Global Water Citizenship

Integrating networked citizens, scientists, and local decision makers

Colin Robertson (PI) — Laurier

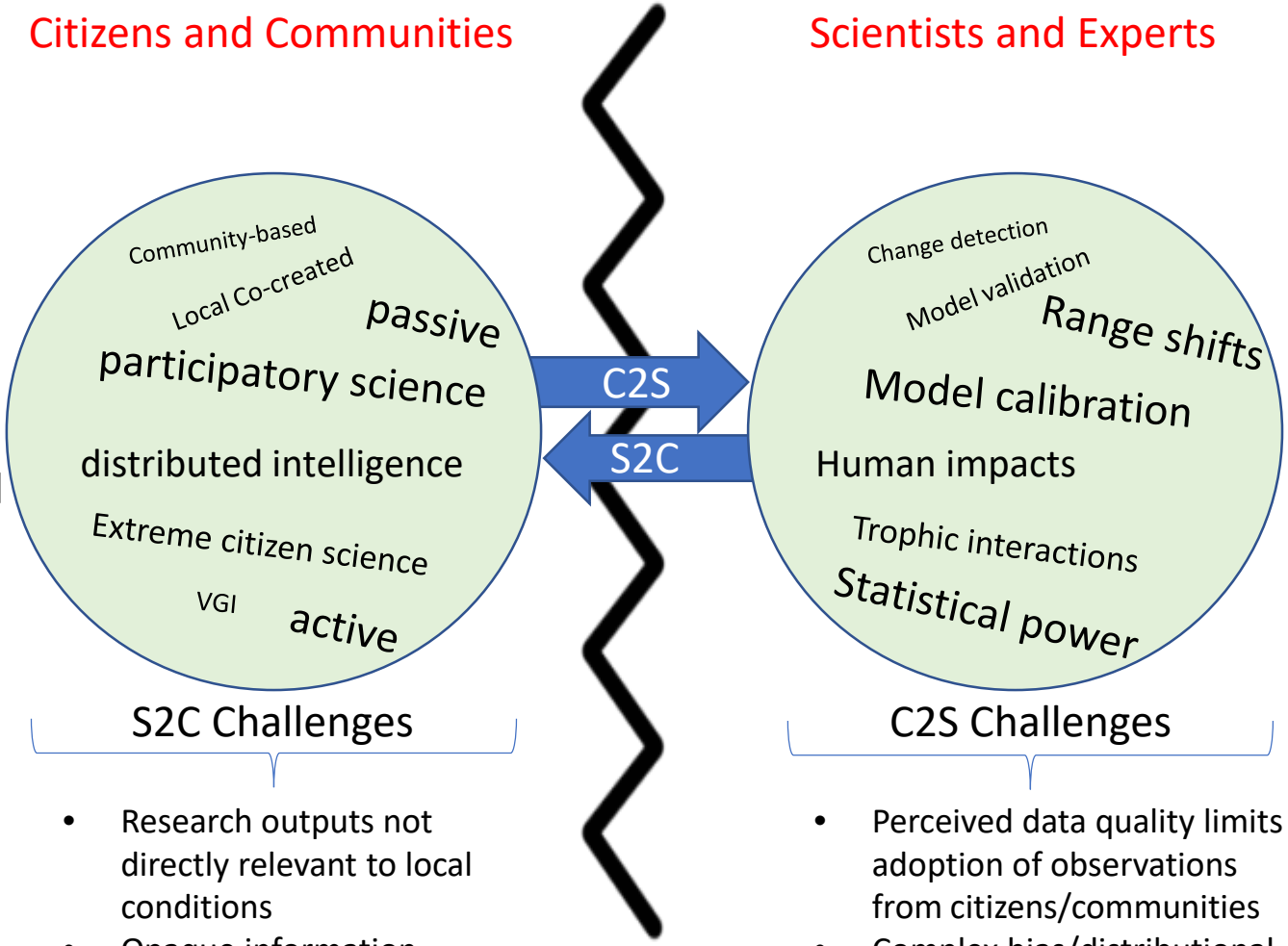
Rob Feick (Co-PI) — University of Waterloo

Steve Roberts (Co-I) — Laurier

Michael English (Co-I) — Laurier

Research Context

1. Communities can be engaged
2. Need decision-support tools and up-to-date information



1. Scientists need observations
2. Evidence-based policy and risk management

S2C Challenges

- Research outputs not directly relevant to local conditions
- Opaque information formats

