Erik E. Nordman

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21 May 2025

Education

State University of New York – College of Environmental Science and Forestry at Syracuse, Ph.D. in Environmental & Natural Resource Policy, December 2006. M.S. in Forest Resource Management, December 1998.

Doctoral Dissertation: A public hedonic analysis of environmental attributes in an open space preservation program.

Master's Thesis: Evaluation of willow and poplar biomass production clones for resistance to multiple insect pests

State University of New York - College at Geneseo, B.S. in Biology, May 1995.

Employment

Michigan State University, East Lansing, Michigan

Director, Institute of Public Utilities, July 1, 2025 - Present

Associate Professor, Agricutural, Food, & Resource Economics, July 1, 2025 - Present Leads the Institute of Public Utilities, the nation's premier source for professional development and policy research in the public utilities sector.

Responsible for IPU's financial management, institutional development, & marketing. Develops and delivers professional development curricula to support the informed, effective, and efficient regulation of infrastructure-intensive networks that provide essential electricity, natural gas, water, and broadband services.

Leads IPU's applied research program, supervises graduate research assistants.

Strategic Resolution Experts, Inc., Remote

Executive Consultant for Climate Resilience, June 5, 2023 – March 25, 2025

Contracted with FEMA's Future Conditions Resilience Branch (formerly Climate Resilience Integration Branch) to provide policy analysis, strategic guidance, and leadership on climate resilience, nature-based solutions, and disaster risk management.

Developed agency-wide strategies for climate resilience and use of nature-based solutions to address various hazards, such as flooding, extreme heat, and wildfire.

Supported FEMA's implementation of the Inflation Reduction Act.

Evaluated the economic, social, and ecological benefits and costs of nature-based solutions for mitigating extreme heat and drought.

Convened workshops and facilitating listening sessions.

Drafted speeches, briefings, and talking points for FEMA leadership.

Mentored junior staff on economic analyses, policy analyses, and systematic reviews.

Identified opportunities to enhance climate resilience programming, such as through policy changes, use of the social cost of carbon, community-driven relocation, and reviewing curricula at the National Disaster and Emergency Management University (formerly Emergency Management Institute).

Security clearance: Secret.

Grand Valley State University, Allendale, Michigan

Adjunct Professor of Natural Resources Management, August 15, 2024 – May 15, 2025 Professor of Natural Resources Management (with tenure), August 15, 2006-August 14, 2023 Adjunct Professor of Economics, August 15, 2018 – August 14, 2023

Secured and managed more than \$2.3 million external research funding as principal or co-investigator. Supervised research assistants and collaborators. Funding partners include the US Forest Service, US Department of Energy, US Department of State, The Nature Conservancy, Michigan Sea Grant, and others.

Authored more than fifty peer-reviewed research articles, books, book chapters, technical papers, and outreach articles on natural resource policy environmental and ecological economics, and renewable energy.

Conducted research on collaborative environmental management, social dimensions of conservation and ecological restoration, economic valuation of natural resources, renewable energy, and nature-based solutions.

Supervised collaborating researchers, graduate assistants, and undergraduate research assistants.

Teaching responsibilities included:

- o NRM 451 / 551 Natural Resource Policy (currently teaching)
- o ECO 345 Environmental & Resource Economics
- NRM 495 Trends in Natural Resources Management (Capstone)
- o BIO 338 Environmental Ethics
- NRM 450 Applied Spatial Analysis of Natural Resources
- NRM 395 GIS Applications in Natural Resources
- NRM 462 Forest Ecosystem Management
- o NRM 350 Aerial Photography and Remote Sensing of the Environment
- NRM 250 Resource Measurements and Maps
- BIO 105 Environmental Science
- NRM 380 (Special Topics), including Collaborative Environmental Management, Livelihoods, Resources, & Development; Renewable Energy Management and Modeling

Indiana University – Ostrom Workshop, Bloomington, Indiana

Visiting Scholar, August 15, 2019- May 15, 2020 (Sabbatical)

Conducted archival research and interviews with Ostrom Workshop faculty, staff, and affiliates.

Presented at and attended weekly colloquia and research seminars.

Used Ostrom's theoretical framework to analyze the <u>2030 District energy efficiency</u> program.

Attended the 2019 UNFCCC Conference of Parties (COP25) in Madrid, Spain.

Continuing to maintain an Affiliate Scholar designation with the Ostrom Workshop.

Kenyatta University, Nairobi, Kenya

Fulbright Scholar and Visiting Professor, Environmental & Community Development Department, August 1, 2012-July 15, 2013 (Sabbatical)

Conducted research on the feasibility of wind energy in Kenya's tea growing regions and the visual impact of the Ngong Hills wind farm on tourist experiences at Nairobi National Park.

