



a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA

# **Social Networks, Water Governance, and Valuing Ecological Goods and Services**

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# Networks and Governance

- Partners
  - Regional District Okanagan Similkameen
  - Regional District Kootenay Boundary
  - Regional District Thompson Nicola
- Objectives
  - Map social networks for persons involved in three watershed planning processes.
  - Compare the maps, as representing different stages in a process.

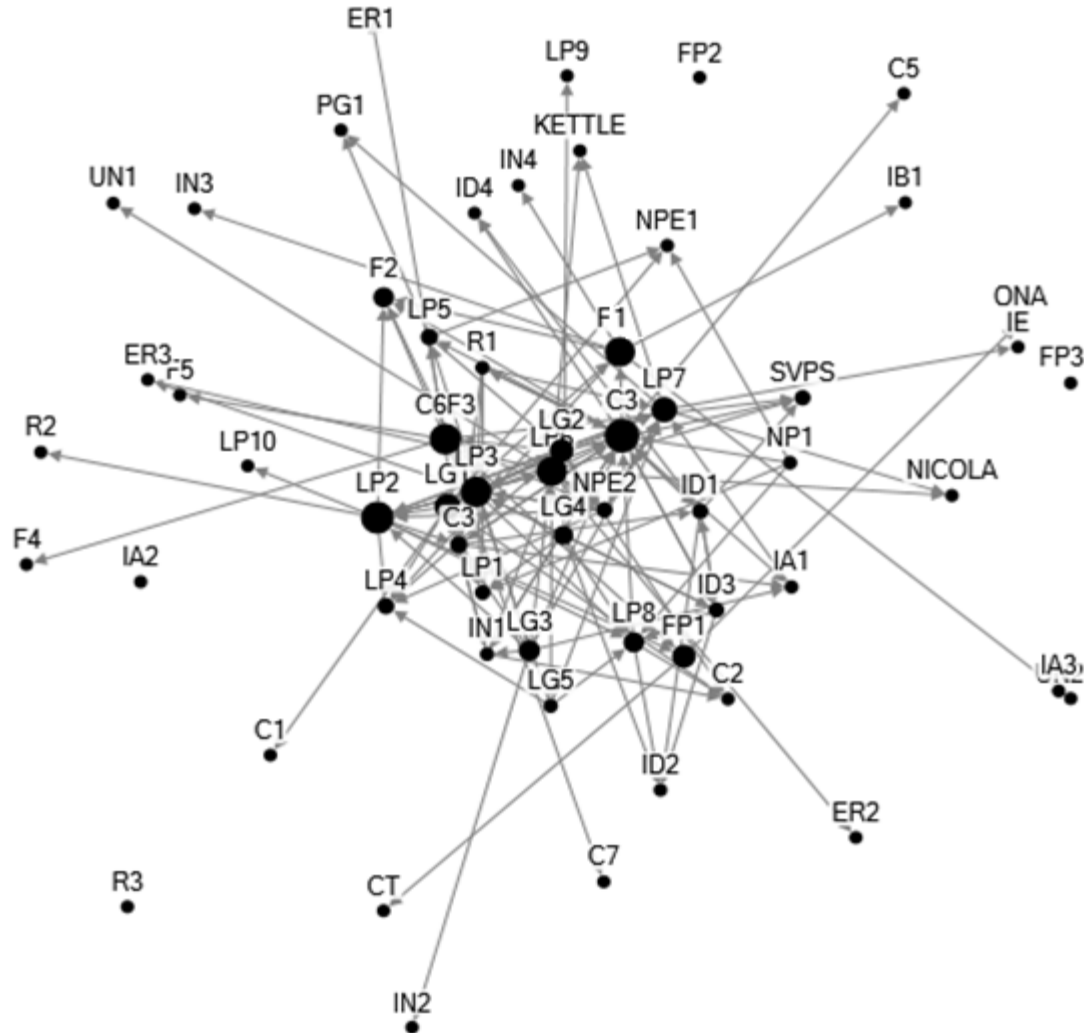
# Networks and Governance

- Methods
  - Identify people involved in watershed planning process (Nicola, Kettle and Similkameen).
  - Conduct social network interviews.
  - Construct maps of social networks.
  - Compare maps, possibly explaining as different stages of planning process.
    - Nicola, largely complete,
    - Kettle, in the middle,
    - Similkameen, initial stages.

