

## Education

M.P.P International  
Development Policy, Duke  
University

M.E.M. Ecosystem Science  
and Conservation, Duke  
University

B.A. Economics, University  
of Chicago

Years at ECONorthwest: 2

Years in Industry: 2

## Areas of Expertise

Policy Analysis

Natural Resources

## Shivangi Jain, Project Manager

Shivangi joined ECONorthwest in 2020. She specializes in environmental economics, quantitative methods, and policy analysis. Prior work experience includes quantitative analysis on clean energy adoption in Myanmar, policy analysis to improve farmland access for minority and sustainable farmers in the United States, and research on protected area policies in India. She is experienced in R, STATA, and ArcGIS.

## REPRESENTATIVE PROJECTS

- **USFS Central Oregon IFNF Funding—Bend, OR (Ongoing).** For the USFS Innovative Finance for National Forests program, ECONorthwest will identify investment, maintenance, and funding gaps for central Oregon national forests (Deschutes and Ochoco). ECO will develop a framework for funding based on beneficiaries and users, as well as internal mechanism needs for national forests to utilize external funding more efficiently.
- **Socioeconomic, Recreation, and Environmental Justice Impacts of Department of State Lane’s Proposed Habitat Conservation Plan for the Elliott State Research Forest—Western Oregon (2022–Ongoing).** For USFWS and NOAA Fisheries, preparing socioeconomic, recreation, and environmental justice impact assessments for a NEPA evaluation of DSL’s proposed Habitat Conservation Plan for the Elliott State Research Forest.
- **Socioeconomic, Recreation, and Environmental Justice Impacts of Oregon Department of Forestry’s Proposed Habitat Conservation Plan—Western Oregon (2021–Ongoing).** For NOAA Fisheries and USFWS, prepared socioeconomic, recreation, and environmental justice impact assessments for a NEPA evaluation of ODF’s proposed Habitat Conservation Plan.
- **Urban Flood Safety & Water Quality District—Portland, OR (Ongoing).** ECONorthwest is helping evaluate financing options for the newly created Urban Flood Safety and Water Quality District in Multnomah County. ECO will identify potential revenue systems and would develop a model for evaluating revenue potential across various alternatives.

- **OWEB DEI Assessment & Trainings – Salem, OR (Ongoing).** ECONorthwest is helping Oregon Watershed Enhancement Board (OWEB) incorporate Diversity, Equity, and Inclusion (DEI) into their policies and programs through DEI trainings, creation of equity statements, increasing engagement with under-represented communities, and development of an equity lens for their grant making.
- **ODF Habitat Conservation Plan Environmental Impact Statement (EIS) – Statewide, OR (Ongoing).** For the Oregon Department of Forestry, ECONorthwest would evaluate socioeconomic and environmental justice impacts associated with various alternatives for developing habitat conservation plans for threatened and endangered species across all ODF forests. This would include scenarios for species not currently listed but likely to be listed over the next 30-50 years. HCPs are an alternative to no-take policies and allow for some incidental take. This work would be in collaboration with ICF’s HCP team, which intends to conduct the HCP for ODF if they move forward.
- **Pierce County Flood Risk Assessment – Tacoma, WA (Ongoing).** For Pierce County, ECONorthwest is calculating the benefits of implementing a comprehensive flood hazard management plan. This includes the calculation of avoided damages to infrastructure, public and private property, work and transportation interruptions, utilities, and ecological functions.
- **Mid-Breton Sediment Diversion EIS – Seattle, WA (Ongoing).** For Louisiana’s Coastal Protection and Restoration Authority, ECONorthwest is evaluating potential socioeconomic and environmental justice impacts associated with a sediment diversion project designed to divert water from the Mississippi River to restore marshes south of New Orleans.
- **Hillsboro Witch Hazel Village South (WHVS) ESEE Analysis – Hillsboro, OR (Ongoing).** As part of the comprehensive plan for the development of the Witch Hazel Village development area in the City of Hillsboro, ECONorthwest conducted an ESEE analysis that evaluates economic, social, environmental, and energy tradeoffs involved in development of land for various land uses, specifically in regions with significant natural resources.
- **NEPA Socioeconomic Review for the Bureau of Land Management – National (Ongoing).** For the Bureau of Land Management (BLM), as a sub to EMPSi, ECONorthwest would provide peer review of a selection of NEPA socioeconomic and environmental justice analyses. The outcome of this peer review is to provide BLM with a report on how its NEPA socioeconomic and EJ analyses have been conducted over the last 5 years.
- **TNC Oregon Research Equity Support – Portland, OR (Ongoing).** ECONorthwest is supporting The Nature Conservancy of Oregon in incorporating equity strategies and practices into their floodplain vulnerability research and partnership with the Connecting Canopies Initiative.

