### Global Water Futures Knowledge Mobilization Core Team Inception Report

April 2018

# **1.0 Introduction and Vision**

The Global Waters Futures (GWF) Program promises state-of-the-art knowledge mobilization (KM) in conjunction with its scientific objectives of predicting change in cold regions, developing Big Data and support systems, and designing user solutions to focus on real world problems. Explicit in these objectives is robust engagement with a diverse end-user community.

KM is the process of moving knowledge from formal research projects into active use. It is an iterative and interactive process of sharing of knowledge between research producers and users including policy professionals, decision-makers and communities) from beginning to end - during project development, operation and interpretation. The most effective mobilization involves a close association of researchers and practitioners with co-creation intentions and methods.

Strong GWF-funded project-level KM initiatives will build robust overall outcomes for GWF and a variety of GWF program-level initiatives will foster stronger internal and external relationships and connections. A strong KM network will develop and share best practices and resources with all projects, researchers and staff, and build KM capacity across the entire GWF network. The KM Core Team envisions a GWF legacy that has fostered innovation in researcher-practitioner co-creation and has led to policy advancements and positive social change for water science and management in Canada.

In the life of the GWF program, the KM Core Team would like to achieve the following program-level key outcomes:

- Increased appreciation for KM across all GWF researchers, regardless of their discipline
- Partners, collaborators and knowledge users who feel like they have been meaningful participants in the development and operation of GWF research projects
- Better identification, tracking and documentation of KM measures of success
- Documentation of tools and products that are transferred to knowledge users
- Research that demonstrates how GWF has advanced the KM community of practice

Through the GWF program, a KM Core Team was assembled through core financial support to partner institutions to assist in achieving the KM goals outlined in project proposals. This document outlines the roles and responsibilities of the KM Core Team and serves as a framework for the proposed activities of that team for the first 3 years of GWF.

# 2.0 KM Core Team

### 2.1 Purpose

The GWF KM Core Team is an advisory body that provides oversight, advice, and support for KM initiatives of GWF-funded projects. The KM specialists focus on assisting project investigators, researchers and staff to succeed in their stated KM goals while also, identifying and creating opportunities to facilitate and develop KM capacity across the GWF network. While the KM specialists' primary mandate is to support GWF Pillar 3 projects, their goal is to create resources that can be shared through the broader network, therefore supporting Pillar 1, 2 and supplementary initiatives as well.

### 2.2 KM Core Team Members

To institutionalize and support the GWF KM philosophy and approach, a GWF KM Core Team, with representatives from the University of Saskatchewan, University of Waterloo, and Wilfrid Laurier University has been established to provide oversight, advice, and support across the GWF network.

The GWF KM Core Team is comprised of interdisciplinary and cross-university team of KM specialists. Currently they are:

#### Andrew Spring, Wilfrid Laurier University

Andrew has recently completed his PhD at Wilfrid Laurier University where he conducts research focused on food security in Canada's Northwest Territories. His work explores the challenges and opportunities at the intersection of food security and food sovereignty, climate change and pressures exerted on country food and traditional economic activity in Indigenous communities.

He has a diverse background in sustainability and the environment. Trained as an environmental engineer (MASc Toronto), his expertise is creating innovative programs to engage communities in sustainable planning or environmental conservation. Working with a diverse group of stakeholders, he aims to expand Laurier's capacity to conduct research that meets the needs of people in the North.

Areas of knowledge mobilization expertise and interest: engagement with northern communities; Indigenous traditional knowledge; community planning; food and water security;

#### Stephanie Merrill, University of Saskatchewan

Stephanie joins the Global Water Futures Program from the east coast where she was the communications coordinator for the Canadian Rivers Institute (University of New Brunswick) and previously the director of the freshwater protection program for the Conservation Council of New

Brunswick. Stephanie graduated from University of New Brunswick in 2009 with a MSc. in Forestry and Environmental Management and in 2004 with a BSc. in Biology.