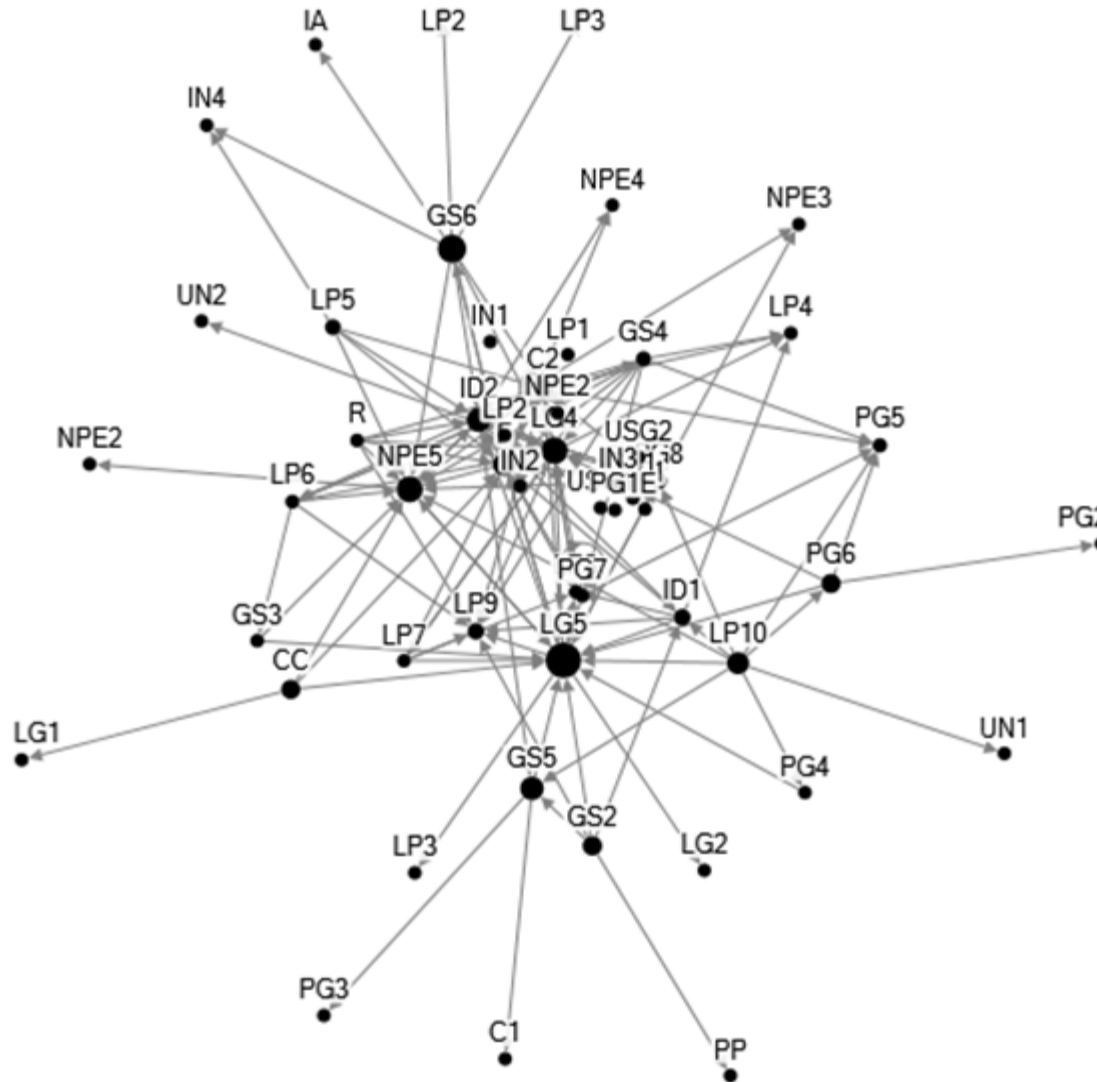
# Networks and Governance

- Results
  - Very low response rate to initial recruitment efforts.
    - Need (almost) complete network for analysis.
    - Completed by calling each person and individually interviewing.
  - Networks seem to disintegrate after planning process complete
    - 'ad-hoc' networks, emerge for task then disintegrate
    - Maybe not right network to try to sustain?