Taught courses to undergraduate and graduate students.

- SET 623 Energy for Sustainable Development
- o ECD 402 Environmental Economics
- o ECD 302 Principles of Research Methods

Nordman Sustainability Solutions, Spring Lake, Michigan

Independent Sustainability Consulting, May 1, 2014-December 31, 2022

Pan American Development Foundation: created a curriculum in climate change adaptation and disaster risk reduction for young adults based on the sustainable livelihoods framework. Collaborated with local experts to develop and deliver the curriculum, training more than 50 participants.

ACT Commodities: evaluated a forest carbon offset program.

Awards and Honors

Employee of the Quarter, SRE, Inc. December 2023.

Recommended Summer Reading, *Science* magazine, July 2021, for the book *The Uncommon Knowledge of Elinor Ostrom: Essential Lessons for Collective Action*.

Visiting Scholar, Ostrom Workshop, Indiana University, 2019-2020

US Department of State, Virtual Fellow, 2016

Fulbright Scholar, Kenyatta University, Nairobi, Kenya, 2012-2013

Great Lakes Wind Collaborative Partnership Award, 2011

GVSU Sustainability Champion, 2009, 2014

Service and Leadership Positions

United States Society for Ecological Economics, Board member, 2022-present

Careerline Tech Center (Ottawa County), Natural Resources and Outdoor Studies program advisory board member, 2018-2023

Fulbright Scholar Discipline Review, Environmental Science – Policy Committee member, 2018-2021

Upper Midwest and Great Lakes Landscape Conservation Cooperative – Coastal Conservation Working Group – 2015-2016

US Department of State, Young African Leaders Program, reviewer, 2014

West Michigan Environmental Action Council, Board president and member, 2008-2012

Great Lakes Commission, Wind Energy Best Practices Working Group, 2009 – 2011 **Michigan State Wind Outreach Team**, 2009 - 2012

GVSU Natural Resources Management Program, Academic coordinator, 2008-2010 World Bank Development Marketplace, Reviewer, 2008

Publications

Books and Book Chapters

*Denotes undergraduate student authors

Nordman, E., P. Doran, C. Glupker, S. Haapaniemi, E. Isely, P. Isely, V. Strassberg, S. Viars. (*In press*). Linking physical and knowledge commons in a green stormwater infrastructure program. In *Environmental Knowledge Commons: Cases and Lessons for Knowledge Sharing*, A. Raymond, S. Shackelford, J. Steinberg, and M. Mattioli, eds. Cambridge University Press.

Nordman, E. 2021. *The Uncommon Knowledge of Elinor Ostrom: Essential Lessons for Collective Action*. Washington, D.C.: Island Press. 275 p. ISBN 9781642831559.

Nordman, E. 2021. A conceptual model of polycentric governance in the 2030 District energy program. In, Foster, S. and C. Swiney (eds.), *The Cambridge Handbook of Commons Research Innovations*. ISBN 9781108938617.

Nordman, E., N. Christopher, and Y. Jakobcic. 2017. Sustainability as a university value: A journey from awareness to value creation. In Mitchell, S. and J. Arevalo (eds.), *The Sustainability in Management Education Handbook*. Northampton, MA, USA: Edward Elgar.

Nordman, E., J. VanderMolen, B. Gajewski, and A. Ferguson*. 2013. Great Lakes, great debates: Facilitating public engagement on offshore wind energy using the Delphi Inquiry approach. In, Richardson, Robert B. (ed.), *Building a Green Economy: Perspectives from Ecological Economics*. East Lansing, MI: Michigan State University Press.

Peer-reviewed Research Articles

Isely, P., **E. Nordman**, K. Robbins,* and J. Cowie. (*In review*). Economic impact of shoreline remediation and habitat restoration in the Muskegon Lake Area of Concern.

Nordman, E. A. Barrenger,* J. Crawford,* J. McLaughlin,* and C. Wilcox.* 2019. Options for achieving Cabo Verde's 100% renewable electricity goal: A review. *Island Studies Journal*, *14*(1).

Nordman, E., E. Isely, P. Isely, R. Denning. 2018. Benefit-cost analysis of stormwater green infrastructure practices for Grand Rapids, Michigan, USA. *Journal of Cleaner Production* 200: 501-510.

Isely, P., **E. Nordman**, S. Howard, R. Bowman. 2017. *Phragmites* removal increases property values in Michigan's lower Grand River watershed. *Journal of Ocean and Coastal Economics* 4(1).

Standridge, C., D. Zeitler, A. Clark, T. Spoelma, **E. Nordman**, T.A. Boezaart, J. Edmonson, G. Howe, G. Meadows, A. Cotel, F. Marsik. 2017. Lake Michigan wind assessment analysis, 2012 and 2013. *International Journal of Renewable Energy Development* 6(1):19-27.

