

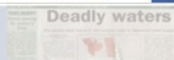
# Piped Water Quality and House Prices: A Household Production Function Approach

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50th Anniversary of the Clean Water Act:  
The Role of Environmental Economics in Improving Regulatory  
Analysis  
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# Motivation



**NOT TO DRINK ANY WATER WHICH HAS NOT PREVIOUSLY BEEN BOILED.**

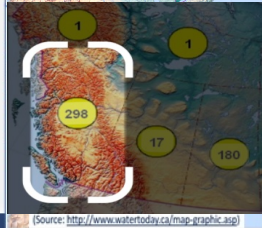
**NOTICE**  
Boil or treat water before drinking.



Canada has 1838 drinking-water advisories

Number of communities with drinking water advisories

## Drinking Water Advisories



[Source: <http://www.watertoday.ca/map-graphic.asp>]

- ▶ Water system treatment failures in early 2000s (Canada).
- ▶ Water advisories were imposed.
- ▶ In 2018, more than 98% of BWAs occurred in SDWs.
- ▶ As of 2017, 90% of water systems in B.C are small.

## Problem:

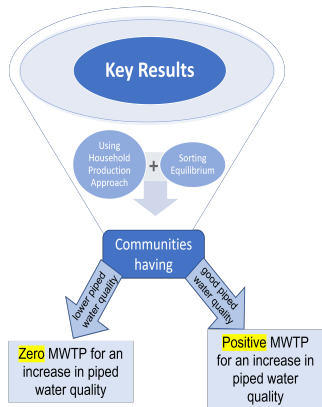
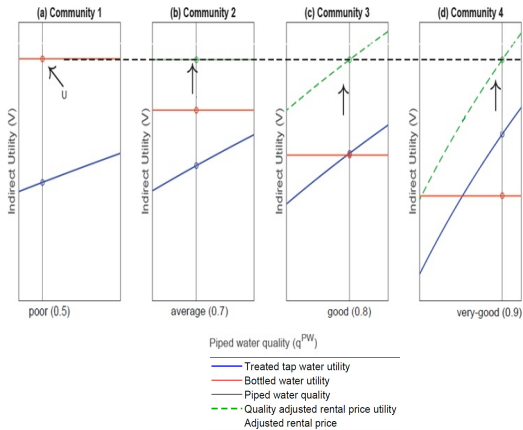
How to convince rural communities to invest in their drinking water system upgrades?

► Question arises:

- How to estimate value of piped water quality in monetary terms?
- What economic benefit can be generated from such investments?
- Whether the benefits provided by upgrading a system is greater than the cost?



# Residential Sorting Equilibrium



# Recommendations

- ▶ The information regarding piped water quality is important and the health authority should provide it.
- ▶ Efforts to assist households in lower piped water quality communities are required, such as providing lower cost alternatives, subsidizing system upgrades, etc.

# THANK YOU