5 years in review presented by

ENVIRONMENTAL POLICY INSTITUTE AND THE MASTER OF ARTS (ENVIRONMENTAL POLICY) PROGRAM



Environmental Policy Institute



ENVIRONMENTAL POLICY INSTITUTE

Who are we: The Environmental Policy Institute (EPI) at Grenfell Campus, Memorial University of Newfoundland is an inclusive community dedicated to excellence in research, teaching and learning, and public engagement on environmental policy issues in Newfoundland and Labrador, in Canada, and internationally.

Research: EPI uses theories, approaches, and methods from social sciences, humanities, and natural sciences to solve environmental policy issues.

Teaching: EPI faculty are engaged in both undergraduate and graduate teaching and learning activities. The Masters in Environmental Policy (MAEP) program is delivered by EPI core and affiliated faculty.

Engagement: EPI builds awareness and stimulates dialogue and debate on environmental policy issues with stakeholders and the broader public through initiatives including workshops, panel discussions and other venues.



PEOPLE

EPI faculty, staff and students come from a broad range of disciplinarian backgrounds from the humanities, social and natural sciences, providing an interdisciplinary learning and research environment.

EPI Faculty

Dr. Wade Bowers, professor, biology Dr. Paul Foley, assistant professor, political science Dr. Andreas Klinke, associate professor, political science Dr. Michael van Zyll de Jong, associate professor, applied ecology Dr. Kelly Vodden, associate professor, geography

Affiliated Faculty*

Dr. Catherine Keske, associate professor, economics Mr. Stephen Decker, lecturer, geography Dr. Roza Tchoukaleyska , assistant professor, geography Dr. Gabriela Sabau, associate professor, economics

*Acted as primary supervisor in the MAEP program

Adjunct Faculty

Dr. John Dagevos, senior researcher and managing director, Telos, Brabant Centre for Sustainable Development, Tilburg University

Dr. Maura Hanrahan, associate professor, Indigenous studies University of Lethbridge (Grenfell 2014-2016)

Dr. Stephen Bonnell, environmental assessment practice leader, Amec Foster Wheeler Environment and Infrastructure

Staff

Jerry Collins, research assistant Paula Dawe, staff specialist (Current) Susan Kennedy, staff specialist (2013-2014)

Myron King, GIS / research associate Nadia Simmons, staff specialist (2014-2016)



RESEARCH

EPI uses theories, approaches, and methods from social sciences, humanities, and natural sciences to advance excellence in research on environmental policy issues. EPI communicates and mobilizes research and knowledge to both academic and non-academic audiences.

Research Areas

- Risk governance
- Risk assessment
- Climate change
- Fisheries and wildlife management
- Forest management
- Watershed management
- Ecological economic
- Ecosystem based management
- Human dimensions
- Geographic information systems
- Coastal zone management
- Community and regional Development
- Indigenous research
- Corporate social and environmental responsibility
- Drinking water
- Food and agriculture
- Sustainability indicators and monitoring
- Sustainable tourism

Metrics

- 77 research projects
 23+ partners
 1.7 million (principal investigator)
 10.3 million (co-investigator)
 1 peer-reviewed volume
 33 peer-reviewed articles
 27 peer-reviewed book chapters
 68 conference papers
 46 presentations
 41 policy reports and briefs
- 43 media stories
- 2 workbooks and toolkits

RESEARCH

Sample Projects

- Development of a Planning and Analysis Tool for Ecological Restoration of Rivers
- Assessing the impact of instream barriers and climate change on wild Atlantic salmon population persistence and production in forested boreal watersheds
- The Anticipation and Management of Risks in Global Governance
- Public Participation Best Practices in Environmental Decision Making in Newfoundland and Labrador – Analyzing the Forestry Management Planning Process Project
- Canadian Regional Development: A
 Critical Review of Theory, Practice and
 Potentials
- Exploring Solutions for Sustainable Rural Drinking Water Systems
- Shrimp Allocation Policies and Regional Development Under Conditions of Environmental Change: Insights for Aboriginal Groups in Northern Labrador
- Assessing the Outcomes of environmental certification on sustainability; perspectives of forestry and fishery producers in Atlantic Canada.

Partners & Collaborators

- University of Hull, International Fisheries
 Institute, UK
- Canadian Forest Service
- Department of Fisheries and Land Resources
- Department of Environment and Municipal Affairs
- Compusult Limited
- Corner Brook Pulp and Paper Limited
- Ducks Unlimited
- Municipalities Newfoundland & Labrador
- Newfoundland and Labrador Environmental Industry Association
- Professional Municipal Administrators
- Qalipu First Nation
- Townsuite Municipal Software- PROCOM
 Data Services Inc.
- University of Giessen, Germany
- Atlantic Salmon Conservation Foundation
- Department of Fisheries and Oceans
- Indian Bay Ecosystem Corporation



Sample Publications

Eddy, B. G., B. Hearn, J. E. Luther, M. van Zyll de Jong, W. Bowers, D. Piercey, G. Strickland & B. Wheeler. (2014). An information ecology approach to science policy integration in adaptive management of social-ecological systems. *Ecology and Society* 19 (3): 40

Foley, Paul and Charles Mather. (2016). Making space for community use rights: insights from "community economies" in Newfoundland and Labrador. *Society and Natural Resources* (Open Access).