Nordman, E. and J. Mutinda. 2016. Biodiversity and wind energy in Kenya: Revealing landscape and wind turbine perceptions in the world's wildlife capital. *Energy Research and Social Science* 19 (2016):108-118.

Nordman, E., D. O'Keefe, E. Arndt*. 2016. Enhancing public engagement on offshore wind energy using *genius loci*: A case study from a Lake Michigan coastal community. *Sustainability Policy and Practice* 12(4):19-32

Nordman, E., E. Isely, P. Isely, R. Denning. 2016. Benefit-cost analysis of four stormwater green infrastructure practices for Grand Rapids, Michigan, USA. *Proceedings of the 22nd Annual International Sustainable Development Research Society Conference: Rethinking Sustainability Models and Practices: Changes for the New and Old World Contexts.* Lisbon, Portugal, 13-15 July 2016

Standridge, C., D. Zeitler, A. Clark, T. Spoelma, **E. Nordman**, T.A. Boezaart, J. Edmonson, R. Phillips, G. Howe, G. Meadows, A. Cotel, F. Marsik. 2015. A case study of laser wind sensor performance validation by comparison to an existing gage. *International Journal of Renewable Energy Research* 5(2):524-531

Kuehn, D., R. Schuster, and **E. Nordman**. 2015. Landowner perceptions of three types of boating in the Saranac Lakes area of New York State's Adirondack Park. *Journal of Outdoor Recreation and Tourism* 9:53-63.

Nordman, E., J. VanderMolen, B. Gajewski, J. Koches, P. Isely, Y. Fan, S. Damm*, A. Ferguson*, C. Schoolmaster*. 2015. An integrated assessment for wind energy in Lake Michigan coastal counties. *Integrated Environmental Assessment and Management* 11(2):287-297

Nordman, E. 2014. Energy transitions in Kenya's tea sector: A wind energy assessment. *Renewable Energy* 68:505-514

Nordman, E., J. VanderMolen, B. Gajewski, P. Isely, Y. Fan, J. Koches, K. Thompson, S. Damm*, R. Gajewski*, A. Ferguson*, and C. Schoolmaster*. 2013. *Locating wind energy facilities in Michigan's coastal counties: Final report of the West Michigan Wind Assessment*. Michigan Sea Grant technical report MICHU-13-212. Available at: http://www.miseagrant.umich.edu/wp-content/blogs.dir/1/files/2012/05/MICHU-13-212-Locating-Wind-Energy-Facilities-in-Michigan%E2%80%99s-Coastal-Counties-Final-Report.pdf

Nordman, E. and J. Wagner. 2012. Public purchases and private preferences: Challenges for analyzing public open space acquisitions. *Urban Forestry and Urban Greening* 11: 179-186

Nordman, E. and J. Wagner. 2010. Incorporating acquisition costs in forestland open space programs: Lessons from conservation biology and applications. *Journal of Forestry* 108(6):282-287.

Luzadis, V., L. Castello, J. Choi, C. Franco, E. Greenfield, S. Kim, J. Munsell, **E. Nordman**, and F. Olowabi. 2010. The science of ecological economics: A content analysis of *Ecological Economics*, 1989-2004. *Annals of the New York Academy of Sciences* 1185: 1-10.

Kuehn, D., R. Schuster, M. Mink, and **E. Nordman**. 2009. Beliefs and attitudes of four stakeholder groups in the Saranac Lakes area of New York's Adirondack Park. *Adirondack Journal of Environmental Studies* 15 (2):25-35.

Nordman, E., D. Robison, L. Abrahamson, and T. Volk. 2005. Relative resistance of willow and poplar biomass production clones across a continuum of herbivorous insect specialization: Univariate and multivariate approaches. *Forest Ecology and Management* 217: 307-318.

Technical reports and book reviews

Nordman, E. 2025. Reading: Elinor Ostrom – What Works in Practice Can Work in Theory. *Royal Economic Society Newsletter*. Issue 208, January 2025.

The White House. 2024. *The Climate Resilience Game Changers Assessment*. (I was a contributing author to this report). Available at: https://www.whitehouse.gov/wp-content/uploads/2024/07/Climate-Resilience-Game-

Changers-Assessment.pdf.

FEMA. 2024. *Financing Climate Resilience*. (I was the lead author of this report). Available at: https://www.fema.gov/sites/default/files/documents/fema_financing-climate-resilience 092024.pdf.

Nordman, E. 2024. Book Review: *The Culture of Stopping* by Harald Welzer. *Environmental Values* (online now, volume and issue forthcoming).