Over the past 10 years she has played a leadership role in shaping water policy conversations in the Atlantic region and across Canada. Stephanie is dedicated to relationship building, effective communications and contributing meaningfully to better environmental public policy. She has gained her multidisciplinary experience by working alongside a diversity of rural and urban watershed groups, community, environmental and indigenous organizations, academic scientists and government agencies.

Areas of knowledge mobilization expertise and interest: community engagement; science to policy; national and provincial water policy; watershed management; Indigenous reconciliation

#### Position currently unfilled, University of Waterloo

From August 2017-March 2018 this position was filled by Kara Hearne. Kara was instrumental in the formation of the KM Core Team's operations. She played a strong role in assisting the University of Waterloo led projects in their kick off, KM planning and project inception and contributed significantly to the development of the KM delivery framework, list of services, project templates and the inception report.

A process is currently underway to fill this position and a new staff is expected to be in place by mid-May.

#### Stephanie Morningstar, McMaster University

Stephanie was hired by McMaster mid-April and is currently transitioning into the role. The existing team members have met with her by phone and have briefed her on the Team's focus and operations. Her role at McMaster and working relationship with the KM Core Team will evolve over the coming weeks and months.

### 2.3 KM Advisory Committee

The KM Advisory Committee advises and offers guidance to the KM Core Team. This committee ensures that the KM Core Team is meeting its mandate and deliverables while offering a link directly to the SMC and institutional representatives to enhance communication and reporting.

Representatives of the KM Advisory Committee are:

University of Saskatchewan: Lawrence Martz, formerly Toddi Steelman\* Wilfrid Laurier University: Kelly Munkittrick, formerly Alison Blay-Palmer\* University of Waterloo: Kevin Boehmer

\*Toddi Steelman and Alison Blay-Palmer were instrumental in the conception of the KM mandate, concepts and documentation during the development and inception of the GWF program. They both played important roles in establishing the KM Core Team membership, focus and operations.

### 2.4 Team Operations

The KM Core Team of specialists currently meets by phone once a week, and engages regularly through email and a Slack channel to work on collaborative initiatives, discuss projects, and share best practices. Specifically, through these exchanges, the team:

- provides support to each other on KM opportunities and challenges faced at home institutions or projects
- ensures GWF KM consistency across institutions
- shares project progress and lessons learned that are transferable across projects
- shares expertise, contacts, and skill sets
- collaborates on team activities, templates and training that can be applied/adapted across institutions
- fosters consistency in KM expectations and services across GWF projects

The KM Core Team meets with the KM Advisory Committee quarterly, or as needed, to receive feedback and guidance on directions, presentations and documents. The KM Core Team reports to the GWF SMC through the KM Advisory Committee, specifically through Dr. Lawrence Martz who joined the SMC in October, 2017 as a liaison between the Team. The KM Core Team will provide updates to the SMC on project or program KM initiatives and progress, share successes and challenges when required.

## **3.0 KM Strategies and Best Practices**

GWF's Pillar 3 projects espouse the philosophy of knowledge mobilization: co-production, collaboration and dissemination of knowledge with end users for solutions to real-world challenges. The field of KM has been evolving and many best practices have been developed. Below are the strategies and best practices that the GWF KM Core team encourages and provides support to implement at the project level.

Projects should make meaningful attempts to:

- Create a transdisciplinary project team that is made up of researchers and practitioners working together to co-produce knowledge through a positive and trusting relationship with all participants. To meet the needs of all potential users of the research, projects must be designed by the team and with the intended end user audience. It is critical to recognize that end users have practical experience, information and content to add to the research.
- Engage in KM throughout the entire project timeline. KM should be planned for at the outset of the project by building it into the research design. As part of this process, it is best practice to build agreement in advance among your team and it is critical that there is opportunity for end-users to be a part of setting expectations, timelines, and deliverables of the project.
- Determine how end user communities normally collect, evaluate and use knowledge and how they communicate with each other, and then create opportunities for active, inclusive and

iterative communication between team members and end users, using their preferred communication channels.

