

## Curriculum Vitae

### Experts for CAC (Manitoba)

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## *Curriculum Vitae*

***Bram F. Noble, Ph.D.***

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### **1. CURRENT APPOINTMENTS**

- Professor, Environmental Assessment, Department of Geography & Planning, School of Environment and Sustainability, University of Saskatchewan
- Associate Editor, *Journal of Environmental Assessment Policy and Management*
- Senior Researcher, Aura Environmental Research and Consulting Ltd.

### **2. ACADEMIC CREDENTIALS**

- Ph.D., Memorial University, 2002, Geography, Environmental Assessment
- M.E.S., Wilfrid Laurier University, 1999, Geography, Resource Management
- B.A.Hons., Memorial University, 1997, Natural Resource Geography

### **3. SPECIALIZATIONS**

- Environmental assessment: cumulative effects, strategic environmental assessment
- Resource management: regional environmental planning and management
- Decision analysis: multi-criteria decision support systems

### **4. PUBLICATIONS: BOOKS, BOOK CHAPTERS, EXPOSITORY AND REVIEW ARTICLES**

#### **BOOKS**

**Noble, B.F.** 2010. *Introduction to Environmental Impact Assessment: Guide to Principles and Practice, 2nd edition*. Toronto: Oxford University Press. 274pgs

**Noble, B.F.** 2006. *Introduction to Environmental Impact Assessment: Guide to Principles and Practice*. Toronto: Oxford University Press. 216 pages.

**Noble, B.F., Martz, D., and Aitken, A. (eds.)** 2005. *Prairie Perspectives: Geographical Essays, Volume 8*. University of Winnipeg Press.

## CHAPTERS IN BOOKS

- Noble, B.F.** 2012. Cumulative environmental effects: thinking beyond the project in environmental assessment. Guest Statement, in P. Dearden and B. Mitchell *Environmental Change and Challenge: A Canadian Perspective*, 4<sup>th</sup> Edition. Oxford University Press.
- Noble, B.F.** 2011. Environmental Impact Assessment. In: eLS 2011, John Wiley & Sons, Ltd: Chichester <http://www.els.net/> [DOI: 10.1002/9780470015902.a0003253.pub2]
- Noble, B.F.** 2010. Applying Adaptive Environmental Management. In B. Mitchell (ed.), *Resource and Environmental Management in Canada: Addressing Conflict and Uncertainty 4th Edition*. Toronto: Oxford University Press.
- Noble, B.F.** and **Harriman Gunn, J.** 2009. Strategic Environmental Assessment, in K. Hanna (ed.) *Environmental Impact Assessment: Practice and Participation 2<sup>nd</sup> Edition*. Oxford University Press.
- Noble, B.F.** 2009. From projects to priorities: toward a more strategic environmental assessment process. Guest Statement, in P. Dearden and B. Mitchell *Environmental Change and Challenge: A Canadian Perspective*, 3<sup>rd</sup> Edition. Oxford University Press.
- Kulshreshtha, S.N. and **Noble, B.F.** 2007. Economic Geography of Agriculture in Saskatchewan. In M. Lewry (ed.) *Geography of Saskatchewan*. Regina, CPRC.
- Kulshreshtha, S.N. and **Noble, B.F.** 2007. Irrigation Development. In M. Lewry (ed.) *Geography of Saskatchewan*. Regina: Canada Plains Research Centre.
- Noble, B.F.** and S.N. Kulshreshtha 2007. Community Pastures. In M. Lewry (ed.) *Geography of Saskatchewan*. Regina: Canada Plains Research Centre.
- Noble, B.F.** 2006. Multi-criteria decision support for energy supply assessment. In G. Hearth (ed.), *Multi-criteria Analysis*. Hampshire, UK: Ashgate.
- Noble, B.F.** 2005. Strategic Impact Assessment. In K. Hanna (ed.), *Environmental Impact Assessment – Practice and Participation*. Toronto: Oxford University Press.
- Noble, B.F.** 2004. Applying Adaptive Environmental Management. In B. Mitchell (ed.), *Resource and Environmental Management in Canada: Addressing Conflict and Uncertainty 3<sup>rd</sup> Edition*. Toronto: Oxford University Press.
- Noble, B.F.** 1997. Marginality on the Great Northern Peninsula. In Bell *et al* (eds.) *CAG'97 Field Guide: Great Northern Peninsula and Southern Labrador*. Memorial University of Newfoundland, Department of Geography, Pp. 23-25.

## EXPOSITORY AND REVIEW ARTICLES

- Noble, B.F.** 2010. Cumulative environmental effects and the tyranny of small decisions: Toward meaningful cumulative effects assessment and management. *Natural Resources and Environmental Studies Institute Occasional Paper Series*, paper no. 7, University of Northern British Columbia, Prince George, B.C., Canada.
- Noble, B.F.** 2010. 'Environmental Impact Assessment'. In *Encyclopedia of Geography*. Thousand Oaks, CA: Sage.
- Noble, B.F.** 2010. 'Environmental Impact Statement'. In *Encyclopedia of Geography*. Thousand Oaks, CA: Sage.

- Noble, B.F.** 2010. 'Environmental Impact Assessment'. In *The Canadian Encyclopedia*. Ottawa, ON: Historica Foundation of Canada.
- Noble, B.F.** 2010. 'Strategic Environmental Assessment'. In *The Canadian Encyclopedia*. Ottawa, ON: Historica Foundation of Canada.
- Noble, B.F.** 2006. Human health in environmental impact assessment. Letter to the Editor. *Arctic*, 59(2): 234-235.

## 5. PUBLICATIONS: PEER REVIEWED SCIENTIFIC JOURNAL PUBLICATIONS

- Sheelanere, P., **Noble, B.F.**, and Patrick, R. 2013. Institutional requirements for watershed cumulative effects assessment and management: lessons from a Canadian trans-boundary watershed. *Land Use Policy*, 30, 67-75.
- Noble, B.F.**, Gunn, J., and Martin, J. 2012. Survey of current methods and guidance for strategic environmental assessment. *Impact Assessment and Project Appraisal*. Article in press.
- Ball, M., **Noble, B.F.**, and Dube, M. 2012. Valued ecosystem components for watershed cumulative effects: an analysis of environmental impact assessments in the South Saskatchewan watershed, Canada. *Integrated Environmental Assessment and Management*. Accepted for publication.
- Noble, B.F.**, Sheelanere, P., and Patrick, R. 2011. Challenges and opportunities for watershed cumulative effects assessment and management: Lessons from the South Saskatchewan River watershed, Canada. *Journal of Environmental Assessment Policy and Management*, 13(4), 567-590.
- Nielsen, J., **Noble, B.F.**, and Hill, M. 2012. Impact assessment and wetland mitigation decision support framework for linear developments: an application to the Louis Riel Trail Highway 11 North project, Saskatchewan, Canada. *The Canadian Geographer*, 56(1), 117-139.
- Fidler, C. and **B.F. Noble**. 2012. Advancing strategic environmental assessment in the offshore oil and gas sector: Lessons from Norway, Canada, and the United Kingdom. *Environmental Impact Assessment Review*, 34, 12-21
- Richards, G.W., **Noble, B.F.**, and K. Belcher. 2012. Barriers to renewable energy development: a case study of large-scale wind energy in Saskatchewan, Canada. *Energy Policy*, 42, 691-698
- Noble, B.F.**, Hill, M. and Neilsen, J. 2011 Environmental assessment framework for identifying and mitigating the effects of linear development to wetlands. *Landscape and Urban Planning*, 99: 133-140.
- Hanna, K and **Noble, B.F.** 2011. The Canadian Environmental Assessment Registry: Promise and Reality. *UVP-report (Journal of the German EIA/SEA Association)*, 25(4):222-225.
- Nasen, L. **Noble, B.F.**, and Johnstone, J. 2011. Environmental effects assessment of oil and gas lease sites on a grassland ecosystem. *Journal of Environmental Management*, 92: 195-204.
- Seitz, N.E., Westbrook, C.J., and **Noble, B.F.** 2011. Bringing science into river systems cumulative effects assessment practice. *Environmental Impact Assessment Review*, 31: 180-186.
- Noble, B.F.** and Birk, J. 2011. Comfort monitoring? Environmental assessment follow-up under community-industry negotiated environmental agreements. *Environmental Impact Assessment Review*, 31(1): 17-24.
- Gunn, J. and **Noble, B.F.** 2011. Conceptual and Methodological Challenges to Integrating SEA and Cumulative Effects Assessment. *Environmental Impact Assessment Review*, 31: 154-160.

**Noble, B.F.** and Fidler, C. 2011. Advancing Indigenous Community - Corporate Agreements: Lessons from Practice in the Canadian Mining Sector. *Oil, Gas and Energy Law Intelligence*, 9(4): 1-30.

**Noble, B.F.** and Gunn, J. 2010. Regional strategic environmental assessment for integrated land management. *Horizons*, 10(4): 106-112 (Invited paper, special 10<sup>th</sup> anniversary issue on Sustainable Places).

Harriman Gunn, J. and **Noble, B.F.** 2009. A conceptual and methodological framework for regional strategic environmental assessment (RSEA). *Impact Assessment and Project Appraisal*, 27(4): 258-270.

