### **WORKSHOP**

# WORKING TOGETHER FOR GROUNDWATER PROTECTION AND SUSTAINABLE MANAGEMENT

VICTORIA, BRITISH COLUMBIA

## PARTICIPANT WORKBOOK February 2018





This workshop has been made possible through funding from the Geological Survey of Canada (GSC). It is the result of a collaborative effort between the Quebec Groundwater Network (Réseau québécois sur les eaux souterraines; RQES), the GSC, the BC Ministry of Environment (ME), the BC Ministry of Forests, Lands, and Natural Resource Operations (MFLNRO), and the Université du Québec à Trois-Rivières (UQTR) Landscape Ecology and Planning Chair. The following individuals in particular have contributed to various aspects of the workshop:

- Yves Michaud, Geoscience Manager, GSC
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- Anne-Marie Decelles, RQES Transfer Agent, workshop preparation and facilitation
- Yohann Tremblay, RQES Transfer Agent, workshop preparation and facilitation
- Guillaume Légaré-Couture, RQES Transfer Agent, workshop facilitation
- Julie Ruiz, professor and UQTR Landscape Ecology and Planning Chair, workshop design
- Pat Lapcevic, Section Head, Water Protection, BC FLNRO
- Mike Wei, Head, Groundwater and Aquifer Science, BC MoE
- Christine Beiber, Watershed Science and Adaptation, BC MoE

#### Workshop Organizers

#### The Quebec Groundwater Network (Réseau québécois sur les eaux souterraines - RQES)

The mission of the RQES is to consolidate and expand collaborations between university research teams and governmental and non-governmental organizations, consultants, educational institutions, and other organizations interested in groundwater, with the aim of mobilizing scientific knowledge on groundwater.

The RQES pursues the following specific objectives:

- Identify end users' needs in terms of new research, concrete applications for groundwater resource management, and training;
- Facilitate the transfer of scientific knowledge to end users in order to support the management and protection of groundwater resources;
- Support the training of qualified personnel in groundwater-related fields to meet current and future requirements of the labor market in research, management, and consulting.

For more information please visit: rqes.ca

#### The Geological Survey of Canada

The GSC is part of the Earth Sciences Sector of Natural Resources Canada. It is Canada's oldest scientific agency and one of its first government organizations. Founded in 1842, the GSC helped to develop a viable Canadian mineral industry by establishing the general geological baseline information upon which the industry could plan detailed investigations. Throughout its long and colourful history, the GSC has played a leading role in exploring the nation.

Today, the GSC is Canada's national organization for geoscientific information and research. Its world-class expertise focuses on the sustainable development of Canada's mineral, energy, and water resources, on the stewardship of Canada's environment, on the management of natural geological and related hazards, and on related technological innovation.

For more information please visit: www.nrcan.gc.ca/earth-sciences/science/geology/gsc/17100

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#### Agenda

#### **Objectives**

This workshop aims to bring relevant stakeholders together to share skills and expertise on groundwater. More specifically, it aims to:

- 1. Generally debrief on past projects, and identify strategies, challenges, and potential solutions with respect to groundwater in BC
- 2. Pave the way for further collaborations

#### 9:00 - 9:20am

#### Opening

(formal presentations)

#### 9:20 - 10:15am

**Activity 1** - Characterizing Canada's key regional aquifers : details, scope and limitations of the GSC approach for the provinces (formal presentation and group discussion)

#### **Coffee Break**

#### 10:30 - 11:15am

#### **Activity 2** - Sharing our expertise and our needs

(formal presentation and brainstorming activity)

#### 11:15am - 12:00pm

**Activity 3** - Understanding the different working environments (formal presentation and discussion)

#### LUNCH

#### 1:00pm - 2:30pm

**Activity 4** - Realistic ideas on how to collaborate going forward (group activities and discussion)

#### 2:30 - 3:00pm

#### Closing discussion

(group discussion and closing remarks)

#### **Facilitators**

#### **Your facilitators**



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Characterizing Canada's key regional aquifers: details, scope and limitations of the GSC approach for the provinces



Mission of the GSC and its approach to characterizing Canada's key regional aquifers: the Nanaimo case study



The province of BC's main groundwater objectives



### Scope and limitations of the GSC approach for the province

Participants are asked to think about and discuss the following questions:

- What has worked well? What could work better?
- How does this approach meet the needs of the province?
- What are the limitations of the GSC approach?