- Strengthen mutual understanding within the project team through limiting the use of jargon, translating technical terms into plain-language or terms that are compatible for end user needs.
- Ensure dual accountability for KM within the team. Ideas and information must flow in all directions. Lines of accountability must be clear between researchers and practitioners within the team. It is important that changes to the project's scope and/or timing are negotiated with all team members and end users are invited to participate in critical direction changes.

## **4.0 Project-Level Involvement**

### **4.1 Support Services**

The KM Core Team has a diverse set of skills and experiences that can help support KM initiatives across the GWF network. A List of Services (the detailed list of services is provided in Appendix A) has been developed that should be considered as the tasks that the KM Core Team can support for individual GWF projects. The KM Core Team has been working with project PIs and theme leads to define project-specific needs and responsibilities in consideration of project priorities and team resourcing (see Section 4.2). The following list is a summary of the List of Services:

#### **Planning and Initiation**

- Support the integration of KM activities into the research work plan.
- Develop KM strategy (development of new strategies, and incorporating refinements to existing strategies based on ongoing feedback).
- Support of collaborator identification and onboarding (identifying relevant knowledge users, support the integration of new collaborators into the project).

#### KM project-level activities

- Support project committees, meetings with collaborators, workshops, seminars (defining purpose and attendees, preparation of guiding documents, review of materials to be presented, attendance to monitor success of KM efforts, workshop facilitation).
- Support the preparation of knowledge translation materials, such as newsletters, white papers, and policy briefs (creation and/or review of content).
- Review and advise on content for websites, apps, videos, etc.
- Support knowledge dissemination (designing strategies for transferring and communicating information).

#### Networking and relationship management

- Support and facilitate where needed, the cultivation and maintenance of contacts, communications and relationships between water researchers and knowledge users.
- Overcome differences in understanding and perspectives among researchers and knowledge users, where appropriate.

• Identify opportunities to connect projects to other synergistic networks or initiatives.

#### Training and capacity building

• Provide one-on-one or small group support to project teams on specific or general KM issues.

#### Progress tracking and monitoring

- Monitor and progress tracking of KM plan implementation.
- Develop forms for researcher use, including for tracking and documentation of collaborator engagement.
- Identify KM successes and challenges, and identify of opportunities to overcome challenges and to improve on KM processes, practices and activities.

#### **Reporting and administration**

- Develop of relevant performance indicators.
- Assist project teams in monitoring, tracking and reporting on KM activities and performance.
- Update the GWF Strategic Management Committee on project-specific KM progress, achievements and challenges.

### **4.2 Support Service Implementation**

The List of Services (4.1 and Appendix A) forms the basis of the KM specialists' possible support for GWF projects (Pillar 3 primarily and Pillars 1, 2 secondarily). To provide a more systematic overview of the KM needs across all projects (Pillars 1, 2, 3), a needs assessment of the List of Services was undertaken. This helped the Team to identify, to the best of our ability, the support needed by each project (Appendix B, C).

Pillar 3 needs were assessed through reviews of proposals and inception documentation, one-on-one meetings and conversations with PI's, and by working directly with project managers and staff. An email solicitation by Toddi Steelman was sent asking PIs of Pillar 1, 2 projects specific questions about their KM needs and expectations of the KM Core Team. The results of this work was used to match the List of Services to each project (Appendix B, C).

As the assessment shows, the types of tasks and level of support needed varies across GWF projects, depending on several factors including the KM goals and objectives of the project, the KM experience of the PI's and project teams, and resourcing (e.g. some projects have allocated supplementary KM resources such as project managers or user engagement staff).

KM support services are available to all projects. To ensure that all projects across institutions have equal access and communication with the KM Core Team, we have set up an email and distribution listserve. We have launched the KM List of Services byway of personal messages to PI's and project staff and to the entire network distribution list, outlining the process for eliciting KM support. If requests to the KM Core Team begin to overwhelm our current capacity, the Team, with the Advisory Committee, will develop a request prioritization process. Through the email distribution list of project PI's, project managers, and dedicated KM staff we will keep the network updated on new project-based KM resources or templates, opportunities for capacity building, and advancements in KM best practices. Furthermore, the KM team will make templates and important KM documentation available in a shared library and investigate the option of posting important KM templates on the GWF website for easy access to project personnel.