Harriman Gunn, J. and **Noble, B.F.** 2009. Integrating cumulative effects in regional strategic environmental assessment frameworks: Lessons from practice. *Journal of Environmental Assessment Policy & Management*, 11(3): 267-290.

**Noble, B.F.** 2009. Promise and dismay: The state of strategic environmental assessment systems and practices in Canada. *Environmental Impact Assessment Review*, 29(1): 66-75.

Gachechiladze, M., **Noble, B.F.**, and Bitter, B. 2009. Following-up in strategic environmental assessment: a case study of 20-year forest management planning in Saskatchewan, Canada. *Impact Assessment and Project Appraisal*, 27(1): 45-56.

Harriman, J. and **B.F. Noble** 2008. New urban planning means being 'proactive': learning points from the field of strategic environmental assessment. *Plan Canada*, 48(4): 23-26.

**Noble, B.F.** 2008. Strategic approaches to regional cumulative effects assessment: a case study of the Great Sand Hills, Canada. *Impact Assessment and Project Appraisal*, 26(2): 79-90.

Harriman, J. and **Noble, B.F.** 2008. Characterizing regional approaches to project and cumulative effects assessment in Canada. *Journal of Environmental Assessment Policy and Management*, 10(1): 1-26.

**Noble, B.F.** and Christmas, L. 2007. Strategic environmental assessment of greenhouse gas mitigation options in the Canadian agricultural sector. *Environmental Management*, 41(1): 64-78.

Bronson, J.E. and **Noble, B.F.** 2006. Health determinants in Canadian northern environmental impact assessment. *Polar Record*, 42(223): 315-324.

**Noble, B.F.** and Bronson, J.E. 2006. Practitioner survey of the state of health integration in environmental assessment: the case of northern Canada. *Environmental Impact Assessment Review*, 26:410-424.

Storey, K. and **Noble, B.F.** 2005. Socioeconomic effects monitoring: towards improvements informed by biophysical effects monitoring. *Impact Assessment and Project Appraisal*, (Invited, special issue), 23(3): 210-214.

**Noble, B.F.** and K. Storey 2005. Toward increasing the utility of follow-up in Canadian EIA. *Environmental Impact Assessment Review*, 25(2): 163-180.

Bronson, J.E. and <sup>1</sup>**Noble, B.F.** 2005. Measuring the effectiveness of Parks Canada's environmental management system: a case study of Riding Mountain National Park. *The Canadian Geographer*, 50(1): 101-113.

**Noble, B.F.** and Bronson, J.E. 2005. Integrating human health in environmental impact assessment: case studies of Canada's northern mining resource sector. *Arctic*, 58(4): 395-405.

**Noble, B.F.** 2004. Integrating strategic environmental assessment with industry planning: A case study of the Pasquai-Porcupine forest management plan, Saskatchewan, Canada. *Environmental Management*, 33(3): 401-411.

- Noble, B.F.** 2004. A multi-criteria analysis of Canadian electricity futures. *The Canadian Geographer*, 48(1): 11-28.
- Noble, B.F.** 2004. State-of-practice survey of SEA in Canadian provinces. *Environmental Impact Assessment Review*, 24(3): 351-361.
- Noble, B.F.** 2004. Strategic environmental assessment quality assurance: Evaluating and improving the consistency of judgments in assessment panels. *Environmental Impact Assessment Review*, 24(1): 3-25. Reprinted in 2004 by Elsevier Science in *Virtual Journal of Environmental Sustainability*, 2(2).
- Noble, B.F.** and Macharia, S. 2004. Towards a working framework for best-practice EIA follow-up: lessons from Canadian case studies. *Prairie Perspectives*, 7: 209-226
- Noble, B.F.** 2003. Auditing strategic environmental assessment practice in Canada. *Journal of Environmental Assessment Policy and Management*, 5(2): 127-147.
- Noble, B.F.** 2003. Strategic environmental assessment quality assurance: Evaluating and improving the consistency of judgments in assessment panels. *Environmental Impact Assessment Review*, 24(1): 3-25.
- Noble, B.F.** 2002. Strategic environmental assessment of Canadian energy policy. *Impact Assessment and Project Appraisal*, 20(3): 177-188.
- Noble, B.F.** 2002. The Canadian experience with SEA and sustainability. *Environmental Impact Assessment Review*, 22(1): 3-17.
- Noble, B.F.** 2001. Adaptive management opportunities and constraints. *Horizons*: 4(3): 14.
- Noble, B.F.** and Storey, K. 2001. Towards a structured approach to strategic environmental assessment. *Journal of Environmental Assessment Policy and Management*, 3(4): 483-508.
- Noble, B.F.** 2000. Strategic environmental assessment: What is it and what makes it strategic? *Journal of Environmental Assessment Policy and Management*, 2(2): 203-24.
- Noble, B.F.** 2000. Strengthening EIA through adaptive management: a systems perspective. *Environmental Impact Assessment Review*, 20(1): 99-113.
- Noble, B.F.** 1999. Institutional criteria for co-management. *Marine Policy*, 24(1): 67-77.

## 6. PUBLICATIONS: PEER REVIEWED PAPERS IN CONFERENCE PROCEEDINGS

- White, L., and **Noble, B.F.** 2012. The contribution of SEA to energy sector planning. In *Energy Future: The Role of Impact Assessment*. Proceedings of the International Association for Impact Assessment. Fargo, ND: IAIA.
- White, L, and **Noble, B.F.** 2012. Strategic environmental assessment of electricity futures. In *Energy Future: The Role of Impact Assessment*. Proceedings of the International Association for Impact Assessment. Fargo, ND: IAIA.
- Rushton, R. and **Noble, B.F.** 2012. Efficacy of SEA for sustainable forest management. In *Energy Future: The Role of Impact Assessment*. Proceedings of the International Association for Impact Assessment. Fargo, ND: IAIA
- Seitz, N.E., Westbrook, C.J., **Noble, B.F.** 2010. Bringing science into river systems cumulative effects assessment practice. 36th Annual Scientific Meeting of the Canadian Geophysical Union, May 31-June 4, 2010. Ottawa, Ontario, Canada.

- Ball, M. and Noble, B.F. 2010. Indicators for watershed cumulative effects assessment: an analysis of environmental impact statements in the South Saskatchewan River Basin. Annual meeting of the Canadian Association of Geographers, June 1 – 5, Regina, SK
- Fidler, C. and Noble, B.F. 2010 Advancing aboriginal community – corporate agreements: lessons from practice in the Canadian mining sector. Annual meeting of the Canadian Association of Geographers, June 1 – 5, Regina, SK
- Nasen, L. and Noble, B.F. 2010. The status of EIA follow-up and reclamation practices for grassland oil and gas development in Saskatchewan. 2010 Conference and Annual General meeting of the Canadian Land Reclamation Association, Alberta, 24-26 February.
- Nasen, L. and Noble, B.F. 2009. Environmental Effects Assessment of Oil and Gas Activity on a Semi-Native Grassland in Southwest Saskatchewan. *Proceedings of the 2009 Annual General Meeting and Conference: Canadian Land Reclamation Association*, August 23-25, Quebec City, Quebec.
- Christmas, L. and Noble, B.F. 2006. Implications of One-size-fits-all Policy Solutions for GHG Mitigation in Canadian Agriculture. Association of American Geographers, Chicago, IL.
- Noble, B.F. 2005. Stakeholder-based decision support for SEA: a case study of greenhouse gas mitigation in Canadian agriculture. *Ethics and Quality*. Proceedings of the 25<sup>th</sup> annual conference of the International Association for Impact Assessment. Boston, M.A.
- Noble, B.F. 2004. SEA benefits to industry: a case study of integrated SEA in Saskatchewan's forestry sector, Canada. *Whose Business is it?* Proceedings of the 24<sup>th</sup> annual conference of the International Association for Impact Assessment. 24-30 April, Vancouver, Canada.
- Noble, B.F. 2004. Environmental, regional, and strategic assessment – Canadian perspective. Presentation and speaker notes published in proceedings of an international workshop *Information Session on Regional and Strategic Environmental Assessments*. May 2003, Halifax, NS: Her Majesty the Queen in Right of Canada.
- Noble, B.F. and Bronson, J.E. 2004. Addressing human health impacts in EIA: Observations from case studies from Northern Canada. *Whose Business is it?* Proceedings of the 24<sup>th</sup> annual conference of the International Association for Impact Assessment. 24-30 April, Vancouver, Canada.

## 7. TECHNICAL REPORTS TO GOVERNMENT AND INDUSTRY

- Noble, B.F. 2011. *Criteria for Ministerial decisions under section 12.5.7 of the Nunavut Land Claims Agreement*. Report prepared for Aboriginal Affairs and Northern Development Canada. Her Majesty the Queen in Right of Canada: Hull, QC.
- Noble, B.F. 2011. *Criteria for Ministerial Decisions under Sections 12.4.7 and 12.4.9 of the Nunavut Land Claims Agreement*. Her Majesty the Queen in Right of Canada: Ottawa, ON.
- Noble, B.F. and Harriman, J. 2008. *Strengthening the Foundation for Regional Scale Strategic Environmental Assessment in Canada*. Research report prepared for the Canadian Council of Ministers of Environment Environmental Assessment Task Group under contract agreement. CCME: Ottawa, ON.
- Noble, B.F. and Harriman, J. 2008. *Regional Strategic Environmental Assessment in Canada: Principles and Guidance*. Research report prepared for the Canadian Council of Ministers of Environment Environmental Assessment Task Group. CCME: Ottawa, ON.