DETAILS, SCOPE, AND LIMITATIONS OF THE GSC APPROACH FOR THE PROVINCE OF BC					
What has worked well?	What are the limitations of the GSC approach?	What could work better?			

# 2

# Sharing our expertise and our needs



# Specific projects and core competencies of the GSC



Needs of the province



## List the expertise of the GSC and the needs of the province

GSC COMPETENCIES AND PROVINCIAL NEEDS REC	GARDING AQUIFER KNOWLEDGE AND MANAGEMENT
GSC Competencies	Province of BC needs

# 

# Understanding the different working environments



## The GSC working environment



The province of BC working environment



# Barriers and challenges related to our working environments and potential ways to address them

Discussion of what the barriers and challenges are, and potential ways to address them.

WORKING ENVIRONMENTS				
Barriers and challenges	How to address them			

# Realistic ideas of how to collaborate going forward

# Connecting the expertise of the GSC with the needs of the province

How can we connect the expertise of the GSC with the needs of the province?

Based on the competencies and needs previously identified, and considering the working environments, participants are asked to work in subgroups to identify possible links between the competencies of the GSC and the needs of the province.

POSSIBLE LINKS BETWEEN THE COMPETENCIES OF THE GSC AND THE NEEDS OF THE PROVINCE			
GSC Competencies	Province of BC needs		



### [2] Identifying ideas or projects on how we can work together

For the identified links between competencies and needs, identify ideas or projects where we can work together. You may have more than one idea per identified link. Ideas or projects do not have to be complicated or long-term. Write one idea per post-it.

Ideas:		
Idea 1:	 	
Idea 2:	 	
Idea 3:		
ldos 1:		

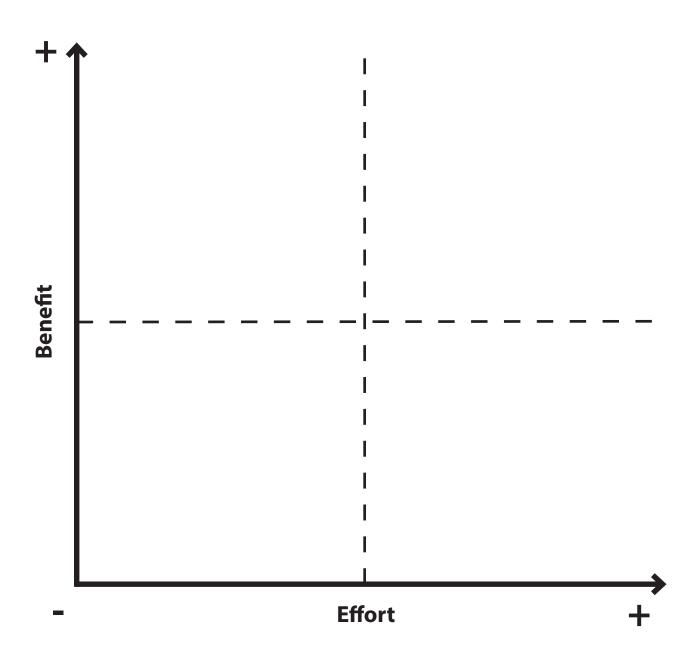


### Evaluating the effort and benefits of ideas or projects

Working in subgroups, participants are asked to write one idea per post-it. For each idea, place the post-it on the effort-benefit matrix:

- BENEFIT: If we put this idea in place tomorrow, what would the benefit be for the province?
- EFFORT: What would the effort required (combined GSC+BC) be to carry out the project?

Discuss why your subgroup chose to place each idea where it is.



# Workshop summary

### **Contributors to this knowledge exchange workshop:**