#### 4.4.1 Activities to date

Since the summer/fall of 2017, the KM Core team has been building relationships and initiating KM activities by working directly with project teams. Some selected project-level activities to date include:

#### **Planning and Initiation**

- Developed logic models to organize projects' flow
- Assisted in the development of (i.e. Terms of Reference, identifying members), and participation in, KM advisory committees and working groups
- Developed project-specific work plans that focus on the co-creation delivery model
- Undertook a cross-GWF project KM needs assessment
- Assisted some Pillar 1, 2 projects with the development of their proposal's KM plan

#### **Project-level KM activities**

- Participated in regular research team meetings, brown bag sessions, and strategic conversations
- Identified KM opportunities for projects, including new partnerships and external meeting opportunities
- Reviewed and gave feedback on partner, collaborator and end-user communications or engagement initiatives such as surveys, invitations, Standard Operating Procedures for tech transfer, conference presentations, project websites
- Co-wrote op-eds, plain language stories and newsletters
- Assisted in organizing (i.e. agenda setting, meeting design) and hosting (i.e. session facilitation, presentations) kick-off workshops/meetings for project teams, collaborators and end user partners.

#### Networking and relationship management

- Met with selected end-user partners to understand project expectations and needs
- Identified potential considerations for partners, collaborators and knowledge users working in overlapping areas

#### Training and capacity building

- Secured further funding for project KM activities
- Participated in hiring KM support staff to assist with project deliverables
- Initiated conversations with project-based students on KM professional development interests
- Designed and delivered a plain language writing workshop to project-specific students and HQPs
- Designed and delivered HQP workshop focused on working in the north

#### Progress tracking and monitoring

• Developed and (soon to be) circulated a partner, collaborator, knowledge user engagement tracking template

• Developed and (soon to be) circulated an annual KM progress survey to be used as a future evaluation tool

#### **Reporting and administration**

• Reviewed and gave feedback on inception reports and annual progress reports, with a focus on the KM plans and initiatives

Through these project activities to date, we have increased appreciation for KM and awareness of GWF's new KM resources. We anticipate that demands on the KM Core Team will continue to increase over time as more researchers become aware of our services, as the research itself unfolds, and as projects begin to produce data and develop processes for designing decision support tools. We will need to employ creative strategies to meet the expected demand, given the large number of projects across GWF and the limited number of KM specialists in the Core Team. Some of these may include:

- Identifying and securing opportunities for summer students, internships, and young professional placements, both at the project level and at the KM Core Team level
- Connecting GWF projects with similar deliverables for product or meeting/workshop efficiencies
- Assisting in identifying potential project funding that could increase their KM capacity
- Developing a KM champions network as a liaison between projects and the KM Core Team

Development of the KM Champions Network has been identified as a priority to create a mechanism for all projects to engage with the KM Core Team effectively, and is therefore described further below.

#### 4.4.2 KM Champions Network

The KM Core Team has been and will continue to work directly with PIs and theme leads on various KM tasks. We can also improve efficiency, interaction, and capacity building by identifying project-specific people to liaise with the KM team. We are in the process of developing a KM Champions Network to increase access to day-to-day operations at the project level. This network will complement our regular and ongoing conversations and check-ins with project PIs, especially around major decision points or annual reporting.

The KM Champions network will be composed of a nominated contact from each project that will allow the KM core team to build a hub of engaged research team members to provide a window into each project. Specifically the network will:

- provide a vehicle for connecting KM Core Team to project-level champions to achieve their KM goals.
- evaluate KM progress against proposed project milestones and deliverables.
- Identify links between GWF projects across the country, and between GWF and relevant external projects. This may include the identification of new opportunities to expand the scope of KM activities and collaborations and facilitate phase II project expansions.

While the KM specialists in the Core Team have built individual relationships with many of the KM Champions, we will formalize and interact as a group by meeting approximately monthly via conference call or WebEx. KM Core Team members will be responsible for coordinating, setting agendas and chairing each meeting and will assume responsibility for the effective operations of the Network.