# Networks and Governance



# Networks and Governance



# Networks and Valuation

- Partners:
  - Regional District Central Okanagan (RDCO)
  - Okanagan Basin Water Board (OBWB)
  - Environment Canada
- Objectives:
  - Measure the value of key environmental goods and services in the central Okanagan
  - Explore the impact of social networks
  - Explore the impact of deliberation

# Networks and Valuation

- Methods:
  - Choice experiment
    - Mail invitation to complete survey online.
    - PI built on-line choice experiment system
  - Additional 'egocentric' network questions
  - Sample of participants invited to deliberation session.
  - After deliberation session, choice experiment invitation to all who completed first choice experiment.



# Networks and Valuation

ENVIRONMENTAL RESOURCES INDICATOR	STATUS QUO	OPTION 1	OPTION 2
<b>Loss:</b>	<b>100 km<sup>2</sup></b>	<b>0 km<sup>2</sup></b>	<b>100 km<sup>2</sup></b>
NATURAL HABITATS (Sensitive Ecosystem Area Lost)			
<b>Share:</b>	<b>20%</b>	<b>20%</b>	<b>10%</b>
GROUND WATER USE (Share of total water use from groundwater)			
<b>Returns:</b>	<b>40,000</b>	<b>40,000</b>	<b>60,000</b>
AQUATIC HABITAT HEALTH (Count of spawning Kokanee Salmon)			

# Networks and Valuation

Density:	75 ppl/km <sup>2</sup>	70 ppl/km <sup>2</sup>	70 ppl/km <sup>2</sup>
RURAL CHARACTER (population density in rural areas)			
Levy:	\$0.00	\$0.10 per \$1000	\$0.05 per \$1000
COST (Special Property Levy)	 \$0.00	 \$40 on \$400,000 house	 \$20 on \$400,000 house
Which option would you prefer?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Your preferred option without status quo		<input type="radio"/>	<input type="radio"/>

Continue >>



# Networks and Valuation



Q26. **NAME INTERPRETER** : How close (familiar) are you with these people?

Choose "very close (very familiar)", "close (familiar)" or "Acquaintance" for each of the people you have identified.

	INITIALS	Very Close	Close	Acquaintance
1.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5.		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Continue >>



# Networks and Valuation



**Q27. CONTACT BETWEEN/AMONG YOUR CONTACTS:** Please think about the relations between the people you just mentioned. Are they very close (very familiar) to one another, close (familiar) to each other or strangers in the sense that they would not recognize one another if they met on the street.

For each row in the table below, please select as "Very close (very familiar)(VC)", "Close (familiar)(C)", "Stranger (S)" to indicate how familiar the person named in the row is with the person named in the column. While in many cases we expect the familiarity to be the same in both directions, it is possible that the familiarity may not be the same in both directions.

	INITIALS				
1.			<input type="text"/>	<input type="text"/>	<input type="text"/>
2.		<input type="text"/>		<input type="text"/>	<input type="text"/>
3.		<input type="text"/>	<input type="text"/>		<input type="text"/>
4.		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
5.		<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

# Networks and Valuation

- Deliberation sessions
  - Two groups of ~10 persons
    - Choice experiment consistent budget allocation.
  - Part 1 (Saturday, joint session)
    - View video interviews recorded with local experts
    - Each group can compose questions for experts
    - Experts answer questions (by email).
  - Part 2 (Sunday, separate sessions)
    - Read answers to questions.
    - Deliberation and budget decision.



# Networks and Valuation

- Results
  - Public telephone directories becoming less useful (e.g. Canada 411 reverse lookup).
  - Paper mail response rate poor
    - Drew on other funds to get sufficient respondents
  - Empirical analysis:
    - Good variation in choices
    - Econometrics promising, no results yet.
      - Part of Ph.D. thesis.

# Water and Economy

- Value of services provided by water often not recognized.
  - Need better measurement.
  - Need ways to internalize public/external costs/benefits so decision makers consider.
- Relationship between communication channels and effective governance still poorly understood.
  - Is important, but don't know how and why, and how to improve.