

PANEL 2 – WATER AND ECONOMY

PRESENTATION BY DIANE DUPONT, BROCK UNIVERSITY

PROJECT DESCRIPTION (1)

- **Original Partner: Capital Regional District (Victoria)**
 - Provided household-level water consumption data
 - Combined with pricing, census and climate information
- **Outcomes:**
 - Estimated water demand models to obtain price/income elasticity measures
 - Log-log and Stone-Geary models (to allow for “subsistence” consumption levels that are unresponsive to price changes)
 - Use to examine potential distributional impacts from water pricing reform

PROJECT DESCRIPTION (2)

- **Leveraged WEPGN Funding with...**
 - CWN Knowledge Mobilization Funding Grant
 - CWN Secure Source Waters Consortium Grant
- **Outcomes:**
 - Integration of many disciplines and levels of expertise
 - Work towards a common language and goal
 - Develop networks/tools to assist with environmental decision-making for real-world problems

PROJECT DESCRIPTION (3)

- **CWN Knowledge Mobilization Grant (with Steven Renzetti)**
 - Expand number of municipal partners
- **Outcomes:**
 - New municipal partners (Guelph and Calgary) provided household water consumption data
 - Greater range of climate change and population information
 - Estimation of short and long run models
 - Use of time series techniques (error correction models) to improve water demand forecasts
 - Creation of excel spreadsheet to facilitate municipal capacity to forecast future demands

PROJECT DESCRIPTION (4)

- **CWN Secure Source Waters Consortium Grant (with Monica Emelko, Steven Renzetti, Vic Adamowicz; PI is Uldis Silins)**
 - Large scale, interdisciplinary project to link upstream wildfire activity to water quality changes and impacts on downstream water utilities
- **Outcomes:**
 - Linkage of many disciplines
 - Better understanding of different facets of relationship of water utility costs to water quality changes (water supply knowledge)

PROJECT DESCRIPTION (5)

- Most recent leveraging is with Vic Adamowicz's "reliability survey"
- Expand scope of that survey in two directions
 - Cross-Canada
 - Include questions around "flooding" to obtain WTP to avoid situations of "too much water"

HOW THIS PROJECT HELPS TO ANSWER THE QUESTION

- What is needed to enhance water's contribution to the Canadian economy?
 - Information about how water is currently used by households and how policies might affect consumption
 - Provide more realistic water demand projections
 - Integrate capital investment planning and demand side management (more efficient use of scarce resources)
 - Understand relationship between land, forests, and water quality
 - Develop network of researchers with different and complementary skills to recognize the role of water and its value