The intent of the KM Champions Network is to provide the KM Core team with a window into each GWF project, however, the network also provides an excellent opportunity to increase KM connections and capacity across the broader GWF network by enabling dialog, training, and sharing of KM activities and best practices, questions and case studies (see 5.0 for more on program level support).

# 5.0 Program-Level Support

In addition to a focus on supporting the KM activities and plans of the projects, the KM Core Team will work to identify opportunities to build KM capacity across the GWF community over the course of the program. These activities intend to increase the understanding, uptake and documentation of KM strategies and best practices (Section 3) and assist in achieving the program vision and key outcomes stated early in this report.

### 5.1 Program-Level Activities

The following initiatives and activities have been identified as the focus areas for the KM Core Team that will help us achieve our key outcomes stated in Section 1:

Initiative or Activity	Yr 1	Yr 2	Yr 3 +
Build and support a KM Champions Network as a mechanism to build program-wide capacity for KM best practices, and peer-to-peer sharing of successful KM activities.			
Develop KM templates that can be shared across the network.			
Develop a GWF partners/collaborators network map and visual tools to illustrate connections and strength of GWF.			
Develop KM tracker and evaluation templates that can be used to capture KM successes at the project level.			
Support GWF outreach coordinator in the development of a GWF Young Professionals (YP) network and provide YP network with KM training and capacity building opportunities.			
Conduct research on KM perceptions and changes over the life of the GWF program.			
Develop and share a centralized resource library of best practices and templates for the GWF community.			
Improve co-ordination with the Communications Team for better KM integration at GWF and institutional levels.			

Organize, deliver and/or facilitate GWF community KM training workshops (in person and/or online).		
Plan and deliver KM content and capacity building workshops at GWF Annual meetings and other GWF network gatherings.		
Assemble GWF case studies that feature successful examples of co-creation that has had innovative research outcomes and social impact to be used as peer-to-peer KM training content.		

Other activities will be identified as needed and as opportunities arise.

### 5.1 Activities to Date

#### **GWF** program-level KM activities

- Assisted in organizing, agenda setting, and facilitating Indigenous Water Research Strategy cocreation workshop
- Initial work to map the GWF-wide end-user/partner network
- Tracking of 'passive' end-users contacting GWF for future communications/outreach work
- Provided KM reporting and measurement recommendations to the SMC for annual report development
- Early assistance on writing a Water Resources chapter for the Natural Resources Canada Climate Change in Canada national assessment
- Facilitated World Café table discussions at the GWF Inception Meeting January 2018
- Preliminary KM workshop design and outreach posters for the June 2018 GWF science meeting
- Communications and KM training workshop for HQP working in the north

#### Votes:

- The KM Core Team has been established to provide oversight, advice, and support. The team is an advisory body that reports to the SMC.
- The following list should be considered as an inventory of tasks that the KM Core Team has the collective skills and experience to undertake in support of individual GWF projects. Not all tasks can be undertaken for all projects the KM Core Team has undertaken a needs assessment for each project that will inform our work, priorities and distribution of human resources.

Lasks Lead   Advisory Support		ŀ	KM Team Role		
	Tasks	Lead	Support	Advisory	

PLANNING AND INITIATION

Workplan development (for projects co-producing research with collaborators)

Develop a workplan framework that integrates KM activities into the research program	х	~	~
Workplan gap analysis (focus on co-production planning) – do we have all the project information needed to develop a research plan with collaborators? (e.g. have we identified research end products and end users for all tasks?)	~	~	~
Analysis of project resourcing and team structure (focus on co-production planning) – have we thought through everyone that needs to be part of the plan, and what their roles will be? (e.g. collaborator roles on a task-specific basis)	~	~	~
Workplan packaging for execution of research/project plan agreements with key collaborators	х	~	~
Idea pitching/proposal writing to supplement underfunded portions of project	х	~	~

