

# **A Social Network Analysis For Knowledge Integration and Extension of WEPGN Research**

Principal Investigator – Dr. Lalita Bharadwaj, University of Saskatchewan  
Dr. Diane Dupont, Brock University  
Dr. Lori Bradford, University of Saskatchewan

## **Challenge**

Solutions for complex water challenges not only require the development of novel data collection and modeling tools, but also the creation of strong research clusters and innovative knowledge mobilization instruments. There is a need to understand the focus and nature of interdisciplinary collaborative research, as well as the functionality and collaborative nature of the networks of researchers, extension and integration of partnerships.

Deriving these solutions is essential for the integration and extension of research knowledge beyond disciplinary silos so that deeper understanding and relationship building between those who make water policy decisions and those who are impacted by them can be made.

## **Project**

The project team will apply social network analysis techniques to study the integrative and collaborative patterns between water issues addressed; and the extent, size, numbers, clusters and degree of collaborative partnerships within the WEPGN. The analysis will serve as a measure of, and opportunity for, integration among WEPGN as well as the extent, degree and opportunities for future integrative and cross-cutting research. Additionally, the types, extent, connections, patterns, flow, targeted audience, relationships of information exchange, and key messages will be studied to uncover tools and opportunities for individuals or groups of individuals within WEPGN. This will allow WEPGN to extend, act on opportunities and to make changes for improved routes and delivery of information exchange and articulation of key messages.

Data from this approach will provide guidance to better support WEPGN to reach its goals of better supporting integrative and cross-cutting research into Canadian water problems, as well as build on the past successes and identify lessons learned from previous projects of the network. This approach is an important contribution to helping provide insight into how research networks can organize themselves to tackle the major complex water issues facing our country.

## **Outputs**

Anticipated Outputs include:

- An attractive and attention-grabbing video to use in presentations.
- Roster-Design survey

## Outcomes

The project aims to achieve the following outcomes:

- Enhance and refine the WEPGN theme and knowledge mobilization outputs.
- Enhance the research relationships within WEPGN and possibly beyond the network. <sup>[1]</sup><sub>[SEP]</sub>
- Increase multidisciplinary collaboration across WEPGN.
- Provide WEPGN with a novel product that shows collaborative research within the network <sup>[1]</sup><sub>[SEP]</sub> and directions for the future. <sup>[1]</sup><sub>[SEP]</sub>
- Contribute to the achievement of the principles goals of the WEPGN: build knowledge and facilitate exchange between researchers and partners, continue building a vibrant and productive network of partnerships that will mobilizing knowledge, improve our understanding of water's role in Canada, strengthen connections and facilitate multi-directional flow of knowledge and provide high-quality training experiences.

## Research Team and Partners:

### Research Team:

Dr. Lalita Bharadwaj, University of Saskatchewan

Dr. Diane Dupont, Brock University

Dr. Lori Bradford, University of Saskatchewan

### Partners:

WEPGN

### Highly Qualified Personnel (HQP):

TBD