

LAKE FUTURES

Enhancing the Adaptive Capacity
and Resilience of Lakes
and Their Watersheds



UNIVERSITY OF
WATERLOO



Inception Meeting

January 22-23, 2018

Wilfrid Laurier University, Waterloo, ON

Lake Futures

- **The Problem**
 - Canadian lakes are subject to developmental pressures.
- **The Plan**
 - Analyze causes and impacts of lake eutrophication
 - Develop watershed-lake models and indicators
 - Assess management options
- **Outcomes**
 - Deliver risk management solutions to enhance the resilience and adaptive capacity of Canada's lake basins under changing climate and land use

Lake Futures

Integrating Lakes and their Watersheds



PI: Basu

4 Universities

21 Faculty Researchers

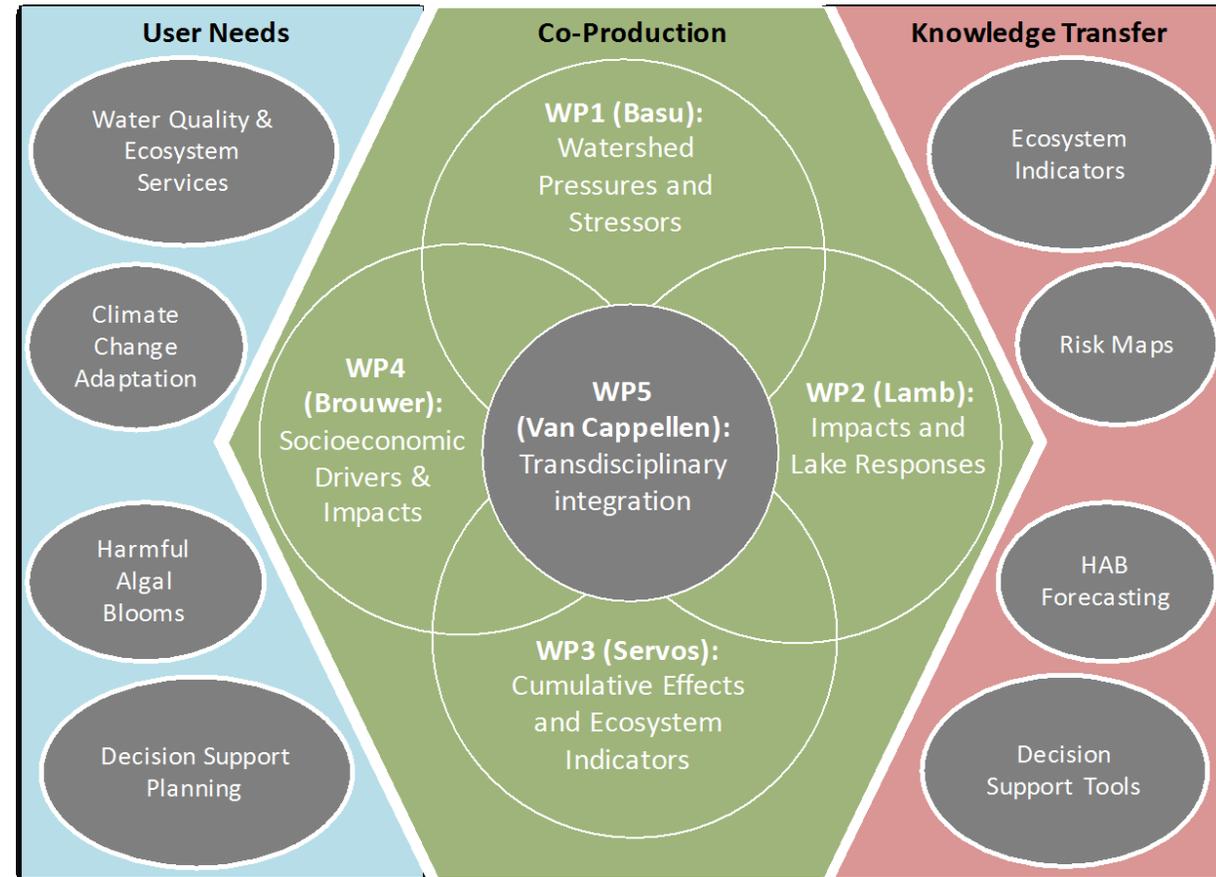
WP1: Land-based pressures on lake ecosystems

WP2: Biogeochemical responses of lakes

WP3: Develop and test ecosystem indicators

WP4: Socioeconomic drivers

WP 5: Integration to deliver decision support tools



Progress to Date

Recruitment and student engagement

- 7 of 11 graduate students recruited.
- 2 of 3 post-docs recruited.
- Monthly HQP meetings – team cohesion and training
- Summer school planning underway (June 6-7, 2018)



Progress to Date



Project planning

- Project Office established - weekly meetings
- Management Committee established, monthly meetings
- Internal project kick-off (October 27, 2017)