#### KM strategy development

Analysis of existing KM strategy to identify areas needing improvement, flexibility and/or likely adjustment points	~	~	~
Updates to KM strategy resulting from ongoing research team and collaborator feedback	~	~	~
Development of new KM strategies	✓	✓	✓

Collaborator identification and onboarding

Identify potential end users and other stakeholders (e.g. identifying additional end users and interested parties)	х	~	~
Define levels of effort for onboarding per collaborator group (e.g. existing strong relationships, relationships in development, cold calls)	х	~	~

Develop a collaborator onboarding strategy	Х	~	✓
Contact collaborators to confirm involvement and onboarding approach	х	~	~
Discussions with users to help clearly define research needs	х	~	✓
Develop and maintain research team and collaborator contact lists	~	~	✓

#### **KM ACTIVITIES**

#### **Committees and meetings**

Define committee/meeting purpose and member representation	Х	~	~
Invitations to participate	Х	~	✓
Preparation of guiding documents (e.g. Terms of Reference, Charter, agenda)	~	~	~
Meeting scheduling and logistics	х	Х	~
Meeting planning (materials, format)	х	~	~
Presentations – review slide deck, offer language advice, practice runs with presenters	х	~	~
Attendance (monitor discussions, provide feedback on success/challenges, and impact on KM plan)	~	~	~
Facilitation	~	~	~
Minutes	х	~	~

#### Workshops and seminars

Planning – scheduling and logistics	x	х	~
Planning – materials, format, invitees	х	~	~
Presentations – review slide deck, offer language advice, practice runs with presenters	х	~	~
Facilitation	~	~	~
Minutes	х	~	~

#### Translation materials (e.g. newsletters, policy briefs)

Planning and coordination (format, timing, content plan)	Х	~	~
Content – analysis and synthesis of research results to create product suitable for risk analysis, decision making or other purpose	~	~	~
Review for appropriate messaging, language, methods, messengers - in collaboration with communications team	~	~	~

# Layout, production and dissemination (e.g. support communications team leading these tasks and/or overseeing subcontractors (e.g. graphic designers))

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Websites, apps, and visual materials (e.g. videos)		-	
Planning - content and flow	х	~	~
Site setup and management	х	~	~
Content management (periodic review, recommendations, updates)	х	~	~
Knowledge dissemination			
Send project updates, translation materials, and research end products to collaborators and request/encourage feedback	x	~	~
Identifying strategies for transferring and communicating information to collaborators	х	~	~
NETWORKING AND RELATIONSHIP MANAGEMENT			
Engagement and communication with stakeholders to check-in on successes/challenges	~	~	~
Problem-solving and intervention (if needed) to overcome differences in understanding and perspectives among researchers and collaborators.	~	~	~
KM presentations for external audiences: collaborators, classes or interest groups	~	~	~
Give project-level presentations at strategic conferences or meetings, events	х	~	~
Identify opportunities to connect project to other synergistic networks or initiatives	~	~	~
PROGRESS TRACKING AND MONITORING	-	<u>.</u>	•
Monitoring and progress tracking of KM plan implementation	~	~	~
Team coordination and monitoring completion of key KM-related action items (e.g. reports, documents)	~	~	~
Development of form for researcher use: tracking and documentation of collaborator engagement	~	~	~
Collection, tracking, and filing of relevant supporting documentation (e.g. meeting minutes, key correspondence)	~	~	~
Identification of KM successes and challenges, and of opportunities to overcome challenges and to improve on KM processes, practices and activities.	~	~	~
REPORTING AND ADMINISTRATION			
Development of relevant performance indicators (project- and product-level)	✓	~	~

Documentation/reporting of KM plan progress and success measured against selected

performance indicators

When requested, update the GWF Strategic Management Committee on project-specific KM progress, achievements and challenges	<b>√</b>	~	~
Project annual reports (KM section)	х	~	~
KM Team Role Lead – take ownership for completion of the task, with support from the research team. Support – help the research team ensure success of task: contribute to discussions, help prepare materials, review materials. Advisory – contribute to strategy planning, offer recommendations and best practice information, provide			

templates and resources.