- **Infrastructure NEXT—OR (2022).** ECONorthwest created a framework and case studies that would help the Center for Sustainable Infrastructure analyze the benefits and economic impacts of technical assistance efforts regarding water infrastructure (wastewater, stormwater, drinking water) for low-income rural communities in Oregon and Washington. The prime consultant was Willamette Partnership, and the work was funded by the Bridge Collaborative, a project of the Nature Conservancy.
- **Pierce County Flood Risk Assessment and Economic Analysis—Pierce County, WA (2021).** For Pierce County, Washington, ECONorthwest is conducting an evaluation of flood risk and corresponding flood impacts. The analysis includes impacts to transportation, recreation, infrastructure, and economic activity in the county.
- **South Cooper Mountain Non-Potable Water System—Beaverton, OR (2021).** For the city of Beaverton, ECONorthwest conducted a benefit-cost analysis for alternatives involving a new non-potable water system (purple pipes) for the South Cooper Mountain community under development.
- **Oregon Agricultural Trust Trainings—Salem, OR (2021).** ECONorthwest developed an equity lens for Oregon Agricultural Trust that would help them incorporate Diversity, Equity, and Inclusion (DEI) goals into their future internal and external programs and decision-making. In the process, ECONorthwest provided two trainings on the foundations of DEI and its place in Oregon's agricultural history and led a workshop with OAT's staff and board to apply DEI values to their mission and strategic plan. Through interviews with staff and selected board members, ECONorthwest also conducted an internal equity assessment and developed specific recommendations to improve equity in OAT's existing internal and external programs.

## PRE-ECONORTHWEST EXPERIENCE

- **Energy Access & Gender Empowerment Project—Duke University (2020). Research Intern.** Analyzed household data from Myanmar to explore the impact of gender empowerment on clean energy adoption. Also, reviewed 24 papers to explore if impacts of access to clean energy differ by gender.
- **Union of Concerned Scientists—Washington D.C. (2019). Research Intern.** Compiled a database of 100 governmental and non-governmental agricultural programs that seek to improve farmland access for beginning, minority, and sustainable farmers. Also, recommended policy reforms to improve access to credit, land, and skills for minority and sustainable farmers, as well as summarized the programs and recommendations as a white paper for future policy advocacy.

- **International Centre for Trade and Sustainable Development – Geneva, Switzerland (2018). Junior Associate.** Reviewed literature on impacts of fossil fuel and fisheries subsidies for a commissioned research project. Also, organized three dialogues between experts and over 70 World Trade Organization (WTO) delegates on ways to reform fisheries subsidies to aid concurrent WTO negotiations. As well as drafted an article on WTO's role in disciplining overfishing and illegal fishing for the Food and Agricultural Organization's (FAO) Development Law Magazine.
- **Centre for Wildlife Studies – Bengaluru, India (2017).** Research Assistant. Analyzed socio-economic details of impacted households to predict the occurrence of human-wildlife conflict in Rajasthan, India, also modeled the impact of the availability of infrastructure versus monetary incentives in relocating residents from Tadoba Andhari Tiger Reserve and summarized findings in journal articles for publication.

## PUBLICATIONS

Karanth, K.K., Jain, S., & Weinthal, E. (2017). Human-wildlife interactions and attitudes towards wildlife and wildlife reserves in Rajasthan, India. *Oryx*, 1-9.

Karanth, K.K., Jain, S., & Mariyam, D. (2017). Emerging Trends in Wildlife and Tiger Tourism in India. In J.S. Chen & N.K. Prebensen (Eds.), *Nature Tourism* (159-171). New York, NY: Routledge.

Karanth, K.K., Kudalkar, S., & Jain, S. (2018). Re-Building Communities: Voluntary Resettlement From Protected Areas in India. *Frontiers in Ecology and Evolution*, 6, 183.