Stakeholder engagement

Social media: website and twitter

UNIVERSITY OF WATERLOO

ADMISSIONS ABOUT WATERLOO FACULTIES & ACADEMICS OFFICES & SERVICES SUPPORT WATERLOO

SEARCH

LAKE FUTURES

Lake Futures: Enhancing adaptive capacity and resilience of lakes and their watersheds

Lake Futures home
About Lake Futures
Our people
News
Events
Opportunities

Welcome to Lake Futures

Canada possesses a huge number of lakes, both large and small, that play a crucial role in water supply, food production, resource extraction, hydropower generation, transportation, recreation, biodiversity and climate regulation. However, despite such water wealth, climate change, agricultural intensification, shoreline development and urbanization are exerting mounting pressures on the health and ecosystem services of lakes, and their associated social and economic benefits. Because many of the environmental stressors affecting lake ecosystems originate in the surrounding watersheds, long-term management strategies and governance models must embrace the lake basin in its entirety.

Lake Futures aims to deliver adaptive watershed and lake management solutions that minimize tradeoffs between lake ecosystems, water uses, and economic growth.

NEWS EVENTS

DISCOVER Global Water Futures

LEARN MORE ABOUT Lake Futures

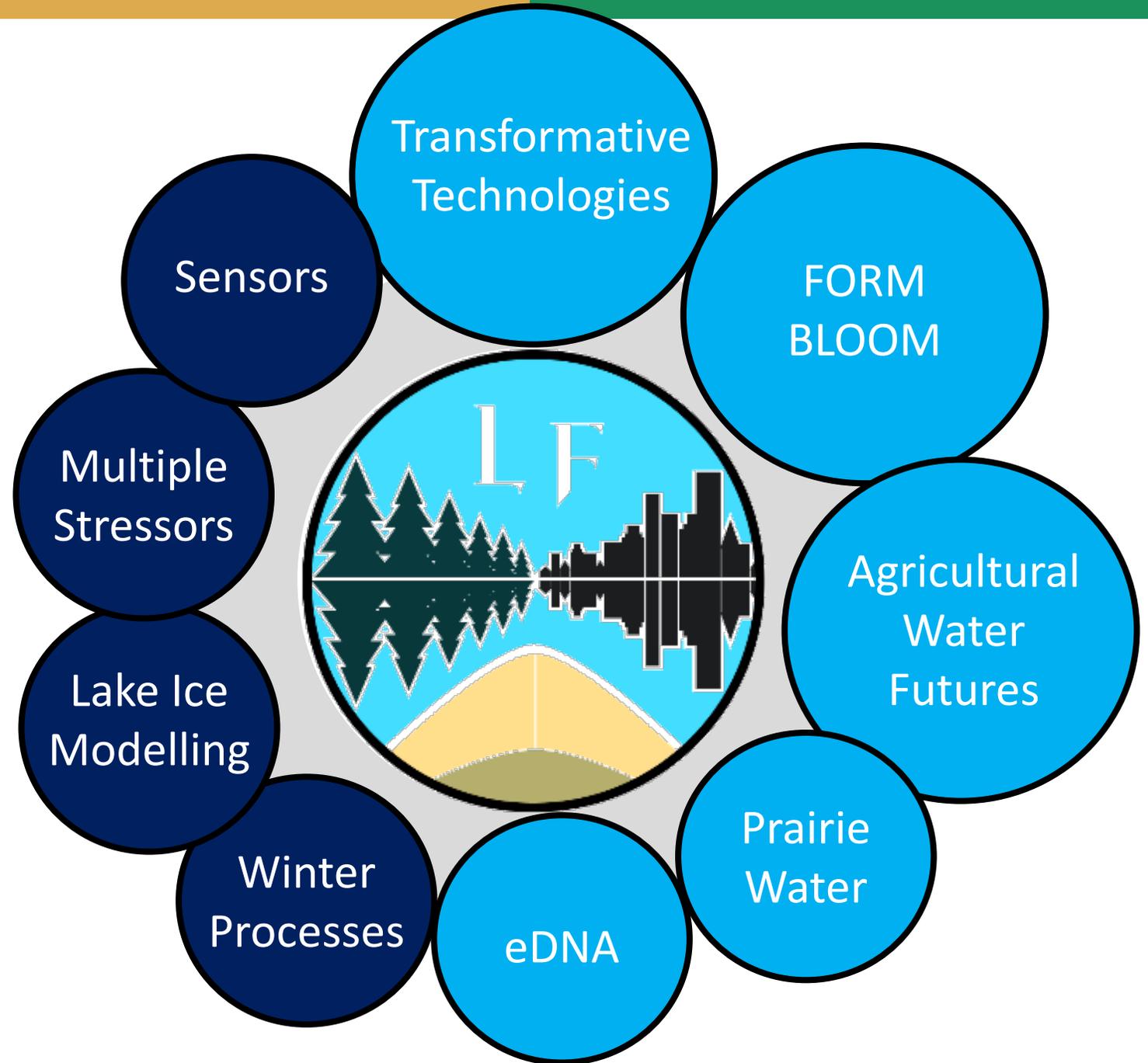
DEC. 6, 2017

Tweets by @Lake_Futures

Front page of The Record features Lake Futures researchers