C2S Challenges

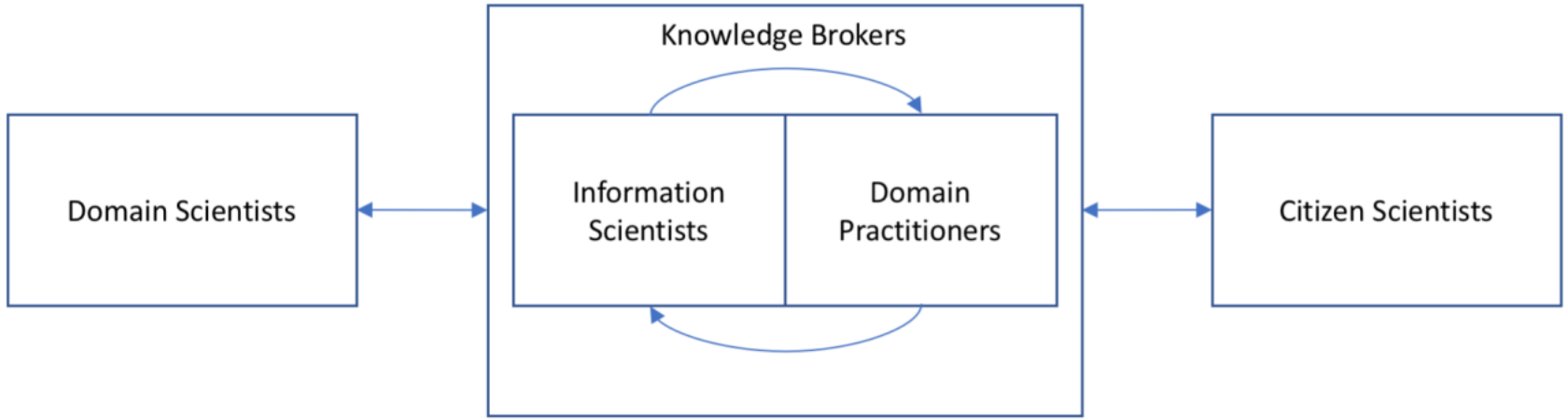
- Perceived data quality limits adoption of observations from citizens/communities
- Complex bias/distributional issues limits uptake

Overall Goals of GWC

- Develop new Big Data analytic tools for integrating citizen/community data into GWF research
- Leverage and connect with existing citizen networks to design, test, and build data quality assessment tools
- Create decision-support tools that encourage participation and adoption of community engagement in water monitoring

Project Approach

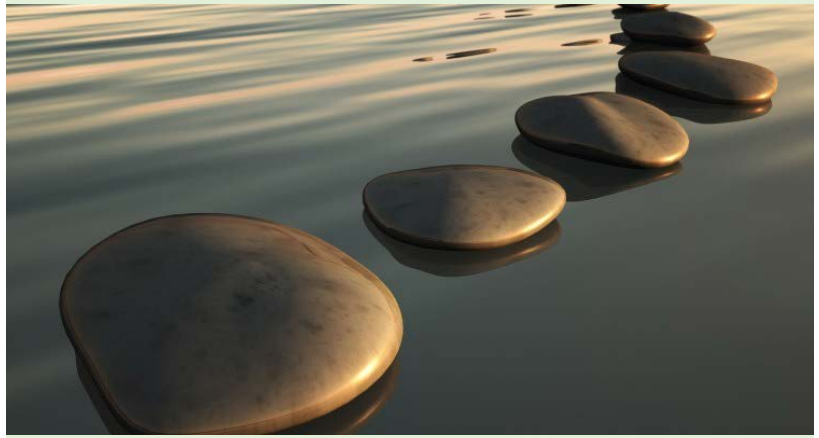
1. Build a national inventory of citizen science projects for water resources
2. Develop tools to reduce barriers to use of citizen science data
3. Develop approaches to maximize use of GWF information products by vulnerable communities and citizens
4. Create tools that expand participation and improve knowledge of documenting environmental change in Canada's cold regions



GWC Partners (Current)

1. Community-based water monitoring sites in NWT
   - Mackenzie DataStream
   - GNWT
2. Citizen monitoring of environmental changes
   - GNWT / LEO Network
3. Technology Development
   - ESRI Canada
4. GWF Researchers
   - NWF Project

Next Steps



1. Build searchable inventory of relevant water citizen science projects
2. Recruitment of personnel (4 PhD, 1 postdoc)
3. Identify GWF partners and team members for initial data quality discussions
4. Development / planning technology platform for data quality modelling

Email: crobertson@wlu.ca

Thanks for your attention…

Global Water Citizenship

Integrating networked citizens, scientists, and local decision makers

Colin Robertson (PI) — Laurier

Rob Feick (Co-PI) — University of Waterloo

Steve Roberts (Co-I) — Laurier

Michael English (Co-I) — Laurier