operations Team Meeting**

University of Saskatchewan  
Saskatoon, SK  
January 22–23, 2019

### **Meeting Overview**

The Global Water Futures (GWF) Operations Team and Strategic Management Committee met at the University of Saskatchewan in January 2019 to review collective progress towards GWF goals, discuss the science directions and operations of the GWF program, and to plan special initiatives. The Operations Team consists of GWF project principal investigators and project managers, and the GWF core team leads, young professional executive, secretariat, and core knowledge mobilization, outreach, data management, and communications staff. This was the second time for this group to meet, following the GWF Inception Meeting, held the same dates one year earlier at Wilfrid Laurier University and the Balsillie School of International Affairs, Waterloo, ON. That meeting provided a first chance for the Operations Team to come together, identify, and begin to address GWF grand challenges by prioritizing strategic needs and developing best practices for a large, transdisciplinary water science network. The 2019 meeting was therefore an opportunity to follow up on scientific progress, network activities, and further strategic planning around key gaps and opportunities. It also provided an opportunity to introduce six new Indigenous co-led projects funded under the GWF Indigenous Communities Water Research Initiative, and welcome their co-principal investigators and project managers to the Operations Team.

The meeting was held on the University of Saskatchewan campus, in the historic Convocation Hall of the Peter MacKinnon Building, and was attended by over 65 members of the Operations Team, with dozens more from the USask campus community and other GWF partners attending the public open house on day one. Representatives from every funded GWF project and core team were present throughout. Most attendees from outside Saskatoon arrived on January 21, and that evening there was a social and networking gathering along with an information session, where project managers had the chance to discuss logistical and management issues with the GWF secretariat and core team members.

More information and digital copies of all presentations and posters are available on the meeting webpage at <https://gwf.usask.ca/news-events/past-events/ocm-19.php>.

### **Introduction, Core Team Overviews, and GWF Open House**

The meeting began with a welcome and prayer by Elder Roland Duquette, to honour the culture, history, and spirituality of the Indigenous Peoples of this region and the Treaty 6 Territory. The first morning was also a GWF public open house, and included introductory remarks from Professors Peter Stoicheff, President of USask, Jay Famiglietti, Executive Director of the Global Institute for Water Security and John Pomeroy, Director of GWF, a promotional GWF video, and overviews of the program in general by Professor Karen Chad, USask VPR and Chair of the GWF Oversight Committee, and of the core teams and their advances. This was followed by a poster session where each GWF project presented a poster that briefly described 1) the project and its science questions & objectives, 2) how the project's progress is addressing GWF's three overarching goals, and 3) how the project addresses the UN Sustainable Development Goals, in particular SDG6 on Clean Water and Sanitation. The later was to help GWF frame its contribution to the UN International Water Action Decade: Water for Sustainable Development, 2018–

2028. An outcome of the poster session will be in-depth overview and report on GWF's contribution to SDGs and the UN Water Decade.

## **Strategic Discussions**

Following the open house, meeting participants gathered into small groups for focussed and moderated breakaway discussions on forecasting and modelling, computer science and data management, knowledge mobilization and communications, and core teams integration, each with its own set of target questions. These were organized to identify gaps and to seek input on best practices that could be implemented to further strengthen the GWF research and networking activities. For more details on the topics and questions, and the rapporteur summaries, see [https://gwf.usask.ca/documents/Breakout\\_Discussions\\_GWF\\_Operations\\_Meeting\\_Jan\\_2019.pdf](https://gwf.usask.ca/documents/Breakout_Discussions_GWF_Operations_Meeting_Jan_2019.pdf).

**Forecasting and Modelling:** Some common elements of discussion among the groups involved the need for further interaction between the core modelling team and the GWF projects, and better integration and streamlining of modelling activities across the program. This requires an inventory of what models are being developed and used, by who, for what purpose, where they are applied, and how the outputs can be made more accessible. There needs to be effort to ensure that the activities are complimentary and contribute to GWF's overall goals, and that research model developments can inform and/or be incorporated into the operational models. The links to other core teams are essential, as the central modelling issues are impacted by data flow and management, computing resources, model visualization, and user engagement around model applications and results.

**Computer Science and Data Management:** The computer science team is focussing on creating tools for visualizing data and providing a user interface for translating model output in useable forms to various GWF participants and stakeholders. This is strongly linked to data management, where data need to be accessible and well documented to maximize their value. There is an urgent need to generate an inventory of existing data and metadata, and ongoing data collection activities at the 60+ observatories operated by GWF members. Training opportunities around WISKI and the Radiam and Cuisinart systems will build capacity and encourage the use of best practices, which could be offered by the data management core team, or through external opportunities. Much discussion focussed around revisions to the GWF data policy. Taking into account the feedback received, the GWF Strategic Management Committee subsequently revised the policy: [https://gwf.usask.ca/documents/GWF\\_Data\\_Policy\\_March-4-2019-Final.pdf](https://gwf.usask.ca/documents/GWF_Data_Policy_March-4-2019-Final.pdf)).

