# **PUTTING A PRICE**

# ON HOW MUCH ALBERTANS VALUE THE RELIABILITY OF THEIR DRINKING WATER SUPPLY

WIKTOR ADAMOWICZ, UNIVERSITY OF ALBERTA Research conducted 2014-2016, Report published September 2016

## WHY DID WE DO THIS RESEARCH

Water utility service providers aim to provide quality water to their customers at all times, minimizing disruptions to water systems that may impact the delivery of water. The impacts from increased frequency and severity of summer droughts and forest fires in regions like Alberta are becoming a growing concern, as they could lead to increased risks in drinking water system outages, and also have negative impacts on downstream water quality. Forest and watershed management practices have the ability to reduce both the risks to the reliability of drinking water sources and the need for increased investments in drinking water treatment infrastructure. An evaluation of the monetary value that Albertans place on the reliability of drinking water sources can assess the economic benefits of forest and watershed management practices in Alberta to inform decision making.



### WHAT DID WE DO

This project (2014-2016) provided an estimate of the monetary value that Albertans place on improving drinking water reliability and collected information on Albertans' experiences and risk perceptions of three different water outage scenarios: short-term, long-term and boil water advisories. The research team used survey-based methods, and included questions about what kind of trade-offs Albertans would make between programs that would reduce their perceived risks and higher water bills. 1250 Albertans completed the survey.

#### WHAT DID WE FIND

The research team found that Albertans have experienced an average of 1 short-term water outage in the last 10 years. The team also found that while around one fifth of the survey respondents do not perceive any risks to their water reliability, 78% of them perceive that the reliability of their drinking water will be reduced in the next 10 years. Albertans who perceive water reliability challenges are willing to pay on average \$71 per year for the next 10 years on their water bills for alternative management programs that will reduce their short-term water outage risks by at least 50%. They are also willing to pay \$99 per year for programs that will reduce their joint risk of all three water reliability problems (that is, risks of short-term outages, longer-term outages, and boil water advisories [BWA]).

#### WHAT ARE THE IMPLICATIONS FOR DECISION MAKERS?

Water utility service providers can use the survey results of what Albertans consider as the monetary value of reducing risks to the reliability of their drinking water supply to create efficient pricing schemes for investments that improve the reliability of water for their customers. If supported by economic analysis – and water utility providers decide to adopt forest and watershed management practices – decision makers can collaborate with forest authorities in efforts to reduce wildfires thereby providing reliable drinking water into the future.

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