Nicholas A. Potter

Research Agricultural Economist

USDA Economic Research Service, Conservation and Environment Branch

Education

- 2021 **Doctor of Philosophy**, Economics, Washington State University, Pullman WA, USA **Fields**: Environmental Economics, International Trade
- 2005 **Master of Science**, Applied Mathematics, University of Massachusetts Amherst, Amherst MA, USA
- 2002 Bachelor of Arts, Economics, Hampshire College, Amherst MA, USA

Research Experience

Research Agricultural Economist

2021 - Present

United States Department of Agriculture, Economic Research Service

 Conduct rigorous economic research on water resources and agriculture using confidential and public data sources; write official research reports for public, policy, and research audiences; and review interagency research and policy outputs

PhD Research Assistant 2016-2021

Washington State University

• Utilized HPC clusters to conduct research on climate impacts on agriculture using satellite-based climate data and survey-based datasets

Associate in Research 2012-2016

Washington State University Center for Sustaining Agriculture and Natural Resources

• Engaged in research on pesticide residues and nutritional content on organic and conventionally produced agricultural products

Research Assistant 2011-2013

National Bureau of Economic Research

 Developed code and conducted causal analysis using confidential panel data on individuals participating in the <u>Moving to Opportunity</u> project

Teaching Experience

Instructor, Fundamentals of Microeconomics

2018

Washington State University

• 211 students, rated 4.2 out of 5

Certifications:

• Data and Software Carpentry Instructor

2018

Academic Publications

- Ward, Frank, Nicholas A. Potter, and R. Aaron Hrozencik. 2025. "Managing Agricultural Water Use in the Western United States A Search for Efficient Climate Adaptation Institutions." Agricultural Water Management 308, March 2025. https://doi.org/10.1016/j.agwat.2024.109279.
- Cameron-Harp, Micah, Nathan Hendricks, Nicholas A. Potter. 2024. "Predicting the spatial variation in cost-efficiency for agricultural greenhouse gas mitigation programs in the U.S." Carbon Balance and Management 19(6). https://doi.org/10.1186/s13021-024-00252-6.
- Hrozencik, R. Aaron, Nicholas A. Potter, and Steven Wallander. 2023. The Cost-Effectiveness of Irrigation Canal Lining and Piping in the Western United States. In Libecap, Gary and Ariel Dinar (Eds.), American Agriculture, Water Resources, and Climate Change. University of Chicago Press.
- Potter, Nicholas A. 2019. "rnassqs: An R package to access agricultural data via the USDA National Agricultural Statistics Service (USDA-NASS) 'Quick Stats' API." Journal of Open Source Software 4(43): 1880. https://doi.org/10.21105/joss.01880.

Other Publications

- Potter, Nicholas A., R. Aaron Hrozencik, and Steven Wallander. 2025 (Forthcoming). Irrigation
 Organizations Governance Structure and Finance. Economic Research Service, U.S. Department
 of Agriculture.
- Hrozencik, R. Aaron, Nicholas A. Potter, and Steve Wallander. 2025. Irrigation Organizations –
 Water Metering and Pricing. U.S. Department of Agriculture Economic Research Service
 Economic Brief No. 40. https://www.ers.usda.gov/publications/pub-details?pubid=111040.
- Sichko, Christopher, Nicholas A. Potter. 2022-2024. Normalized Prices. ERS Data Product, Economic Research Service, U.S. Department of Agriculture. https://www.ers.usda.gov/data-products/normalized-prices/.
- **Potter, Nicholas A.**, R. Aaron Hrozencik, and Steven Wallander. 2023. Irrigation Organizations Water Inflows and Outflows. U.S. Department of Agriculture Economic Research Service Economic Brief No. 36. https://www.ers.usda.gov/publications/pub-details/?pubid=107066.
- Hrozencik, R. Aaron, Grant Gardner, Nicholas A. Potter, and Steve Wallander. 2023. Irrigation
 Organizations Groundwater Management, Economic Brief No. 34, Economic Research Service,
 U.S. Department of Agriculture.
 https://www.ers.usda.gov/publications/pub-details/?pubid=106347.

Working Papers

- Yourek, Matt, Dan Haller, **Nicholas A. Potter**, Kirti Rajagopalan, Kairon Shayne Garcia, Jonathan Yoder. Under review. "Water rights forfeiture in Washington State from 1967 to 2019."
- **Potter, Nicholas A.** and Jonathan Yoder. "Water rights on the frontier: An economic model of forfeiture."
- **Potter, Nicholas A.**, Micheal Brady, and Kirti Rajagopalan. "Climate effects on diverse high-value irrigated agriculture."
- **Potter, Nicholas A.** "Do longer growing seasons mitigate the yield impacts of extreme temperatures?"

Conference Papers/Presentations

- Potter, Nicholas A. and R. Aaron Hrozencik. 2023. "Accounting for Non-Local Climate in Estimating Climate Impacts on Agriculture." Agricultural and Applied Economics Association (AAEA) Annual Meeting, Washington, DC.
- Potter, Nicholas A. and R. Aaron Hrozencik. 2023. "The Economic Implications of Declining Snowpack for Tribal and Irrigated Agriculture Water Supplies." Universities Conference on Water Resources (UCOWR), Fort Collins, CO.
- Potter, Nicholas A. 2023. "Plant Early, Plant Often: Extreme Heat Impacts depend on Winter Climate." Association of Environmental and Resource Economists (AERE) Summer Conference, Portland, ME.
- Potter, Nicholas A. 2022. "Measuring the Implications of Declining Snowpack on Surface Water Availability and Irrigated Agriculture." The Workshop on Environmental Economics and Data Science (TWEEDS), Eugene, OR.
- Potter, Nicholas A. 2022. "Measuring the Implications of Declining Snowpack on Surface Water Availability and Irrigated Agriculture." AGU Chapman conference on Solving Water Availability Challenges through an Interdisciplinary Framework, Golden, CO.
- Hrozencik, R. Aaron, Nicholas A. Potter, and Steven Wallander. 2022. "A National Estimate of Irrigation Canal Lining and Piping Water Conservation." NBER Workshop: Economic Perspectives on Water Resources, Climate Change, and Agricultural Sustainability, Online.
- Potter, Nicholas A. and Jonathan Yoder. 2019. "On the Frontier of Water Rights: Beneficial Use and Relinquishment in Settling the Columbia River Basin." Universities Conference on Water Resources (UCOWR), Snowbird, UT.
- **Potter, Nicholas A.**, Michael Brady, and Kirti Rajagopalan. 2018. "Climate Impacts on Agricultural Productivity in the Fruitful Rim." 9th Annual Northwest Climate Conference, Boise, ID.
- Potter, Nicholas A., Michael Brady, and Kirti Rajagopalan. 2018. "Using Climate Analogues to Obtain a Causal Estimate of the Impact of Climate on Agricultural Productivity." Agricultural and Applied Economics Association (AAEA) Annual Meeting, Washington, DC.

Service

Peer Review

- 2024: Journal of Open Source Software, 1 article, 1 software package
- 2024: AAEA Summer Conference, 5 abstracts
- 2023: R Open Science Consortium, 1 software package
- 2023: Journal of Open Source Software, 1 article, 1 software package
- 2023: Natural Resource Modeling, 1 article
- 2021: AAEA Summer Conference, 4 abstracts

Other Service

- 2024: Instructor, USDA Data Science Training Program
- 2022: Mentor, USDA Pathways Internship
- 2018-2021: Instructor, Software and Data Carpentries

- 2012: Volunteer, Big Brothers Big Sisters
- 2008-2011: Volunteer, US Peace Corps, Guinea and Niger