Haapaniemi, S., P. Doran, V. Strassberg, E. Isely, **E. Nordman,** P. Isely, C. Glupker, S. Viars, S. Dierks, S. Giese, L. Noye. 2023. *Making Detroit's Green Stormwater Infrastructure Count: A Report*.

Nordman, E. 2023. Book Review: *Reimagining Sustainable Cities: Strategies for Designing Greener, Healthier, and More Equitable Cities* by Stephen M. Wheeler and Christina D. Rosan. *Contemporary Sociology* 52(2): 186-188.

Nordman, E. 2022. Book Review: *Cathonomics: How Catholic Tradition Can Create a More Just Economy* by Anthony Annett. *Environmental Values* 31(5), 619-621.

Nordman, E. 2021. Lobster gangs and debunking the "Tragedy of the Commons." YES! Magazine. https://www.yesmagazine.org/economy/2021/08/11/the-commons-lobster-maine-elinor-ostrom.

Isely, P., **E. Nordman,** K. Robbins,*, and J. Cowie 2020. Muskegon Lake Area of Concern Habitat Restoration Project: Socio-economic assessment revisited. Technical report for the Great Lakes Commission. https://www.glc.org/work/aocs/muskegon.

Nordman, E. 2020. Amid mandates, collaboration is key for managing COVID-19. Michigan Bridge. https://www.bridgemi.com/guest-commentary/opinion-amid-mandates-collaboration-key-managing-covid-19.

Nordman, E., and R. Killeen.* 2019. Analyzing voluntary 2030 District energy programs using the Institutional Analysis and Development framework. Indiana University, Bloomington, IN: Sixth Workshop on the Ostrom Workshop Conference Proceedings

Nordman, E., A. Barrenger*, J. Crawford*, J. McLaughlin*, and C. Wilcox*. 2017. Options for achieving Cabo Verde's 100% renewable energy goal. Final report to the US State Department, Office of African Analysis, Division of West and Southern Africa, Bureau of Intelligence and Research.

Crawford, J. and **E. Nordman.** 2017. Establishing a willow biomass energy trial at Grand Valley State University. (ed.). *Michigan Forester*.

Stanton, T. and **E. Nordman**. 2017. Regulating "energy ladder" products and services: Delivering vital energy services using off-grid, mini-grid, and micro-grid power systems. International Confederation of Energy Regulators - The ICER Chronicle Edition 7 (August 2017). Available at

http://www.icer-regulators.net/portal/page/portal/ICER_HOME/publications_press/ICER_Chronicle.html.

Isely, P., **E. Nordman**, C. Glupker, J. Cowie, H. LaMay. 2017. The economic impact of the Huron River. Final report to the Huron River Watershed Council.

Michaels*, A., A. Chandler*, and **E. Nordman**. 2016. Book review: *The Sixth Extinction: An Unnatural History* by Elizabeth Kolbert. *Michigan Forester*.

Nordman, E., E. Isely, P. Isely, and R. Denning. 2016. Benefit-cost analysis of four stormwater green infrastructure practices for Grand Rapids, Michigan, USA. *Rethinking Sustainability Models and Practices: Changes for the New and Old World Contexts*. Lisbon: 22nd Annual International Sustainable Development Research Society Conference.

E. Nordman and P. Isely. 2015. Economic impact of recreation in the Rogue River watershed. A report to Trout Unlimited.

Gaskill, J., B. Zuber, and **E. Nordman**. 2015. Analyzing landslide susceptibility in St. Vincent and the Grenadines using co-kriging and logistic regression. IMAGIN Conference graduate paper competition (3rd place).

West Michigan Wind Assessment Issue Briefs - 2009-2014

Gajewski, B., C. Schoolmaster*, J. Vandermolen, and **E. Nordman**. 2014. Environmental impacts of land-based wind energy in West Michigan. West Michigan Wind Assessment Issue Brief 11.

VanderMolen, J and **E. Nordman**. 2014. Effects of wind farms on navigation: Potential impacts for radar, air traffic and marine navigation. West Michigan Wind Assessment Issue Brief 10.

VanderMolen, J. and **E. Nordman**. 2014. Offshore wind: Environmental benefits, challenges and consequences. West Michigan Wind Assessment Issue Brief 9.

E. Nordman and J. VanderMolen. 2014. Wind and the Electric Grid: Transmission, Storage, and Smart Grid Options. West Michigan Wind Assessment Issue Brief 8.

Nordman, E. 2014. Wind power and air quality: Reducing air pollution and carbon emissions in West Michigan with wind energy. West Michigan Wind Assessment Issue Brief 7.

Isley, P., Y. Fan, and **E. Nordman**. 2013. Wind energy economics: Production costs and additional impacts. West Michigan Wind Assessment Issue Brief 6.