Foley, Paul and Elizabeth Havice. (2016). The rise of territorial eco-certification: New politics of transnational sustainability governance in the fisheries sector, *Geoforum*, Vol. 69 (February): 24-33

Fox, C., van Zyll de Jong, M., Hearn, B., Moores, L., Foley, P. & Harris, D. (2016) Perspectives on Implementing Certification on Crown Forest: The Case of Newfoundland and Labrador. *Forest Chronicle*, 92(4): 503-513.

Hanrahan, M., A. Sarkar and A. Hudson. Exploring Water Insecurity in a Northern Indigenous Community in Canada: The "Never Ending Job" of the Southern Inuit of Black Tickle, Labrador. Arctic *Anthropology*, 51 (2): 9-22.

Keske C. M.H., Brook-Dare J., Hancock T., and King M. (2016). La connexion entre la sécurité alimentaire, la souveraineté alimentaire et la justice alimentaire dans les écosystèmes boréals : le cas de Saint-Pierre-et-Miquelon / The connectivity of food security, food sovereignty, and food justice in boreal ecosystems: the case of Saint-Pierre and Miquelon. Justice Spatiale / Spatial Justice (No.9)

Klinke, A. (2014). Post national Discourse, Deliberation and Participation toward Global Risk Governance. *Review of International Studies*, 40 (2): 247-75. Klinke, A. and Renn, O. (2014). Expertise and Experience: A Deliberative System of a Functional Division of Labor for Post-Normal Risk Governance. *Innovation: The European Journal of Social Science Research*, 27 (4): 442-65.

Minnes, S. and K. Vodden. (2017). The Gap: Understanding Impediments to Sustainable Drinking Water Systems in Rural Newfoundland and Labrador. *Canadian Water Resources Journal.*

Sabau, G. and M. van Zyll de Jong. From unjust uneconomic growth to sustainable fisheries in Newfoundland: The true costs of closing the inshore fishery for groundfish. *Marine Policy*. 61: 376-389.

van Zyll de Jong, M.C., & I.G. Cowx. (2016). Long-term response of salmonid populations to ecological restoration procedures in a boreal forest stream. *Ecological Engineering*, 91: 148–157

Vodden, K. and H. Hall. (2016). Long distance commuting in the mining and oil and gas sectors: Implications for rural regions. *The Extractive Industries and Society* 3(3): 577–583.

Vodden, K., G. Baldacchino and R. Gibson (Eds.) (2015). *Place Peripheral: The Promise and Challenge of Place-Based Development in Rural and Remote Regions*. ISER Publications.

Vodden, K. The Promise and Challenge of Collaborative Governance on Canada's Coasts. *Canadian Geographer*. 59(2): 167-180.





Policy Briefs

Rural drinking water systems (2016)

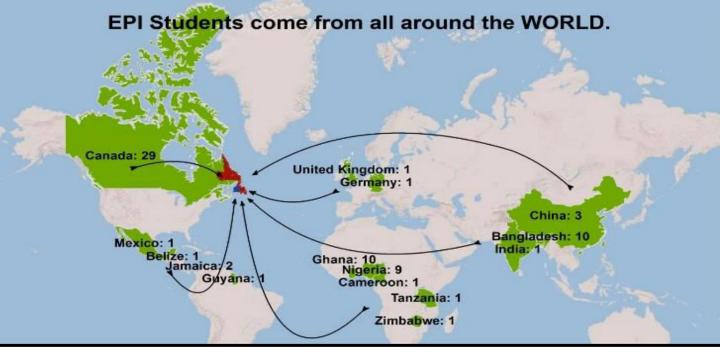
- Governance of Drinking Water Systems In Rural Newfoundland and Labrador
- Source Water Quality and Quantity In Rural Newfoundland and Labrador
- Infrastructure and Operations of Drinking Water Systems In Rural Newfoundland and Labrador
- Public Perception, Awareness and Demand of Drinking Water In Rural Newfoundland and Labrador

See http://nlwater.ruralresilience.ca

Fisheries and coastal communities (2013)

- Rationalization of the Fishing Industry
- Seafood Prices and Market Access for the Inshore Fishery
- Fisheries Regulations that Work
- The Viability of Coastal and Small Island Communities

See http://gracilis.carleton.ca/geog/



TEACHING

EPI delivers undergraduate and graduate programming and learning activities.