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- Noble, B.F.** and Harriman, J. 2008. *Regional Strategic Environmental Assessment (R-SEA): Methodological Guidance and Good Practice*. Research report prepared for the Canadian Council of Ministers of Environment Environmental Assessment Task Group under contract agreement with Alberta Environment. CCME: Ottawa, ON.
- Noble, B.F.** and Harriman, J. 2008. *A Federal Government Approach to Regional Environmental Assessment in Canada*. Research report prepared for Fisheries and Oceans Canada under contract agreement. Department of Fisheries and Oceans Canada: Ottawa, ON.
- Noble, B.F.** and Bronson, J.E. 2007. *Models of Strategic Environmental Assessment in Canada*. Research report prepared for the Minister of Environment's Regional Advisory Committee, Subcommittee on Strategic Environmental Assessment. Hull: CEEA.
- Scientific Advisory Committee** 2007. *Great Sand Hills Regional Environmental Study*. Regina, SK: Canada Plains Research Centre. 229 pp.
- Aura Environmental Research and Consulting Ltd.** 2007. *Lower Churchill Hydroelectric Generation Project: Community Health Baseline Study*. Prepared Minaskuat Limited Partnership-Jacques Whitford. St. John's, NL.
- Noble, B.F.** 2007. *Expert Witness Report: Mikisew Cree Traditional Land Use Study Part II*. Prepared for Rath and Company, Edmonton, AB.
- Noble, B.F.** 2006. *Environmental Impact Assessment Follow-up Prescription and Reporting Framework: Grasslands Grazing Experiment and Reintroduction of Plains Bison, Grasslands National Park of Canada*. Technical report prepared for Grasslands National Park of Canada 5P407-C6-009. Grasslands National Park of Canada, Parks Canada Agency, Western Services Division.
- Noble, B.F.** 2006. *Screening for Significance in Saskatchewan Environmental Assessment*. Regina, SK: Saskatchewan Environment, Environmental Assessment Branch RE0544.
- Harriman, J., Christmas, L. and **Noble, B.F.** 2006. *Governance Instruments and Institutional Arrangements in the Great Sand Hills Region, Saskatchewan: Governance Baseline Study Report*. Environmental assessment baseline study report prepared for the Great Sand Hills Scientific Advisory Committee under contract agreement with the University of Regina, Regina, SK, Canada.
- Peters, E., **Noble, B.F.**, Karvellas, N., Thogerson, K. and Whitehead, K. 2006. *Aboriginal Use and Culture Baseline Study Report*. Environmental assessment baseline study report prepared for the Great Sand Hills Scientific Advisory Committee under contract agreement with the University of Regina, Regina, SK, Canada.
- Noble, B.F.** 2005. *Regional Cumulative Effects Assessment: Toward a Strategic Framework*. Research supported by the Canadian Environmental Assessment Agency's Research and Development Program. CEEA: Ottawa, ON.
- Noble, B.F.** 2004. *A Scoping Framework for Integrated Environmental Assessment and Planning: Guidance for the Cypress Hills Forest and Fire Management Plan Center Block and Subsequent Resource Planning Initiatives*. Government of Saskatchewan, Saskatchewan Environment, Environmental Assessment Branch: Regina, SK. Contract No. RE0126.
- Storey, K. and **Noble, B.F.** 2004. *Increasing the Utility of Follow-up in Canadian EA: A Review of Requirements, Concepts, and Experience*. Research supported by the Canadian Environmental Assessment Agency's Research and Development Program. Hull, Quebec: CEEA.



- Slocombe, D.S., **Noble, B.F.** and Smith, K. 1998. *Adaptive Management and National Park Management: An Annotated Bibliography and Review Essay*. A report prepared for Parks Canada by EDA Environment and Development Associates, Waterloo, Ontario, Canada.
- Noble, B.F.** 1998. *Cooperative Management of the Newfoundland and Labrador Northern Shrimp Fishery in SFA6: Institutional Requirements for Regional Resource Management*. Prepared under contracted agreement for the Government of Newfoundland and Labrador Department of Fisheries and Aquaculture, Fisheries Planning Division, St. John's, Newfoundland, Canada.
- Noble, B.F.** 1996. *Fisheries Diversification Opportunities in Coastal Labrador*. Prepared for Business Solutions Inc., St. John's, Newfoundland, Canada.

## 8. SELECT KEYNOTE AND INVITED ADDRESSES

- Noble, B.F.** 2011. Environmental assessment: state of the art. Invited workshop address. Concordia University EA Graduate Program 10<sup>th</sup> year anniversary. Concordia University, Montreal, 25 March 2011.
- Noble, B.F.** 2011. Environmental assessment: where to go from here? Invited keynote address. Concordia University EA Graduate Program 10<sup>th</sup> year anniversary. Concordia University, Montreal, 25 March 2011.
- Noble, B.F.** 2011. Cumulative effects assessment for integrated land use planning: Principles, practices, and lessons learnt. Invited presentation. Ontario Ministry of Natural Resources workshop on cumulative effects assessment. Toronto, ON, 26-27 January.
- Noble, B.F.** 2010. Watershed cumulative effects assessment. Integrated Water Resources Management in Indigenous Communities Research Forum, 25-28 October. Saskatoon, SK, Canada
- Noble, B.F.** 2010. Cumulative environmental effects and the tyranny of small decisions. Natural Resource and Environmental Studies Institute Annual Lecture. University of Northern British Columbia.
- Noble, B.F.** 2010. Comfort monitoring? Privatization and environmental assessment follow-up in Saskatchewan's uranium mining industry. Natural Resource and Environmental Studies Institute Research Colloquium Series. University of Northern British Columbia.
- Noble, B.F.** 2010. Strategic environmental assessment state of the art. Presentation to the Canadian Environmental Assessment Agency, workshop on strategic environmental assessment. Ottawa, ON.
- Noble, B.F.** 2009. Evaluating the efficacy of strategic EA: lessons from a national review of Canadian systems and practices. International workshop of the Effectiveness of Environmental Assessment. Swedish EIA Centre, Uppsala, Sweden, 5 – 7 October 2009.
- Noble, B.F.** 2009. Regional Strategic Environmental Assessment. *Keynote address*, World Wildlife Fund, Workshop of Regional Strategic Environmental Assessment, Ottawa, ON
- Noble, B.F.** 2008. Regional Environmental Assessment: Concept, Scope, Applications. Invited workshop presentation to Cameo Corporation and Areva Resources, Saskatoon.
- Noble, B.** and P. Duinker 2008. Perspectives on Cumulative Effects Assessment: Toward a Watershed-based Approach. Aquatic Toxicity Workshop, Saskatoon, SK.

- Noble, B.F.** 2007. Circumpolar Studies: Advancing the Environmental Assessment Agenda. Invited workshop presentation to the Canadian Environmental Assessment Agency, Regional Environmental Assessment Advisory Committee, Saskatoon, SK.
- Noble, B.F.** 2005. Model Strategic Environmental Assessment Framework for the Great Sand Hills Regional Environmental Study. Presentation to Saskatchewan Environment and the GSH Scientific Advisory Committee. Regina, Saskatchewan.
- Noble, B.F.** 2003. Defining the Process: Project, Regional, and Strategic Environmental Assessment. Environment Canada International Environmental Impact Assessment Workshop, May, Halifax, Nova Scotia.

## 9. PAPERS PRESENTED AT CONFERENCES

- Noble, B.F.** 2012. Industry-community negotiated agreements: lessons from recent practice in the Canadian mining sector. Political Studies Association AGM, Saskatoon, SK
- Rushton, R. and **Noble, B.F.** 2012. The efficacy of environmental assessment in the forest resource sector: 20-year forest management planning in Saskatchewan, Canada. International Symposium on Society and Resource Management, Edmonton, AB.
- Poelzer, G., **Noble, B.F.**, Ketilson, S., Aitken, A., and Fidler, C. 2012. Challenges to the efficacy of environmental assessment in Canada's Beaufort Sea. International Polar Year, Montreal, QC
- Noble, B.F.**, and Fidler, C. 2012. Advancing strategic environmental assessment in Canada's Arctic offshore oil and gas sector: Lessons from Norway, Canada, and the United Kingdom. International Polar Year, Montreal, QC
- Fidler, C., and **Noble, B.F.** 2012. Coordinating Regional Strategic Impact Assessment offshore initiatives in Canada's Beaufort Sea: A Case Study on the Current State-of-practice. International Polar Year, Montreal, QC
- Aitken, A., Ketilson, S., **Noble, B.F.**, Poelzer, G., and Fidler, C. 2012. Value-added of Regional and Strategic Environmental Assessment for Offshore Oil and Gas Planning and Development in Canada's Arctic. International Polar Year, Montreal, QC
- White, L., and **Noble, B.F.** 2012. The Role and Contribution of Strategic Environmental Assessment in the Energy Sector: Best Practice Process Elements and Outcomes of Six International Case Studies. International Symposium on Society and Resource Management, Edmonton, AB
- White, L., and **Noble, B.F.** 2012. Saskatchewan's Energy Futures: Development and Application of a Strategic Environmental Assessment Process for Electricity Sector Planning Based on Sustainability Criteria. International Symposium on Society and Resource Management, Edmonton, AB.
- Noble, B.F.**, and Patrick, R. 2012. Requisites and capacity for watershed cumulative effects assessment and management in Canada. International Symposium on Society and Resource Management, Edmonton, AB
- White, L., and **Noble, B.F.** 2012. An SEA process incorporating sustainability criteria. International Association for Impact Assessment AGM, 'Energy Future', Porto, Portugal
- White, L., and **Noble, B.F.** 2012. The contribution of SEA to energy sector planning. International Association for Impact Assessment AGM, 'Energy Future', Porto, Portugal
- Fidler, C., and **Noble, B.F.** 2012. Offshore SEA: lessons from Norway, Canada and the UK. International