**Knowledge Mobilization and Communications:** There were a broad range of issues discussed and possibilities that were suggested. See the following documents for full reports:

- [https://gwf.usask.ca/documents/Breakout\\_Discussions\\_GWF\\_Operations\\_Meeting\\_Jan\\_2019.pdf](https://gwf.usask.ca/documents/Breakout_Discussions_GWF_Operations_Meeting_Jan_2019.pdf)
- [https://gwf.usask.ca/documents/GWF\\_OPsMtg\\_KMSummaryActions.pdf](https://gwf.usask.ca/documents/GWF_OPsMtg_KMSummaryActions.pdf)

Some key points raised were that successful KM requires time to build relationships with partners and continual engagement to demonstrate the value throughout the project, not just at the end. There is a need to do more to bring in our partners and engage with them (e.g. at our annual science meetings), and effort on GWF's part needs to include meeting people where they are (non-academic conferences, AGMs of organizations, practitioner conferences, thematic road shows, etc.). To assess impact, we need to go beyond basic measureable elements and we need to capture stories and anecdotal evidence of influence, and there needs to be a repository to capture that. GWF really needs to be thinking about recommendations at the end (for policy, practice, process), and to be capturing lessons learned, particularly failures. For communication, we need to be directly reaching out to the public and sharing

our research stories and results. There were various suggestions on how our website could be improved and strategies we could use for social media and other public engagement.

**Core Team and Project Integration:** For better integration across GWF, it was noted that having scheduled meetings for different groups to confer is important. Ideas for internal integration included, for example, sharing infographics, focussing on young professionals, coordinating KM opportunities, ‘find-an-expert’ space in the newsletter, etc. It was also noted that there are challenges with internal communication, including the need for more information about what is happening across projects and different roles across institutions. We need better sources of information (e.g. an internal website, org charts, profiles of people). A GWF *Operations Team* email list serve is a logical next step towards better internal communication and is being implemented by the SMC.

### **Indigenous Communities Water Research Initiative**

On the second day of the meeting, the six new projects funded under the GWF Indigenous Communities Water Research Initiative briefly presented overviews of their projects, including:

- What does the project address - an overview of what the project is doing, what are its societal and community questions, what are its science questions;
- Foreseen collaborations with other GWF projects and potential groupings;
- Needs from, and contributions to GWF core teams;
- Knowledge mobilization, community engagement and capacity building plans.

This was followed by another round of breakaway discussions focussing on the Indigenization of GWF’s research, working ethically with Indigenous communities, and fostering cultivation of Indigenous relationships and partnerships in research. Questions and ideas emerged around the need for a better understanding of what meaningful and ethical engagement looks like, reciprocity in research, establishment of lasting relationships and how to do active reconciliation. The Indigenization of GWF through the funding for and co-creation of community-led research in the spirit of reconciliation with Indigenous peoples is an area where GWF is attempting to establish new and best practices. This will take time, effort, and dedication, and there will be many lessons to be learned. A more detailed summary of the outcomes of these discussions, together with some potential actions and next steps, is provided here: [https://gwf.usask.ca/documents/GWF\\_Ops\\_Mtg\\_Indigenous\\_Panel\\_Report.pdf](https://gwf.usask.ca/documents/GWF_Ops_Mtg_Indigenous_Panel_Report.pdf).

### **GWF Young Professionals, Observatory Best Practices, International Opportunities, and Closing Remarks**

The final session of the meeting included presentations from the GWF Young Professionals organization, best practices for data management at observatories, international opportunities for GWF, and some details on the project renewal and new funding opportunities for projects. There was a short discussion focused on the GWF data policy, where it was noted that the Tri-Council Secretariat that funds GWF requires open access data. Several projects and observatories provided examples on data access and sharing. This discussion helped to inform the revision of the data policy. Following this, a brief summary of international opportunities and contributions to the UN Sustainable Development Goals based on a recent report by the United Nations University Institute for Water, Environment and Health was given (UNU report available here: <https://inweh.unu.edu/wp-content/uploads/2018/11/Canada-in-the-Global-Water-World-Analysis-of-Capabilities.pdf>).

In closing, it was noted that there are very high expectations of us in GWF as this is the largest funded water research program in the history of Canada. The meeting in general showed that we are largely on

track, there is tremendous energy and excitement, delivery of new results, and it was noted that we will see this in great detail in May at the 2<sup>nd</sup> Annual GWF Open Science Meeting.