Program

MA Environmental Policy

PhD student supervision: geography, biology, Interdisciplinary

Core Courses

Foundations of Environmental Policy Applied Environmental Problem Solving Research Design and Methods Environmental Political Thought Internship

Elective Courses

Political Economy, Political Ecology and Policy Ecological Economics Labor and Environmental Policy Environmental Impact Assessment Risk Assessment and Analysis Energy Policy Management and Regulation of Water Resources Natural Resources Policy and Decision Making Special Topics Course 1- Policy and Planning for Sustainable Communities Special Topics Course 2- Indigenous Peoples and Environmental Policy

Metrics

77 students enrolled (70 MA (environmental policy) and 7 PhD) 15 countries represented 25 graduates 10 theses 13 research papers 26 scholarships and awards 10+ peer-reviewed student publications Highly successful post-graduate employment placement rate 54 internships 34 partners





Internships

Government of Canada: Natural Resources Canada Fisheries and Oceans Canada; Parks Canada Environment Canada

Government of Newfoundland and Labrador: Fisheries and Land Resources; Environment and Municipal Affairs; Executive Council

Government of Nova Scotia: Natural Resources

Government of Germany: Ministry of the Environment

Local Government: Town of Deer Lake; Black Tickle-Domino; Municipalities Newfoundland and Labrador

Indigenous Groups: NunatuKavut Community Council; Torngat Secretariat; No'kmaq Village (The Flat Bay Band Inc.)

Industry: Kruger; Pennecon; Federation of Agriculture; NL Environmental Industry Association, Compusult, PROCOM Data Services Inc

Not for Profits: Indian Bay Ecosystem Corporation; Kairos; Organic Agriculture Centre of Canada; Nature Conservancy of Canada; Conservation Corp NL; Bedfordshire Wildlife Trust, IRD Duhallow Ireland

Agencies: Waste Management Authorities of NL; State Bank of India; National Petroleum Investment Management Services, Nigeria

Universities: Universidad de Queretaro; Shahjerlal University



POST-GRADUATE EDUCATION & EMPLOYMENT

Sample Employers

- Natural Resources Canada
- Environment Canada
- Department of Fisheries and Oceans Canada
- Pennecon
- ADRA Canada
- University of Guelph

Continuing Education

- University of Waterloo
- University of Oxford
- University of Calgary
- University of Saskatchewan

PUBLIC ENGAGEMENT & OUTREACH

EPI plays an important role in fostering public engagement at Grenfell Campus by researching and facilitating debate on critical environmental policy issues within and beyond Newfoundland and Labrador.

Metrics

71 total workshops, conferences or public events organized and/or represented.

Sample Events

Public Engagement Events

Reel Green Films Series NL Nature Atlas Partnership 2014 - 2016 World Water Day Events EPI @ CU Expo 2013 Fracking forum World Wetland Day Coleman's grocery stores

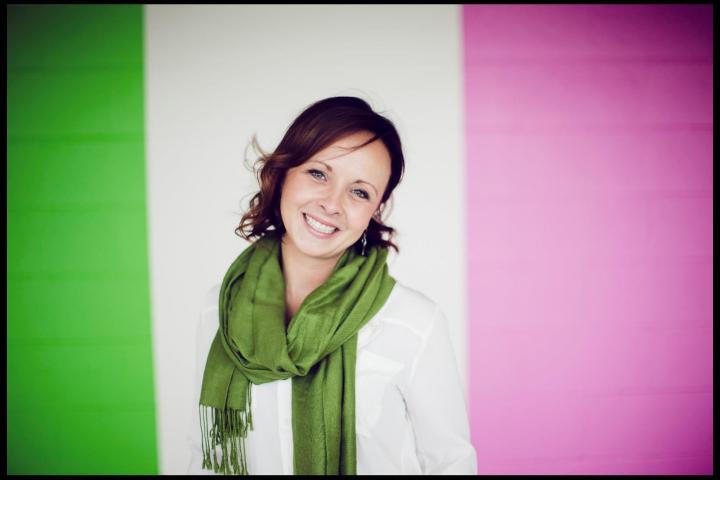
Research Workshops

Expert Workshops Vulnerability Assessment of Boreal Forest to Climate Change Experts Workshop on Forest Certification on Public Lands Expert Workshop on Incorporating Ecosystem Services into Watershed Management Planning Experts Workshop on Drinking Water Assessment

Media

CBC News Radio The Western Star The Northern Pen The Advertiser The Telegram News streams Corner Brook Café Grenfell's official social media channels





ENGAGEMENT

Policy Competitions

- Development of a Wetlands Policy for Newfoundland and Labrador
- Development of Cumulative Environmental Effects Frameworks
- Vulnerable Areas and Economic Development
- An Objectives Based Approach to Improving Electric Vehicle
- Infrastructure in Newfoundland and Labrador
- Reducing Emissions from Transporting Goods and Services
- Ecosystem Services Valuation (ESV) Framework for Land-use Proposals
- Greening Tourism
- Incorporating Climate Change Adaptation Tools in Decision Making
- Extraction Maximum Value from Fisheries Resource (Fish Auction Systems)
- Sustainable Development Policy



FUTURE GOALS

PhD program in sustainability Environmental Design and Decision Making Lab Continuous growth in research, teaching and engagement

For more information on EPI activities summarized in the metrics within this report <u>click here</u>.