- Association for Impact Assessment AGM, 'Energy Future', Porto, Portugal
- Rushton, R., and **Noble, B.F.** 2012. The efficacy of EA for sustainable forest management. International Association for Impact Assessment AGM, 'Energy Future', Porto, Portugal.
- Patrick, R. and **Noble, B.F.** 2012. Watershed cumulative effects assessment and management in Canada: Institutional arrangements, capacity, and scale. Canadian Water Resources Association AGM, Banff, AB.
- Hanna, K., and **Noble, B.F.** Usher P. 2012. The future of environmental assessment: panel discussion. Canadian Association of Geographers AGM, Waterloo, ON
- Noble, B.F.** 2012. Strategic environmental assessment for Arctic energy resource planning and development: opportunities and constraints. Canadian Association of Geographers AGM, Waterloo, ON
- Patrick, R., Sheelanere, P., **Noble, B.F.** 2011 Requisites for watershed-scale cumulative effects assessment and management. Presentation at the PCAG Annual Meeting. North Dakota, 16-18 Sept.
- Noble, B.F.**, Ketilson, S., Aitken, A. 2011. Advancing regional, strategic environmental assessment for offshore energy development in Canada's Beaufort Sea. Special session 'Technologies of oil.' AGM of the American Association of Geographers, Seattle, Washington, 12-16 April.
- Hanna, K., **Noble, B.F.** 2011. Effective environmental assessment. Clean Energy Superpower and Environmental Assessment: Canada's Ambitions and Choices. Queen's University, Kingston, ON.
- Ball, M., **Noble, B.F.**, Dube, M. 2011. Scaling-up valued ecosystem components for watershed cumulative effects assessment. Special session 'Watershed Science and Management'. AGM of the Canadian Association of Geographers 'Our Legacy, Our Future', Calgary, AB, 29 May – 4 June.
- Noble, B.F.**, Aitken, A. 2011. Advancing environmental assessment in Canada's Arctic energy environment: Opportunities, challenges, research directions. Special session 'Arctic Energy Development: Impacts, Management, and Perspectives. AGM of the Canadian Association of Geographers 'Our Legacy, Our Future', Calgary, AB, 29 May – 4 June.
- Noble, B.F.** 2011 Environmental assessment retrospect and prospect. Special session 'Arctic Energy Development: Impacts, Management, and Perspectives. AGM of the Canadian Association of Geographers 'Our Legacy, Our Future', Calgary, AB, 29 May – 4 June.
- Noble, B.F.**, Seitz, N., Westbrook, C.J., Patrick, R. 2011. Cumulative effects assessment for river systems: bringing science into practice. Special session 'Watershed Science and Management'. AGM of the Canadian Association of Geographers 'Our Legacy, Our Future', Calgary, AB, 29 May – 4 June.
- Patrick, R., Sheelanere, P., **Noble, B.F.** 2011. Institutional requirements to support watershed cumulative effects assessment and monitoring in Canada. Cumulative effects assessment for river systems: bringing science into practice. Special session 'Watershed Science and Management'. AGM of the Canadian Association of Geographers 'Our Legacy, Our Future', Calgary, AB, 29 May – 4 June.
- Chilima, J., Gunn, J., **Noble, B.F.**, Patrick, R. 2011. Evaluating institutional arrangements to support watershed-scale cumulative effects assessment in the Grand River Watershed, Ontario, Canada. AGM of the International Association for Impact Assessment, 'Impact Assessment and Responsible Development for Infrastructure, Business, and Industry, Puebla, Mexico, 28 May – 4 June.
- Chilima, J., Gunn, J., **Noble, B.F.**, Patrick, R. 2011. Evaluating institutional "degree of readiness" to support watershed-scale cumulative effects assessment: the case of the Grand River Watershed,

- Ontario, Canada. Canada Water Resources Association AGM, 'Our Water – Our Life – The Most Valuable Resource', St. John's, NL. 27-30 June.
- Ball, M., **Noble, B.F.**, Dube, M. Scaling up valued ecosystem components for watershed cumulative effects assessment. Poster presentation at Connecting Water Resources 2011: Responding to the Opportunities", AGM of the Canada Water Network, Ottawa, ON February 28th to Mar 3rd
- Noble, B.F.** and R. Patrick 2010. Watershed cumulative effects assessment. Annual meeting of the Prairie Division of the Canadian Association of Geographers, September 24-26, North Battleford, SK.
- Noble, B.F.** 2010. Enabling value-added SEA follow-up: a case study of Saskatchewan's forestry sector. International Association for Impact Assessment, April 6 – 11, Geneva, Switzerland.
- Noble, B.F.**, Aitken, A. and G. Poelzer 2010. Regional strategic environmental assessment: Roles and stakes in Arctic oil and gas development. Poster presentation at the Inuvik Petroleum Show, Inuvik, NWT.
- Noble, B.F.** and J. Gunn 2010. Efficacy of EA beyond the individual project. International Association for Impact Assessment, April 6 – 11, Geneva, Switzerland.
- Noble, B.F.**, Patrick, R., Dube, M., Sheelanere, P. and M. Ball 2010. Toward watershed cumulative effects assessment. International Association for Impact Assessment, April 6 – 11, Geneva, Switzerland.
- Noble, B.** and J. Birk 2009. Roles and Stakes in Environmental Impact Assessment Follow-up in Saskatchewan's Uranium Mining Industry. Paper presentation at the annual meeting of the Canadian Association of Geographers, May, Ottawa, Ontario.
- Birk, J. and **B. Noble** 2009. Institutional Development of Environmental Impact Assessment Follow-up in the Saskatchewan Uranium Mining Industry. Annual Meeting of the Association of American Geographers, Las Vegas, NV
- Nasen, L. and **B. Noble** 2009. Assessing the Impact of Oil and Gas Activity on Grassland Ecosystems. Annual Meeting of the Association of American Geographers, Las Vegas, NV.
- Noble, B.** and B. Bitter 2008. A Strategic Approach to Regional Cumulative Effects Assessment in the Great Sand Hills, Saskatchewan. International Association for Impact Assessment, Special Conference on Cumulative Effects Assessment, Calgary Alberta.
- Dube, M., Schrier, H., Westbrook, S., **Noble, B.F.**, Duro, D., Squires, A., McMaster, M., and M. Servos 2008. The Challenges of Aquatic Cumulative Effects Assessment: The Need to Move Beyond the Norm. Canada Water Network, Vancouver, BC.
- Harriman, J. and **B. Noble** 2008. Re-defining Cumulative Effects Assessment in the Context of Regionally-based Strategic Environmental Assessment. International Association for Impact Assessment, Special Conference on Cumulative Effects Assessment, Calgary Alberta.
- Peters, E. and **B. Noble** 2007. First Nations Perspectives on the Great Sand Hills Regional Environmental Study. Aboriginal Research Exhibit, Congress of the Humanities and Social Sciences, Saskatoon, SK.
- Noble, B.F.** and L. Christmas 2007. Structured Strategic Environmental Assessment Frameworks: Case Application to Greenhouse Gas Mitigation Policy Options in Prairie Agriculture. Canadian Association of Geographers, Saskatoon, SK.
- Harriman, J. and **B. F. Noble** 2006. Conceptualizing Regional Approaches to Cumulative Effects Assessment: Project and Strategic Models. International Symposium on Society and Resource Management, Vancouver, BC.

**Noble, B.F.** 2005. Assessing Human Health in Canadian Northern EA: A State-of-practice Survey. Paper presentation. International Association for Impact Assessment, Boston, MA.

**Noble, B.F.** 2005. Stakeholder-based Decision Support for SEA: A Case Study of Greenhouse Gas Mitigation in Canadian Agriculture. Paper presentation. International Association for Impact Assessment, Boston, MA.

Bronson, J.E. and **B.F. Noble** 2005. The State of Health Integration in Northern Environmental Assessment: Perspectives from Northern Health Practitioners. Paper presentation. Canadian Association of Geographers Annual meeting, London, ON.

Christmas, L. and **B.F. Noble** 2005. Social Impact Assessment of Greenhouse Gas Mitigation Strategies in Prairie Agriculture. Paper presentation. Canadian Association of Geographers Annual meeting, London, ON.

**Noble, B.F.** 2004. Improving the Practice of Socioeconomic Effects Monitoring: Lessons form the Hibernia Offshore Oilfield Platform Construction Project. Paper presentation. Prairie Division of the Canadian Association of Geographers annual meeting, Muenster, SK.

