

# Ariana Montoya Lozano

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## **Professional Summary**

Environmental Engineer and Policy Analyst specializing in evaluating water management strategies in developing countries facing climate change. Proficient in conducting research and data analysis to develop effective environmental policies.

## **Education**

### **Purdue University**

Ph.D. Political Science Public Policy 2021 –2026

Dissertation: “Water Governance Policy Strategies in a Climate Change Context”

M.A. Political Science 2021- 2023

M.S Ecological Sciences and Engineering 2019-2021

### **Universidad Nacional de Colombia**

BE, Environmental Engineer 2011– 2017

## **Professional Experience**

Policy Research Assistant, Purdue University, USA 2021-Present

- Conducted extensive quantitative and qualitative data collection and statistical analysis on water management policies and their effects at the local level in rural areas of Latin America.
- Drafted analyses on water management strategies at the local level for climate change adaptation.
- Established and maintained relationships with stakeholders in Latin America climate and water governance process, like state actors and community organizations.

Water and Sanitation (WASH) Intern, Inter-American Development Bank, USA Jun- Aug 2024

- Drafted technical notes and executive summaries on rural water access barriers in Latina America and the Caribbean.
- Conducted literature reviews to identify and summarize the current institutional tools in Latin America and the Caribbean to provide WASH services.
- Assisted in organizing a virtual course to disseminate water security projects results and the latest research findings on WASH in rural areas of Latin America and the Caribbean.

Environmental Research Assistant, Purdue University, USA 2019 – 2021

- Contributed to the implementation and monitoring of nature-based solutions in the Wabash River for water quality improvement.
- Collected water samples and conducted laboratory analyses for water quality.
- Led workshops for community and state actors to disseminate research findings.

Environmental Engineer, Ibero-American Organization of Social Security, Colombia 2018 –2019

- Recruited community leaders to participate in the project and ensured the dissemination of final results to them upon completion.

- Responsible for designing and installing low-cost water potabilization systems in 200 households in underserved rural communities.

## **Skills**

- |                               |                    |
|-------------------------------|--------------------|
| • Quantitative Data Analysis  | • R Studio         |
| • Qualitative Data Analysis   | • STATA            |
| • Survey and Interview Design | • ArcGIS Pro       |
| • Policy Analysis             | • NVivo            |
| • Literature Reviews          | • Microsoft Office |

## **Languages**

- |                    |                    |                           |
|--------------------|--------------------|---------------------------|
| • Spanish (Native) | • English (Fluent) | • Portuguese (Proficient) |
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## **Working Papers**

- Montoya-Lozano, A., & Grillos, T. Effect of women's inclusion on conservation and management practices of Water User Associations. (Under Review for publication)
- Montoya-Lozano. Comparative case between water policies in rural South America and Central America: what comes after a water reform for water user associations.
- Montoya-Lozano, A. Garner, S. Zarychta, A. Grillos, T. Nunez, Jaime. Community-Driven Adaptation: Policy Strategies for Climate Resilience in Rural Honduras.

## **Awards and Fellowships**

- 2025. Travel Award. PROMISE Award, College of Liberal Arts, Purdue University
- 2024. Research Award Best Field Paper Honorary Mention, Political Science Department, Purdue University
- 2024. Travel Award. Science Technology and Policy Award. APSA
- 2024. Travel Award. PROMISE Award, College of Liberal Arts, Purdue University
- 2023. Research Grant. Frederick N. Andrews Environmental Grant, Purdue University
- 2021. Research Fellowship. Lynn Fellowship, Purdue University
- 2016. Research Fellowship. Nexo Global, Colciencias, Education Ministry of Colombia

## **Conference Participation**

- Presenter. Effect of women's inclusion on conservation and management practices of Water User Associations. American Political Science Association APSA, 2024. Philadelphia, USA.
- Presenter. Environmental Justice & Equity. Western Political Science Association, 2024. Vancouver, Canada.
- Presenter. The role of science and technology in water policies reforms in a climate change context. World Symposium on Climate Change Policies. 2023. Manchester, UK (Online).

- Presenter. The effect of geomorphology on nutrient retention in restored floodplains. Indiana Science Communication Day. 2023. Indianapolis, USA.
- Presenter. Comparison of denitrification rates between restored and conventional agricultural floodplain. AEES.2022. Knoxville, USA (Online).