Key Collaborations

Other GWF Projects



Core Support



Technical Team



Computer Team

TBD

Data

TBD



Forecasting/Modelling



Knowledge Mobilization

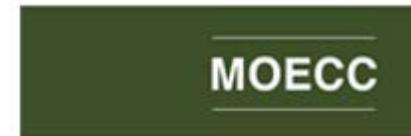
Reporting on key users and KM plan

- Preliminary stakeholder kickoff workshop held in June 2017 with key users
- Targeted meetings held with key users (June 2017 – Jan 2018)
- Current activities:
 - Refining the KM plan based on feedback received to date
 - Identifying priorities and KM action plans based on progress of individual research projects
 - KM Expert Panel being created



Environment and
Climate Change Canada

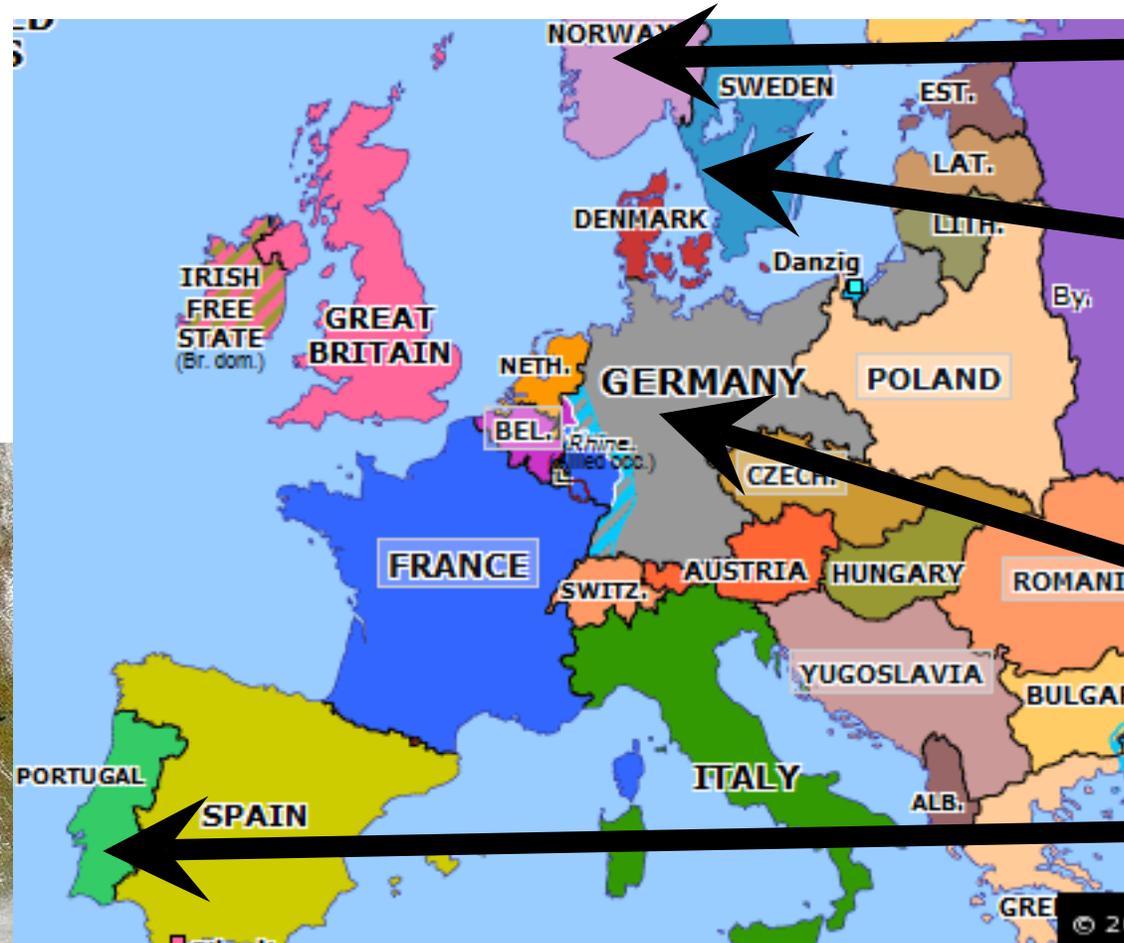
Environnement et
Changement climatique Canada



Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

What is the role of climate, land-use and management on the water quality of our rivers and lakes?



Front page of The Record features Water Institute members commenting on the importance of keeping the Grand River healthy

TUESDAY, DECEMBER 5, 2017

Professor Mark Servos, Canada Research Chair in Water Quality Protection and professor of Biology, Nandita Basu, professor in the Departments of Earth and Environmental Sciences and Civil and

Top 5 Water Science Stories 2017



By Katherine Balpataky, Todd Westcott 11:10AM December 22, 2017

WATERCANADA

Losing small wetlands linked to algal blooms in lakes, research says

Flora Pan · CBC News · July 25, 2017