**Noble, B.F.** and K. Storey 2004. Increasing the Value Added of EIA Follow-up: Lessons from Canadian Case Studies. Paper presentation. Environmental Studies Association of Canada, Winnipeg, MB.

Bronson, J.E. and **B.F. Noble** 2004. A State-of-practice Survey of Health and EA in the Canadian North. Paper presentation. Environmental Studies Association of Canada, Winnipeg, MB.

**Noble, B.F.** 2004. Application of Group Multi-criteria Decision Support to Canadian Electricity Supply Futures Assessment. Poster presentation. International Society for Environmental Information Sciences, Regina, SK.

**Noble, B.F.** 2004. SEA Benefits to Industry: A Case Study of Saskatchewan's Forest Industry. Paper presentation. International Association for Impact Assessment, Vancouver, B.C.

**Noble, B.F.** and J.E. Bronson\* 2004. Addressing Human Health Impacts in EIA: Case Study Observations from Northern Canada. Paper presentation. International Association for Impact Assessment, Vancouver, BC.

Storey, K. and **B.F Noble** 2004. Towards Increasing the Utility of Follow-up in Canadian EIA. Paper presentation. Paper presentation. International Association for Impact Assessment, Vancouver, BC.

Macharia, S. and **B.F. Noble** 2004. Normative Principles for EIA Follow-up: A Case Study of the NWT Ekati Diamond Mine Project, Canada. Paper presentation. International Association for Impact Assessment, Vancouver, BC.

Bronson, J.E. and **B.F. Noble** 2004. Examining the Link Between EMSs and Environmental Performance: A Case Study of Riding Mountain National Park ,Canada. Poster presentation. International Association for Impact Assessment, Vancouver, BC.

**Noble, B.F.** 2003. Auditing Strategic Environmental Assessment Practice in Canada. Paper presentation. Prairie Division of the Canadian Association of Geographers Annual Meeting, Gimli, MB.

Bronson, J.E. and **B.F Noble** 2003. Auditing EMS Performance in Riding Mountain National Park. Paper presentation. Prairie Division of the Canadian Association of Geographers Annual Meeting, Gimli, MB.

**Noble, B.F.** 2003. Geographic Implications of the Resource Cycle: A Case Study of the Newfoundland Fishing Industry. Paper presentation. Canadian Association of Geographers Annual Meeting, Victoria, British Columbia.

**Noble, B.F.** and K. Storey 2001. Towards a Structured Approach to Strategic Environmental Assessment. Paper presentation. International Association for Impact Assessment Annual Meeting, Cartagena, Colombia.

**Noble, B.F.** 2000. Strategic Environmental Assessment: What is it and What Makes it Strategic? Paper presentation. Canadian Association of Geographers Annual Meeting, St. Catharine's, ON.

**Noble, B.F.** 2000. Environmental Assessment of Newfoundland Energy Policy. Paper presentation. Memorial University Interdisciplinary Science Research Meeting, St. John's, NL.

**Noble, B.F.** 1999. Cooperative Approaches to Fisheries Management: Lessons From the Newfoundland Context. Paper presentation. Aldrich Interdisciplinary Lecture and Conference, St. John's, NL.

**Noble, B.F.** 1998. Institutional Criteria for Co-management. Paper presentation. University of Waterloo-Wilfrid Laurier University Research Forum, Waterloo, ON.

**Noble, B.F.** 1997. A Geographic Analysis of Landed Values in the Newfoundland Fishery from 1985 to 1995. Poster presentation. Canadian Association of Geographers Annual Meeting, St. John's, NL.

## 10. ACADEMIC RESEARCH GRANTS AND CONTRACTS

**Noble, B.F.** (PI) 2012-2016. Uncertainty analysis and communication in Canadian environmental impact assessment practice and decision making. Social Sciences and Humanities Research Council of Canada Insight Grant (\$292,000). Co-applicants: J Jaeger (Concordia), J Gunn (UofS).

**Noble, B.F.** 2009 – 2012. Institutional arrangements for watershed-based cumulative effects assessment (\$201,797). Social Sciences and Humanities Research Council of Canada: Canadian Environmental Issues Grants. Co-investigator: R. Patrick, UofS. Collaborators: M. Dube, UofS; R. deLoe, UW; H. Schrier, UBC.

**Noble, B.F.** 2009 – 2012. Strategic environmental assessment roles and stakes in Arctic oil and gas development (\$109,918). Social Sciences and Humanities Research Council of Canada: Northern Communities Grants. Collaborator: A. Aitken, UofS; Partners: G. Poelzer, UofS; M. Peters, Canadian Association of Petroleum Producers; T. Smith, Canadian Environmental Assessment Agency; E. Arkin, Inuvik Environmental Impact Assessment Review Board.

Hanna, K. and **B.F. Noble** (Co-investigator) 2009-2012. Effectiveness and Canadian environmental impact assessment (\$137,112). Social Sciences and Humanities Research Council of Canada.

Clark, D., Bharadwaj, L., Gober, P., McKenzie, M., **Noble, B.F.**, Patrick, R., Pomeroy, J., Reed, M., Wheeler, H. 2011. A collaborative approach to defining water security in the South Saskatchewan River basin. Science in Society Proposal. University of Saskatchewan, Office of VP Research (\$30,000). Role: Co-investigator.

Southcott, C. (PI) et al. Resources and sustainable development in the Arctic. (\$2,500,000 over 4 years) SSHRC-CFI MCRI Program. Role: Co-investigator.

Poelzer, G. (PI) et al. Issues in Northern governance. MITACS Accelerate Program (\$20,000 per student in stipend and travel). Role: Co-applicant

Dube, M. 2008-2012. Development of the healthy river ecosystem assessment systems (THREATS) for assessing and adaptively managing the cumulative effects of man-made developments on Canadian freshwaters (\$800,000). Canada Water Network. Co-investigators: K. Munkittrick, UNB; L. Jackson, UofC; **B. Noble**, UofS; P. Duinker, Dalhousie; C. Westbrook, UofS; M. McMaster,

Waterloo. Role: cumulative effects assessment framework conceptual development and M.Sc. graduate student supervision.

Clark, D., Barrett, M.J., **Noble, B.F.** 2011. Cumulative effects assessment in the Champagne and Aishihik First Nations Traditional Territory, Yukon. University of Saskatchewan, Office of VP Research, Research Acceleration Program (\$4,000). Role: Co-investigator.

Saskatchewan Health Research Foundation 2009-2011 Bhardwaj, L. *et al.* 2009 – 2011. Safe water for health research network. (\$60,000). Saskatchewan Health Research Foundation. Role: co-investigator.

Reed, M. 2009. Shifting sands: Shaping sustainability in northwestern Saskatchewan (\$26,150). Social Sciences and Humanities Research Council of Canada: Public Outreach Grants. Co-investigators: **B. Noble**, M.A. Bowden, G Cunfer, N. Harrison, M. McKenzie)

**Noble, B.F.** 2006 – 2008. Efficacy of community-based monitoring under environmental impact management agreements: Lessons from Saskatchewan’s Northern Uranium Mining Industry (\$37,863). Social Sciences and Humanities Research Council of Canada.

**Noble, B.F.** 2006 - 2007. Biodiversity integration in Saskatchewan strategic environmental assessment (\$12,000). Government of Saskatchewan, Saskatchewan Environment, Environmental Assessment Branch, Regina, SK.

**Noble, B.F.** 2005. Geographic implications of the resource cycle in the Newfoundland fishery (\$4,800). President’s SSHRC Grant.

Jacques Whitford Environment Ltd. (M. Shrimpton and C. Leeder), **B.F. Noble**, and McInnis Cooper Law Firm (J. Thistle) 2005. SEA policy and process issues (\$46,000). Petroleum Research Atlantic Canada.

Great Sand Hills Scientific Advisory Committee (P. Diaz, D. Gauthier - University of Regina; **B. Noble** – University of Saskatchewan; R. Noss – University of Central Florida). 2005-2007. Great Sand Hills regional environmental study (\$3,500,000). Government of Saskatchewan, Ministry of Environment, Regina, SK.

Diaz, P. and **B.F. Noble** 2005. Human capital baseline in the Great Sand Hills, Saskatchewan (\$103,120). Government of Saskatchewan, Ministry of Environment, Regina, SK.

**Noble, B.F.** and E. Peters 2005. Aboriginal use and culture in the Great Sand Hills, Saskatchewan (\$90,694). Government of Saskatchewan, Ministry of Environment, Regina, SK.

**Noble, B.F.** 2004-2005. Building capacity in Saskatchewan provincial EA (\$10,000). Saskatchewan Environment and Resource Management. Government of Saskatchewan, Regina, SK.

**Noble, B.F.** 2004 – 2005. Towards a strategic framework for regional cumulative effects assessment (\$28,000). Canadian Environmental Assessment Agency, ON.

**Noble, B.F.** 2003-2006. Towards best practice health impact assessment: An evaluation of the state of Canadian environmental impact assessment systems and practices (\$59,472). Social Sciences and Humanities Research Council of Canada.

Kulshreshtha, S., **Noble, B.F.**, and K. Grimsrud 2003-2006. Integrated assessment of greenhouse gas mitigation strategies (\$420,000). Social Sciences and Humanities Research Council of Canada BIOCAP Initiative.