Isley, P., and Y. Fan. 2013. Wind energy economics: Potential economic development in West Michigan. Principal investigator, **E. Nordman**. West Michigan Wind Assessment Issue Brief 5.

Nordman, E., J. VanderMolen, B. Gajewski, and A. Fergsuon.* 2011. Citizen views on offshore wind energy: benefits, challenges, and information gaps. West Michigan Wind Assessment Issue Brief 4.

Nordman, E. 2011. Offshore wind energy: public perceptions and policy dimensions. West Michigan Wind Assessment Issue Brief 3.

Nordman, E. 2010. Wind power and human health: Flicker, noise and air quality. West Michigan Wind Assessment Issue Brief 2.

Nordman, E. 2010. Wind energy deployment: Global lessons for West Michigan. West Michigan Wind Assessment Issue Brief 1.

Nordman, E. 2009. Regional response to a statewide renewable energy standard: Status and trends of wind energy development in West Michigan.

Standridge, C., D. Zeitler, Y. Nieves, T. Turnage, and **E. Nordman**. 2012. Evaluating offshore wind resources and ecological conditions in Lake Michigan with a NOMAD buoy and laser sensor. WINDPOWER 2012 Conference Proceedings.

Griffin*, M. and **E. Nordman.** 2012. A realistic, yet optimistic, take on our energy past present, and future (Book review). *The Quest: Energy, Security, and the Remaking of the Modern World* by D. Yergin. Interchange: GVSU Science and Math Update 19(4) May 2012.

Higginson*, N. and **E. Nordman**. 2011. Exploiting uncertainty (Book review). *Merchants of Doubt: How a handful of scientists obscured the truth on issues from tobacco smoke to global warming* by N. Oreskes and E. Conway. Interchange: GVSU Science and Math Update 18(1) February 2011.

Offshore Wind Energy Outreach Project Fact Sheets - 2011

Nordman, E. and D. O'Keefe. 2011. Offshore wind energy in Michigan: Implications for the Great Lakes Environment. Offshore Wind Energy Outreach Project fact sheet MICHU-11-736. 6 pp.

Nordman, E. and L. Vaccaro. 2011. Offshore wind energy in Michigan: Economic costs and benefits. Offshore Wind Energy Outreach Project fact sheet MICHU-11-735. 8 pp.

Nordman, E. and B. Gajewski. 2011. Citizen views on offshore wind energy in Lake Michigan. Offshore Wind Energy Outreach Project fact sheet. 2 pp.

Nordman, E. 2011. Status of offshore wind energy in Michigan's Great Lakes. Offshore Wind Energy Outreach Project fact sheet. 2 pp.

Haven, C., V. Pebbles, J. Hummer, and **E. Nordman**. 2011. Public perceptions of offshore wind energy in Michigan's Upper Peninsula. Offshore Wind Energy Outreach Project fact sheet. 2 pp.

Nordman, E. 2011. Offshore wind energy outreach: wind farm visualization. Offshore Wind Energy Outreach Project fact sheet. 2 pp.

Benjamin*, E., A. Ferguson*, J. Gallagher*, and **E. Nordman.** 2010. (Book review) *The Big Burn: Teddy Roosevelt and the Forest Fire that Saved* America by T. Egan. Michigan Forester #70: 5.

Nordman, E. 2007. Evaluating public open space preservation priorities. In *Proceedings* of the Society of American Foresters National Convention, Portland, Oregon, October 23-27, 2007.

Essays and Op-Eds

Nordman, E. 2021. Crises in the Commons. The legacy of Elinor Ostrom. King's College London – Centre for the Study of Governance and Society. https://csgs.kcl.ac.uk/crises-of-the-commons-elinor-ostroms-legacy-of-self-governance/.

Nordman, E. 2021. Congested, Contested, and Competitive: Are we running out of room in outer space? Urban Resilience Project.

https://urbanresilience.medium.com/congested-contested-and-competitive-are-werunning-out-of-room-in-outer-space-9bc94f96c078.

Nordman, E. and J. Reblando. 2019. Opinion: In the face of a looming climate crisis, the late Elinor Ostrom gives me hope. Minnesota: *Ensia Magazine* (online) https://ensia.com/voices/climate-crisis-elinor-ostrom-common-pool-resources/

Nordman, E. 2018. What Senegal needs to do to close its energy gap by 2030. The Conversation – Africa. Available at: https://theconversation.com/what-senegal-needs-to-do-to-close-its-energy-gap-by-2030-88575. Accessed 28 February 2018.

Nordman, E. 2017. Cape Verde's goal is 100% renewable energy by 2025. Why it may just do it. The Conversation – Africa. Available at https://theconversation.com/cape-verdes-goal-is-100-renewable-energy-by-2025-why-it-may-just-do-it-85759. Accessed 28 February 2018.

