# Elizabeth Sorensen Montoya

256 UCB

2022

2020

2019

2019

expected 2025

expected 2024

2015

■ elizabeth.sorensenmontoya@colorado.edu University of Colorado Boulder www.elizabethsorensenmontoya.com Department of Economics Citizenship: United States of America Boulder, CO 80309 **EDUCATION** Ph.D., Economics, University of Colorado Boulder M.A., Economics, University of Colorado Boulder M.S., Economics, University of Oregon B.S., summa cum laude, Business Administration - Economics & Finance, Black Hills State University B.A., summa cum laude, Spanish, Black Hills State University **CERTIFICATES** Certificate in College Teaching, University of Colorado Boulder

# TEACHING EXPERIENCE

Environmental Economics, Health Economics

**FIELDS** 

Instructor of Record, University of Colorado Boulder Environmental Economics (online)	Summer 2024
Instructor of Record, University of Colorado Boulder Principles of Macroeconomics	Spring 2024
Teaching Assistant, University of Colorado Boulder Principles of Macroeconomics & Principles of Microeconomics	2020-2024

#### RESEARCH EXPERIENCE

Research Assistant, University of Colorado Boulder Department of Economics & Institute of Behavioral Science, Reporting to Prof. Tania Barham	2023
Research Assistant, University of Colorado Boulder Department of Economics, Reporting to Prof. Jonathan Hughes	2022
Research Assistant, University of Colorado Boulder Department of Economics, Reporting to Dr. Mahdieh Yazdani	2021
Undergraduate Research, Black Hills State University Reporting to Prof. Ron DeBeaumont	2018-19

## **OTHER EMPLOYMENT**

Chiesman Essay Scholarship

Assistant, American Economic Association Mentoring Program	2023-2024
SCHOLARSHIPS, AWARDS & FELLOWSHIPS	
Graduate Award for Public Policy Research Department of Economics, University of Colorado Boulder	2024
National Bureau of Economic Research, program participant	2024

Mentoring Program on Aging and Health Economics	
Third Year Paper Award Department of Economics, University of Colorado Boulder	2023
Bacon Family Economics Graduate Scholarship Department of Economics, University of Colorado Boulder	2022

# Privatization of U.S. Drinking Water Systems: Impacts on Quality

While the existing economic literature has extensively examined the effect of privatization on efficiency and profitability, its impact on quality remains underexplored. Understanding this relationship is particularly important in sectors where quality is essential for human health. This study investigates how privatizing U.S. drinking water systems affects quality. Given the competing incentives and regulatory pressures that influence a firm's quality decisions, the ultimate impact of privatization is theoretically ambiguous. Using hand-collected data on municipal systems sold to private companies and employing a propensity-weighted difference-in-differences approach, I find that privatization leads to 1.4 fewer Safe Drinking Water Act violations, a 20% decrease in an index of regulated contaminant concentrations, and a 30% decrease in an index for contaminants that pose an immediate threat to human health. These findings indicate that privatization leads to an overall improvement in drinking water quality and back-of-the-envelope estimates suggest economically meaningful benefits to public health, averaging at least \$12.6 million per state in the sample.

#### WORKING PAPERS

#### Birth Outcome Effects of Nitrate Contamination in Drinking Water (under review)

Despite the prevalence of drinking water contamination in the United States, its health effects are not well understood. Unlike the extensive research on health impacts of air pollution, studies on water contamination are limited, mainly due to a lack of high-frequency water contamination data. To address this gap, I construct a novel dataset of monthly nitrate contamination levels in California's community water systems linked with individual birth records. Nitrate contamination is a persistent issue in water systems in the United States, posing a potential threat to infant health. This study estimates the effect of prenatal exposure to nitrate contamination below current regulatory limits on birth outcomes. Using a panel fixed-effects approach with water system and time fixed effects, I compare birth outcomes across infants from the same water system who were exposed to differing levels of nitrate contamination during each trimester of gestation. I find that third-trimester exposure to nitrate concentrations below regulatory limits increases the likelihood of preterm birth and low birth weight by 1.9 and 1.4 percentage points, respectively. Relative to sample means, these estimates translate to a 38% increase in the probability of preterm birth and a 34% increase in the probability of low birth weight birth.

#### WORKS IN PROGRESS

The Effect of Stricter Shipping Fuel Sulfur Content Regulation on Air Pollution
Climate Change, Migration, and Health among Older Adults (*with Tania Barham, Lori Hunter, and Dylan Connor*)
Sweating through the Night: How Nighttime Heat Affects Student Outcomes (*with Grant Webster*)

#### **PRESENTATIONS**

Southern Economic Association Conference (scheduled)	2024
Front Range Energy and Environmental Economics Camp	
University of Colorado Boulder Graduate Student Seminar	
University of Colorado Environmental and Resource Economics Workshop	2023
University of Colorado Boulder Environmental Economics Seminar	
University of Colorado Boulder Graduate Student Seminar	
University of Colorado Boulder Environmental Economics Seminar	2022

# PROFESSIONAL SERVICE

Organizer – University Colorado Boulder Graduate Student Seminar	2023-present
Host – Graduate Student Panel at Graduate Student Recruitment	Spring 2022
Graduate Student Mentor	2021

# AFFILIATIONS AND PROFESSIONAL MEMBERSHIPS

Affiliate, Institute of Behavioral Science-University of Colorado Boulder Health and Society Program, Population Program, CU Population Center

Member, Association of Environmental and Resource Economics

## **SKILLS**

Software: R, Stata, Python

# REFERENCES

# Jonathan Hughes, PhD (advisor)

Department of Economics University of Colorado Boulder 256 UCB

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# Tania Barham, PhD (committee member)

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