Storey, K. and **B.F. Noble** 2003-2004. Towards best-practice follow-up (\$28,000). Canadian Environmental Assessment Agency, ON.

**Noble, B.F.** 2002-2003. Determining significance in environmental impact assessment (\$4,900). President’s SSHRC Award, University of Saskatchewan.

- Noble, B.F.** 2002-2003. A state-of-practice survey of strategic environmental assessment (\$5,000). University of Saskatchewan Start-up Operating Funds.
- Noble, B.F.** 2000-2002. Strategic environmental assessment of energy policy alternatives, Newfoundland (\$2,800). ISER Institute for Social and Economic Research, Memorial University of Newfoundland, NL.
- Noble, B.F.** 1998. Institutional criteria for cooperative fisheries management in the Newfoundland shrimp fishery (\$1000). Government of Newfoundland and Labrador Department of Fisheries and Aquaculture, NL.

## 11. SELECT CONSULTANCY AND EXPERT ADVISORY ROLES

- Aboriginal Affairs and Northern Development Canada. Development of Ministerial Decision Support Guidance for Decisions under the Nunavut Land Claims Agreement, AANDC, Ottawa, ON, 2011 – 2012.
- AMEC, Consultant. Strategic Environmental Assessment Offshore Newfoundland and Labrador, Laurentian Sub-basin. St. John's, NL 2012.
- Canadian Environmental Assessment Agency. Expert Advisor on Development of CEAA Operational Policy Statement on Cumulative Effects Assessment under the Canadian Environmental Assessment Act. CEAA, Ottawa, ON. 2011.
- National Energy Board, Participant Review Funding Committee Member. National Energy Board, Calgary, AB 2011
- Lower Churchill Hydroelectric Development Project. Environmental Impact Statement, Co-Author, Socio-Economic Analysis, Newfoundland and Labrador Hydro, Minaskuat Limited Partnership. Canada-Newfoundland Joint Federal Provincial Panel Review Environmental Impact Assessment, 2010 - 2011.
- Lower Churchill Hydroelectric Development Project. Environmental Impact Statement, Lead Author, Community Health Baseline Assessment, Newfoundland and Labrador Hydro, Minaskuat Limited Partnership. Canada-Newfoundland Joint Federal Provincial Panel Review Environmental Impact Assessment, 2010 - 2011.
- Canadian Environmental Assessment Agency, Consultant. Development of a Federal Strategic Environmental Assessment Toolkit. CEAA, Ottawa, ON 2008.
- Fisheries and Oceans Canada, Consultant. Framework Development for Regional Environmental Assessment, DFO, Ottawa, ON 2008.
- Canadian Council of Ministers of Environment. Development of a Regional Strategic Environmental Assessment Framework for Canada. CCME Environmental Assessment Task Group, 2008.
- Minister of Environment's Regional Advisory Committee on Strategic Environmental Assessment, Consultant. Performance Review and Evaluation of Strategic Environmental Assessment Models and Frameworks in Canada. Environment Canada, Ottawa, ON 2007
- Government of Saskatchewan, Consultant. Development of Guidance for Significance Determination in Environmental Impact Assessment Screening under Section 2d of the Saskatchewan Environmental Assessment Act. Saskatchewan Ministry of Environment, Regina, SK 2007.
- Government of Saskatchewan, Consultant. Environmental Impact Assessment Capacity Development. Saskatchewan Ministry of Environment, Regina, SK 2006



Government of Saskatchewan, Consultant. Biodiversity Integration in Environmental Assessment. Saskatchewan Ministry of Environment, Regina, SK 2006

Parks Canada, Consultant. Environmental Impact Assessment Follow-up Program Design for Bison Reintroduction into Grasslands National Park of Canada. Val Marie, SK 2007

Mikisew Cree Traditional Land Use Study, Expert Witness. Rath and Company Barristers & Solicitors, Edmonton, AB 2006 – 2007.

Great Sand Hills Regional Environmental Study Scientific Advisory Committee. Saskatchewan Environment, Government of Saskatchewan, Regional, Saskatchewan, Canada. 2005 – 2007.

Government of Saskatchewan, Consultant. Review of 20-year Forest Management Planning Practices. Saskatchewan Ministry of Environment, Regina, SK.

Auditor General of Canada and Commissioner of the Environment and Sustainable Development, Expert Advisor. Sustainable Development Strategies and Strategic Environmental Assessment Program and Performance Audits, Government of Canada, Ottawa, Ontario, Canada, 2002 – 2004.

**12. PROFESSIONAL AND ASSOCIATION OFFICES AND COMMITTEES**

**Scientific journal editorships**

- Associate Editor, *Journal of Environmental Assessment Policy and Management*, 2009 - Current
- Editorial Board Member, *Environmental Impact Assessment Review*, 2007 – Current
- Editorial Board Member, *Impact Assessment and Project Appraisal*, 2007 – Current
- Co-editor, International Association for Impact Assessment Newsletter, professional news section, 2005 – Current
- Associate Editor, *Environments*, 2006 – 2009

**Memberships**

- Member, Canadian Association of Geographers, 2002 – Current
- Member, International Association for Impact Assessment, 2002 – Current
- Member, Great Sand Hills Scientific Advisory Committee, 2004 – 2007
- Member, International Society for Informatics, 2004 – 2007
- Member, Environmental Studies Association of Canada, 2002 – 2005
- Member, United Nations Environmental Protection Division Oil and Gas Forum, 2001 – 2002

**Manuscript reviews undertaken for academic journals**

- *Applied Geography; Canadian Geographer; Canadian Journal of Agricultural Economics; Canadian Water Resources Journal; Ecology and Society; Environmental Engineering and Management; Environmental Impact Assessment Review; Environmental Management; Impact Assessment and Project Appraisal; International Journal of Environment and Sustainable Development; Journal of Business Ethics; Journal of Environmental Assessment Policy and Management; Journal of Environmental Management; Journal of Environment and Sustainable Development; Journal of Environmental Law and Planning; Journal of Ocean Technology; Land Use Policy; Landscape and Urban Planning; Prairie Perspectives; Progress in Planning; Regional Studies; Resources, Energy, and Development; Society and Natural Resources*

YEAR	# REVIEWS*	YEAR	# REVIEWS
2011-12	19	2006-05	15
2011-10	12	2005-04	15
2010-09	19	2004-03	9
2009-08	11	2003-02	5
2008-07	11	2002-01	4
2007-06	12	2001-00	1

\* Indicates number of reviews undertaken, not the total number of requests for reviews.

**Conference organization and chair roles**

2010-11

- Session co-organizer – Arctic Energy Development: Impacts, Management, and Perspectives, AGM of the Canadian Association of Geographers, with Alec Aitken, University of Saskatchewan. Calgary, AB, May 30 – June 4.
- Session co-organizer – ‘Watershed Science and Management’. AGM of the Canadian Association of Geographers ‘Our Legacy, Our Future’, Calgary, AB, 29 May – 4 June.

2009-10

- Session co-organizer - Impact Assessment and Forest Management, International Association for Impact Assessment, Geneva, Switzerland, with Kevin Hanna, Wilfrid Laurier University and Ismo Polonen, Joensuu University Finland
- Session co-organizer: Efficacy of Environmental Assessment, International Association for Impact Assessment, Geneva, Switzerland

2008-09

- Session co-chair, Cumulative effects Assessment, Aquatic Toxicity Workshop, SK

2006-07

- Conference organizing committee, Canadian Association of Geographers annual general meeting, Saskatoon, SK.

2004-05

- Conference organizer, Prairie Division of the Canadian Association of Geographers, Muenster, SK
- Session co-organizer (with A. Morrison-Saunders, Murdoch University, Australia and J. Arts, Netherlands Ministry of Environment and Transport): Environmental Impact Assessment Follow-up, International Association for Impact Assessment, Boston, MA
- Session chair: HIA Policy and Planning, International Association for Impact Assessment, Boston, MA
- Session chair: EIA Follow-up in Current Practice, International Association for Impact Assessment, Boston, MA
- Session chair: SEA Techniques and Methods, International Association for Impact Assessment, Boston, MA
- Session chair: Environmental Data and Information Management, International Society for Environmental Information Sciences, Regina, SK
- Session chair: Learning and Sustainability, Prairie Division of the Canadian Association of Geographers, Muenster, SK

**13. SELECT PUBLIC AND COMMUNITY CONTRIBUTIONS**

**Community volunteer positions**

- Assistant coach, Saskatoon Minor Hockey Association, 2010 – Current
- Co-organizer, 'Shifting Sands' public forum on oil sands development, 2009
- Community volunteer – 'Lawson Community Day in the Park', 2009, 2012
- Instructor – Saskatoon Kids Summer Sports Camp, 2008

**Recent radio, newspaper and magazine interviews**

- *StarPhoenix*: 'Impacts of changes to Canadian Environmental Assessment Act', 2012
- *CBC Radio Regina*: 'Environmental assessment exemptions in Saskatchewan', 2012
- *StarPhoenix*: 'Health of the South Saskatchewan', 2012
- *CBC Radio Inuvik*: 'Offshore development in the Beaufort', 2012
- *Metro Saskatoon*: 'LEED building certification in Saskatoon, 2011
- *CBC Radio West* 'Keystone XL pipeline', 2011
- *Macleans*: 'Bill C38 and energy development in Canada', 2011

## Dr. Jill A.E. Gunn, Ph.D., M.C.I.P.

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### Curriculum Vitae

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#### *Academic Credentials*

- 2009 Doctor of Philosophy (Environmental Assessment)  
University of Saskatchewan
- 2000 Master of Science (Natural Resources Management)  
University of Northern British Columbia
- 1996 Bachelor of Arts (Honours) (Regional and Urban Development)  
University of Saskatchewan

#### *Professional Credentials*

Full Member, Canadian Institute of Planners

#### *Honours, Medals, Fellowships, Prizes*

- 2012. International Downtown Association Downtown Achievement Award in Planning, "Public Spaces, Activity and Urban Form Report." Washington, United States of America.
- 2012. Canadian Institute of Planners Award for New and Emerging Planning Initiatives, "Public Spaces, Activity and Urban Form Report." Banff, Canada.
- 2011. Saskatchewan Premier's Award for Excellence in Design, "Public Spaces, Activity and Urban Form Report." Saskatoon, Canada.