Nordman, E. 2017. The Lamu coal plant doesn't make sense - Kenya has better options. The Conversation – Africa. Available at: http://theconversation.com/why-the-lamu-coal-plant-doesnt-make-sense-kenya-has-better-energy-options-78479. Accessed 3 September 2017.

Nordman, E. 2015. How Michigan can save money while reducing greenhouse gases. Guest commentary, Bridge Magazine 23 July 2015. Available at http://bridgemi.com/2015/07/how-michigan-can-save-money-while-reducing-greenhouse-gases/

Nordman, E. 2014. Climate policy is innovation policy. Guest op-ed, MLive.com 23 December 2014. Available at

http://www.mlive.com/opinion/index.ssf/2014/12/guest_column_climate_policy_is.html

Nordman, E. and B. Gajewski. 2011. Citizen views on offshore wind energy in Lake Michigan. *MiBiz*, 1 July 2011.

Nordman, E. 2007. Can the market save open space? MiBiz, August 6, 2007.

Nordman, E. 2007. Sustainable architecture: Beyond green building. *MiBiz*, June 25, 2007.

Presentations

Keynote Addresses and Invited Lectures

World Affairs Council of Western Michigan, 2024. "Will technology save us on a hotter planet? with Neela Banerjee." Facilitated conversation with NPR chief climate editor N. Banerjee. March 12, 2024, Grand Rapids, Michigan.

Citizens Climate Lobby – Grand Haven-Lakeshore Chapter. 2022. "Electrify Everything!" Invited lecture. October 18, 2022. Spring Lake, Michigan, USA

World Affairs Council of Western Michigan. 2022. Communities by Design Series. "Commons, Collaboration, and Civic Design." Invited lecture, September 29, 2022, Ada, Michigan, USA.

Lone Star Sustainability Forum. 2022. "Commoning for the Built Environment." Invited keynote address, August 4, 2022, San Marcos, Texas, USA.

Adam Smith Center, Singapore. 2022. "Bottom-up Environmentalism." A series of online short courses about the work of Elinor Ostrom. Part of an online curriculum in environmental policy and economics. May 16, 2022. Available at https://www.futurelearn.com/courses/environmental-management-bottom-up-approach-policy-implementation.

California-Nevada Section, American Water Works Association. 2022. "Collaborative Water Governance in a Changing Climate: Learning from Elinor Ostrom." April 27, 2022.

West Michigan Sustainable Business Forum. 2022. "Reassessing the 'Tragedy of the Commons': A guide for sustainable business and collective action." March 24, 2022. Available at https://drive.google.com/file/d/1z4A_s1qcVvXsggY08Kgak6RRxeylRAkH/view?usp=sharing.

Illinois State University. 2022. "Canal by Canal: Lessons from Spain's Ancient Water Court." World Water Day Lecture. March 22, 2022.

Aquinas College – Osher Lifelong Learning Institute. 2022. "Seminar on Environmental and Resource Economics." January 5, 2022.

Indiana University Ostrom Workshop Book Club. 2021. "The Uncommon Knowledge of Elinor Ostrom: Essential Lessons for Collective Action." October 27, 2021. Available at https://youtu.be/Fz_W4FANwsg

The Mint Magazine. 2021. Interview – "Commons Concern." September 26, 2021. Available at: https://www.themintmagazine.com/commons-concern

Institut Ostrom Catalunya - Elinor Ostrom Day. 2021. "Ostromian Climate Action." September 23, 2021.

The Nature Conservancy – Michigan Chapter staff retreat. August 2017. "Trends in economics and conservation." Cassopolis, Michigan.

Michigan Bird Conservation Initiative. 2015. "Birds on the Wire: Bird Conservation and the Electricity System," Tustin, MI.

Holland Historical Museum. October 24, 2013. "Harnessing the wind: Energy research at GVSU." Presentation in conjunction with museum exhibit on wind power through the ages. Invited public presentation.

Conference and Workshop Presentations

Indiana University Ostrom Workshop Book Club. 2022. "The Cambridge Handbook of Commons Research Innovations." February 16, 2022. Available at https://youtu.be/007bCjA3WR4.

Social Cost of Water Pollution Workshop. 2021. "Economic impact of shoreline remediation and habitat restoration in the Muskegon Lake Area of Concern." Cornell Atkinson Center for Sustainability (online), April 23, 2021. With P. Isely, J. Cowie, and K. Robbins.

IASC Commons in Space Conference. 2021. "Incorporating outer space resources into a natural resource management curriculum." Environmental and Resource Management panel. February 26, 2021.

Ostrom Workshop Colloquium Series. "Analyzing Polycentric Climate Governance in the 2030 District Energy Program." March 2, 2020.

Sixth Workshop on the Ostrom Workshop (WOW6). 2019. "Analyzing voluntary 2030 District energy programs using the Institutional Analysis and Development framework." With R. Killeen (undergraduate research assistant).

National Council for Science and the Environment Annual Conference. 2018. "Encouraging Stormwater Green Infrastructure Implementation: Engagement, Experience, and Economics." January 23-25, 2018. Washington, D.C. Panel presentation with E. Isely (WMEAC), E. Cloyd (AAAS), D. Carpenter (Carpenter-Drummond).

International Association of Great Lakes Research Conference. 2018 "Phragmites Removal Increases Property Values in Michigan's Lower Grand River Watershed," International Association for Great Lakes Research, Toronto.

22nd Annual International Sustainable Development Research Society Conference: Rethinking Sustainability Models and Practices: Changes for the New and Old World Contexts. 2016, Lisbon. "Benefit-cost analysis of four stormwater green infrastructure practices for Grand Rapids, Michigan, USA."

MiCAP - Michigan chapter of the American Society for Public Administration Annual Meeting. 2015. "Spirit of Resilience: Genius loci and resilience planning,", Grand Rapids, MI.

Hope College Biology Dept. Seminar. 2014 "Renewable Energy Imperatives and Opportunities: Lessons from Kenya," Hope College, Holland, MI.

MAREC Energy Climate Speaker Series. 2014. "Africa - The Next Renewable Energy Frontier," GVSU MAREC, Muskegon, MI; Grand Rapids, MI.

Calvin College Engineering Dept. Seminar Series. 2013 "A wind energy assessment of Kenya's tea-growing regions," Calvin College, Grand Rapids, MI.

GVSU Biology Dept. Seminar Series. 2013. "Safari Njema: A sabbatical journey through Kenya.," GVSU Biology Dept., Allendale, MI.

International Sustainable Development Research Conference. June 2013. Stellenbosch University, South Africa. "Energy transitions in Kenya's tea sector: A wind energy assessment."

Workshop on Appropriate Technology for the 21st Century. May 25, 2013. Kenyatta University, Nairobi, Kenya. "Feasibility of wind power in Kenya's tea-growing regions."

Wind and Waterfronts Workshop, Great Lakes Commission. 6 August 2012. Web conference. "Going Dutch: Learning from the Netherlands' experience with offshore wind"

WINDPOWER 2012 (American Wind Energy Association). 6 June 2012. Atlanta, GA. "Evaluating offshore wind resources and ecological conditions in Lake Michigan with a NOMAD buoy and laser sensor."

Regional Fishery Workshop. 7 January 2012. Ludington, MI. "Implications of Offshore Wind Energy Development"

Holland-to-Holland Workshop on Offshore Wind Energy. 5 December 2011. Grand Valley State University, Meijer Campus, Holland, MI. "Introduction and status of offshore wind energy in Michigan"

Great Lakes Wind Collaborative Annual Meeting. 20 September 2011. Ypsilanti, MI. "Public engagement for offshore wind energy in Michigan"

53rd Annual Regulatory Studies Program. 10 August 2011. Michigan State University, East Lansing, MI. "5 Lessons from the West Michigan Wind Assessment"

Coastal Zone 2011. 17-21 July 2011. Chicago, IL. "Integrated assessment for constructive collaboration with coastal communities" and "Offshore wind in Michigan: Public perceptions and resource assessment."

United States Society for Ecological Economics. 28 June 2011. Michigan State University, East Lansing, MI. "Great Lakes, great debates: Facilitating public engagement on offshore wind energy using the Delphi Inquiry approach."

State of the Science Workshop on the Ecological Effects of Wind. 9 March 2011. Great Lakes Wind Collaborative and Lugar Center for Renewable Energy at IUPUI. With J. VanderMolen (presenter). "Evaluating the Ecological Effects of Wind Using an Integrated Assessment."

TEDxGrand Valley. 26 October 2010. Grand Valley State University, Allendale, Michigan. "The West Michigan Wind Assessment."

Great Lakes Wind Collaborative Annual Meeting. 20-21 September 2010. Cleveland, Ohio. "The West Michigan Wind Assessment: Analyzing the benefits and challenges of wind energy development in coastal West Michigan."

Michigan Energy Fair. 26 June 2010. Novi, Michigan. "The West Michigan Wind Assessment"

TEDIndia – TED University. 4 November 2009. Mysore, India. "Smart+Connected Learning: Building Sustainable Next Generation Learning Environments and Communities" (with T. Burton, G. Donahue, J. Nelson, A. Prosser, V. Raju).

Michigan Public Service Commission, Renewable Energy Program. 29 October 2009, Muskegon, MI. "Status and Trends of Wind Energy Development in West Michigan."