2005-08. Canada Graduate Scholar. Social Science and Humanities Research Council of Canada. Ottawa, Canada.

2005. Sustainable Community Award: Innovative Citizen Engagement for the Pleasant Hill Local Area Plan. Federation of Canadian Municipalities. Ottawa, Canada.

### ***Research Grants and Contracts***

Noble, B. (PI), Jaeger, J. (Co-I), **Gunn, J.** (Co-I). "Speak No Evil, Hear No Evil? Uncertainty Analysis and Communication in Canadian Environmental Impact Assessment Practice and Decision Making." \$292,000, Insight Grant, Social Sciences and Humanities Research Council of Canada, 2012-2016.

**Gunn, J.** (PI). 'Are All Effects Cumulative?' \$63,044, Insight Development Grant, Social Sciences and Humanities Research Council of Canada, 2011-2013.

**Gunn, J.** (PI) and B. Noble (Co-I). 'Addressing the 'Burden' of Small Projects and Their Cumulative Impacts in Environmental Assessment: Strategic Options in Canada and Western Australia', Bridge Funding (SSHRC Grant, 4A status) \$5,000, University of Saskatchewan, 2011-2013.

**Gunn, J.** (Co-PI) and R. Walker, (Co-PI), Public Spaces, Activity + Urban Form Strategic Framework Part A, \$61,321, City of Saskatoon, 2009-2010.

**Gunn, J.** (PI), 'Addressing the 'Burden' of Small Projects and Their Cumulative Impacts in Environmental Assessment: Strategic Options in Canada and Western Australia', \$4,889, President's SSHRC Award, University of Saskatchewan, 2009-2010.

**Gunn, J.** (PI) 'Addressing the 'Burden' of Small Projects and Their Cumulative Impacts in Environmental Assessment: Strategic Options in Canada and Western Australia', \$1,000, Proposal Development Award, University of Saskatchewan, 2009-2010.

**Gunn, J.** (PI) New Faculty Research Grant, \$15,000, College of Arts and Science, University of Saskatchewan, 2009.

**Gunn, J.** (PI) President's SSHRC Award, \$1000, University of Saskatchewan, 2009.

**Gunn, J.** (PI) Proposal Development Award, \$1000, University of Saskatchewan, 2009.

**Gunn, J.** (PI) Canada Graduate Scholar, \$105,000, Social Sciences and Humanities Research Council of Canada, 2004-2008.

**Harriman, J.** (PI) Wildlife Habitat Management on Electric Utility Transmission Rights-of-Way, \$33,000. BC Hydro, 1997-2000.

## ***Publications***

### *Books*

- Hackett, P., Noble, B., and **Gunn, J.** 2011. Human Geography Lab Manual. Oxford University Press, UK.
- Gunn, J.** 2010. Integrating Strategic Environmental Assessment and Cumulative Effects Assessment in Canada. Saskatoon: University of Saskatchewan, 187 pp. (Ph.D. Thesis)
- Harriman, J.** 2000. Toward a Conceptual Framework for Integrated Resource Management on Electric Utility Transmission Rights-of-Way. Prince George: University of Northern British Columbia, 312 pp. (M.A. Thesis)

### *Invited Journal Articles and Book Chapters*

- Noble, B. and **Gunn J.** 2010. "Regional strategic environmental assessment for integrated land management." *Horizons*, 10(4): 106-112.
- Noble, B. and **Harriman Gunn, J.** 2009. "Chapter 6: strategic environmental assessment." In K. Hanna (ed.) Environmental Impact Assessment: Practice and Participation, 2<sup>nd</sup> ed. Don Mills, ON: Oxford University Press.

### *Refereed Journal Articles*

- Noble, B., **Gunn, J.** and Martin, J. 2012. Survey of Current Methods and Guidance for Strategic Environmental Assessment. Impact Assessment and Project Appraisal, 30(3): 139-147.
- Gunn, J.** and B. Noble. 2011. "Conceptual and methodological challenges to integrating SEA and cumulative effects assessment." *Environmental Impact Assessment Review*, 31:154-160.
- Gunn, J.** and B. Noble. 2009. "Integrating cumulative effects in regional strategic environmental assessment frameworks: Lessons from practice." *Journal of Environmental Assessment Policy and Management*, 11(3): 267-290.
- Gunn, J.** and B. Noble. 2009. "A conceptual basis and methodological framework for regional strategic environmental assessment (R-SEA)." *Impact Assessment and Project Appraisal*, 27(4): 258-270. Nominated for "Paper of the Year 2009-10" by the International Association for Impact Assessment.
- Harriman, J.** and B. Noble 2008. New urban planning means being 'proactive': learning points from the field of strategic environmental assessment. *Plan Canada*, 48(4): 23-26.
- Harriman, J.** and B. Noble 2008. Characterizing project and strategic approaches to regional cumulative effects assessment in Canada. *Journal of Environmental Assessment Policy & Management*, 10(1): 25-50.
- Harriman, J.** and D. Baker 2003. Applying integrated resource and environmental management to transmission right-of-way maintenance. *Journal of Environmental Planning and Management*, 46(2): 199-218.

*Technical Reports*

- Bronson, J., B. Noble, and **J. Gunn**. 2009. *Strategic Environmental Assessment Toolkit and Methodological Guidance*. Research report prepared for the Canadian Environmental Assessment Agency under contract agreement. CEAA: Ottawa, ON.
- Noble, B. and **J. Harriman**. 2008. A federal government approach to regional environmental assessment in Canada. Research report prepared for Fisheries and Oceans Canada under contract agreement. Ottawa, ON: Fisheries and Oceans Canada.
- Noble, B. and **J. Harriman**. 2008. Regional strategic environmental assessment in Canada: principles and guidance. Research report prepared for the Canadian Council of Ministers of Environment Environmental Assessment Task Group under contract agreement. Ottawa, ON: Canadian Council of Ministers of Environment.
- Noble, B. and **J. Harriman**. 2008. Regional strategic environmental assessment (R-SEA): methodological guidance and good practice. Research report prepared for the Canadian Council of Ministers of Environment Environmental Assessment Task Group under contract agreement with Alberta Environment. Ottawa, ON: Canadian Council of Ministers of Environment.
- Noble, B. and **J. Harriman** 2008. Strengthening the foundation for regional scale strategic environmental assessment in Canada. Research report prepared for the Canadian Council of Ministers of Environment Environmental Assessment Task Group under contract agreement. Ottawa, ON: Canadian Council of Ministers of Environment.
- Harriman, J.**, L. Christmas and B. Noble 2006. Governance Instruments and Institutional Arrangements in the Great Sand Hills Region, Saskatchewan. Research report prepared for the Great Sand Hills Scientific Advisory Committee under contract agreement. Regina, SK: Government of Saskatchewan.
- Harriman, J.** 2003. Pleasant Hill Safety Audit Final Report. Saskatoon, SK: City of Saskatoon.
- Harriman, J.** 2003. Wildlife species at risk operational procedures: Bella Coola non-integrated generation. Research report prepared for BC Hydro under contract agreement. Prince George, BC: BC Hydro, 37 pp.
- Harriman, J.** 2003. Wildlife species at risk operational procedures: Queen Charlotte Islands non-integrated generation. Research report prepared for BC Hydro under contract agreement. Prince George, BC: BC Hydro, 39 pp.
- Harriman, J.** 2003. Wildlife species at risk operational procedures: Stikine non-integrated generation. Research report prepared for BC Hydro under contract agreement. Prince George, BC: BC Hydro, 37 pp.
- Harriman, J.** 2002. Species at risk: Bella Coola non-integrated area. Research report prepared for BC Hydro under contract agreement. Prince George, BC: BC Hydro, 74 pp.
- Harriman, J.** 2002. Species at risk: northeast transmission lines. Research report prepared for BC Hydro under contract agreement. Prince George, BC: BC Hydro, 94 pp.