Society of American Foresters National Convention, 23 October 2007, Portland, OR. "Evaluating public open space preservation priorities."

Grant-funded Projects

PI: C. Glupker. 2022. "White River Economic Impact Assessment." West Michigan Shoreline Regional Development Commission. \$22,970. Co-investigators: P. Isely, E. Nordman.

PI: E. Isely. 2021. "Evaluating the Green Stormwater Infrastructure Business Case Using the Rainwater Rewards Stormwater Calculator in Detroit." The Nature Conservancy, \$50,000. Co-investigators: P. Isely, **E. Nordman**, C. Glupker

PI: **E. Nordman.** 2019. Visiting Scholar Grant. Ostrom Workshop, Indiana University. \$6,462.

PI: **E. Nordman**. 2019. "Paris Agreement: Managing a global commons." GVSU Catalyst Grant. \$3,560.

PI: **E. Nordman**. 2018. "Ostrom's Workshop: How Elinor Ostrom changed how we manage our environment." GVSU Collaboration Grant: \$9,218. Collaborators: J. Reblando (Illinois State University) and C. Fennessy (freelance journalist), W. Depew (undergraduate research assistant).

PI: **E. Nordman**. 2017. "Analyzing survival, growth, and environmental effects of willow biomass energy crops at GVSU." GVSU Student Summer Scholars grant: \$6,225. Undergraduate research scholar: J. Crawford.

PI: P. Isely (GVSU). 2017. "Socio-economic analysis of Muskegon Lake restoration efforts." Great Lakes Commission: \$30,594. Co-investigators: **E. Nordman**, J. Cowie.

PI: **E. Nordman**. 2016. "Cabo Verde's Roadmap to 100 Percent Renewable Energy." US Department of State Virtual Fellows Program. Pro-bono. Undergraduate research assistants: A. Barrenger, J. Crawford, J. McLaughlin, C. Wilcox.

PI: P. Isely (GVSU). 2016. "Economic value of the Huron River Water Trail." Huron River Watershed Council: \$25,000. Co-investigators: **E. Nordman**, C. Glupker, J. Cowie. Undergraduate research assistant: H. LaMay.

PI: West Michigan Environmental Action Council. 2015. "Stormwater Green Infrastructure Ecosystem Services Calculator." USDA Forest Service: \$99,810. Coinvestigators: **E. Nordman** (GVSU), P. Isely (GVSU), R. Denning (GVSU).

PI: P. Isely (GVSU): 2015. "Economic impact of water-based recreation in the Rogue River watershed." Trout Unlimited: \$5,000. Co-PI: **E. Nordman.**

PI: P. Isely (GVSU): 2015. "Effect on invasive *Phragmites* on housing prices in the lower Grand River watershed." The Nature Conservancy: \$7,600. Co-PI: **E. Nordman**

PI: **E. Nordman.** 2015. "Analyzing landslide risks in St. Vincent and the Grenadines using GIS." DigitalGlobe Foundation Imagery Grant: \$3,000.

PI: **E. Nordman**. 2012. "Teaching and research in renewable energy resource management at Kenyatta University, Kenya". Fulbright Scholar grant, US Dept. of State: \$84,400.

PI: A. Boezaart (GVSU). 2011. "Lake Michigan Wind Assessment Study." US Dept. of Energy, We Energies of Wisconsin, and Sierra Club: \$1.7 million. Co-investigators: D. Assanis (U Michigan), J. Edmunson, J. Gehring (MI Nat. Features Inventory), B. Klatt (MI Nat. Features Inventory), G. Meadows (U Michigan), **E. Nordman** (GVSU), B. Vanzieleghem (U Michigan).

PI: **E. Nordman**. 2011. "Offshore wind energy outreach and education." Michigan Energy Office: \$37, 230, MSU Coastal Community Development Grant: \$4,900. Coinvestigators: K. Walton (GVSU), J. VanderMolen (GVSU), V. Pebbles (Great Lakes Commission), J. Hummer (Great Lakes Commission), D. O'Keefe (Michigan Sea Grant).

PI: Pollinator Partnership. 2009. "Evaluating the ecological and economic costs and benefits of incorporating floral resource strips into vegetable production systems." USDA Natural Resource Conservation Service: \$185,640. Co-investigators: **E. Nordman** (GVSU), M. Gardiner (Ohio State University).

PI: **E. Nordman**. 2008. "Locating wind energy facilities in Michigan's coastal counties: An integrated assessment for Muskegon and West Michigan" (West Michigan Wind Assessment). Michigan Sea Grant: \$139,912. Co-investigators: P. Isely, J. Koches.

Professional Society Memberships

American Association for the Advancement of Science

Fulbright Association

United States Society for Ecological Economics

International Association for the Study of the Commons

Great Lakes Renewable Energy Association