- Harriman, J.** 2002. Species at risk: Queen Charlotte Islands non-integrated area. Research report prepared for BC Hydro under contract agreement. Prince George, BC: BC Hydro, 81 pp.
- Harriman, J.** 2002. Species at risk: Stikine non-integrated area. Research report prepared for BC Hydro under contract agreement. Prince George, BC: BC Hydro, 74 pp.
- Harriman, J.** 2001. Species at risk: south transmission lines. Research report prepared for BC Hydro under contract agreement. Prince George, BC: BC Hydro, 162 pp.
- Harriman, J.** 2001. Species at risk: west transmission lines. Research report prepared for BC Hydro under contract agreement. Prince George, BC: BC Hydro, 148 pp.
- Harriman, J.** 1999. Critical success factors in new product development in the secondary wood products manufacturing industry. Prince George, BC: Forest Renewal BC.
- Harriman, J.** 1998. Wildlife Habitat Management on British Columbia Hydro's Northern Transmission Rights-of-Way. Research report prepared for BC Hydro under contract agreement. Prince George: BC Hydro, 182 pp.

*Invited Conference Addresses and Panels*

- Gunn, J.** 2010. Saskatoon Speaks: City Center Focused Visioning Workshop (invited panellist). City of Saskatoon, December, Saskatoon, Canada.
- Gunn, J.** 2010. Strategic Environmental Assessment in Canada: A Key Link in Pursuing Sustainable Development Outcomes (keynote address, May 25). Sustainability Assessment Symposium hosted by Integral Sustainability: Fremantle, Western Australia.
- Gunn, J.** 2010. "Sustainability Assessment International Round Table" (Barry Sadler, convener, May 26). Sustainability Assessment Symposium hosted by Integral Sustainability: Fremantle, Western Australia.
- Gunn J.** 2010. "Applying R-SEA in Canada." SEA Toolkit Workshop (February 12), Canadian Environmental Assessment Agency: Ottawa, Canada.
- Gunn J.** 2010. "Urban Quality in Downtown Saskatoon: Potential Baseline Data Collection Methodology." Public Spaces, Activity + Urban Form Project Launch (May 10). City of Saskatoon, Land Branch: Saskatoon, Canada.
- Harriman, J.** 2008. Regional strategic environmental assessment. Panel discussion hosted by the Canadian Council of Ministers of Environment, Environmental Assessment Task Group (panel member). International Association of Impact Assessment Special Topic Meeting: Assessing and Managing Cumulative Effects. Calgary, AB.
- Harriman, J.** 1999. Wildlife habitat management on electric transmission rights-of-way in the United States and Canada: Results of a Bi-National Survey (plenary speaker). Edison Electric Institute Natural Resources Workshop. Williamsburg, Virginia.
- Harriman, J.** 1997. Address from the Canadian Institute of Planners national council student representative (keynote speaker). Canadian Institute of Planners Annual Conference. St. John's, Newfoundland.



*Conference Presentations*

- Harwicke, C., South, J., Walker, R., **Gunn, J.** 2011. Public Spaces, Activity and Urban Form (panel display). Saskatchewan Design Week Conference, Saskatoon, Canada. November 14-18.
- South, J., **Gunn, J.**, Walker, R., and Hardwicke, C. 2011. An Urban Quality Research Methodology. EcoCity Summit, Montreal. Canada. August 22-26.
- Walker, R, **Gunn, J.**, South, J., Hardwicke, C. 2011 A Public, Private and University Partnership: The Public Spaces, Activity and Urban Form Project. Association of Professional Community Planners of Saskatchewan Conference, Saskatoon, Canada. September 12-14.
- Zamchevska, V. and **Gunn, J.** 2012. Sustainability Assessment in Small Towns. University of Saskatchewan Graduate Student Association Conference, Saskatoon, Canada. March 7.
- Olgunju, A. and **Gunn, J.** and 2012. Valued Ecosystem Component Selection. University of Saskatchewan Graduate Student Association Conference, Saskatoon, Canada. March 7.
- Zamchevska, V. and **Gunn, J.** 2012. A Sustainability Assessment Framework for Small Towns in Canada. International Symposium on Society and Resource Management, Edmonton, Canada. June 17-22.
- Olagunju, A. and **Gunn, J.** 2012. Selecting Valued Ecosystem Component for Road Transportation Projects. International Symposium on Society and Resource Management, Edmonton, Canada. June 17-22.
- Olagunju, A. and **Gunn, J.** and 2012. Strategic Environmental Assessment Best Practices in Nigeria. International Symposium on Society and Resource Management, Edmonton, Canada. June 17-22.
- Gunn, J.** 2011. SEA as a Way to Address 'Small Projects'? International Association of Impact Assessment, June, Puebla, Mexico. May 28-June 4.
- Chilima, J., **Gunn, J.**, Noble, B. and Patrick, R. 2011. Evaluating Institutional Arrangements to Support Watershed-Scale Cumulative Effects Assessment in the Grand River Watershed. International Association of Impact Assessment, Puebla, Mexico. May 23 – June 4.
- Chilima, J. and **Gunn, J.** 2011. Evaluating Institutional 'Degree of Readiness' to Support Watershed-Scale Cumulative Effects Assessment: The Case of the Grand River Watershed, Ontario, Canada. Canadian Water Resources Association Conference, St. John's, Canada. June 27 – 30.
- Chilima, J. and **Gunn, J.** 2011. Evaluating Institutional Arrangements to Support Watershed-Scale Cumulative Effects Assessment in the Grand Rover Watershed, Ontario, Canada. The College of Arts and Science Graduate Student Poster Symposium, Saskatoon, Canada. April 19.
- Chilima, J. and **Gunn, J.** 2011. Institutional Arrangements for Watershed-Scale Cumulative Effects Assessment. Canadian Water Resources Association World Water Day Event (online conference). March 22.
- Chilima, J. and **Gunn, J.** 2010. The Importance of Multi-Stakeholder Collaboration in Advancing and Sustaining Watershed Cumulative Effects in the Grand River

- Watershed, Ontario, Canada. Impact 2010: Shaping Communities Through Research, University of Saskatchewan, Saskatoon, Canada. Nov 18 – 19.
- Harriman, J.** 2008. Integrating cumulative effects assessment and strategic environmental assessment: challenges to concept and methodology. International Association of Impact Assessment Special Topic Meeting: Assessing and Managing Cumulative Effects. Calgary, AB.
- Harriman, J.** 2006. Regional approaches to cumulative effects assessment: Project and strategic models. Twelfth International Symposium on Society & Natural Resources. Vancouver, British Columbia.
- Harriman, J.** 2002. Crossing conceptual boundaries: Integrated resource management on electric utility transmission rights-of-way. Eighth International Symposium on Society & Natural Resources. Bellingham, Washington.
- Harriman, J.** 2001. 38 rare wildlife species and 300 kilometers of line: Integrated maintenance prescriptions. Edison Electric Institute Natural Resources Workshop. Palm Springs, California.
- Harriman, J.** 2000. Wildlife habitat management on electric transmission rights-of-way: Results of an international survey. Seventh International Symposium on Environmental Concerns in Right-of-Way Management. Calgary, Alberta.
- Harriman, J.** 1998. Integrated resource management on transmission rights-of-way. Seventh International Symposium on Society & Natural Resources. Columbia, Missouri.

#### *Workshops*

- Bronson, J., **Gunn, J.**, and Noble, B. 2009. Strategic Environmental Assessment Toolkit Workshop. Prepared for the Canadian Environmental Assessment Agency under contract agreement. Ottawa: Canadian Environmental Assessment Agency.
- Harriman, J.** 2007. Planning Education Program Workshop 1: Planning in Saskatoon. Public education workshop curriculum prepared for the City of Saskatoon under contract agreement. Saskatoon, SK: City of Saskatoon.
- Harriman, J.** 2007. Planning Education Program Workshop 2: Reviewing and Commenting on Planning Proposals. Public education workshop curriculum prepared for the City of Saskatoon under contract agreement. Saskatoon, SK: City of Saskatoon.

#### *Book Reviews*

- Harriman, J.** 2007. Governing Canada's freshwater resources: weaknesses, challenges, innovations. *Environments*, 35(2): 97-99.
- Harriman, J.** 2007. Integrated resource and environmental management: concepts and practice. *Environments*, 36(1): 87-89.

### ***University Courses***

#### *University of Saskatchewan:*

- GEOG 880 Environmental Geographies (Sustainability Assessment) (2012)
- RUP 395 Planning History and Theory (2009, 2011, 2012)
- RUP 390 Research and Field Methods in Planning (2009, Jan 2010, Sept 2010, 2012)
- GEOG 280 Environmental Geography (2010)
- EXT DIV Climate Change (2007)
- GEOG 391 Field Methods in Human Geography (2006)
- GEOG 130 Introduction to Human Geography (2006)

#### *University of Northern British Columbia:*

- NREM 210 Integrated Resource Management (2002)
- NREM 101 Natural Resources Management II (2002, 2001)
- ENVS 309 Women and Environmental Studies (2001)
- NREM 306 Society, Policy, and Administration (2001)
- NRES 100 Communications in Natural Resources and Environmental Studies (2001)

### ***University Service***

- College of Reviews (Social Sciences and Humanities Research Council of Canada applications), University of Saskatchewan, 2012.
- Nominations Committee (Member), College of Arts and Science, University of Saskatchewan, 2010-2012.
- Undergraduate Affairs Committee (Member), Department of Geography and Planning, College of Arts and Science, University of Saskatchewan, 2010-2012.
- Dean's Designate Chair of a Ph.D. Defence (Candidate: Meredith Burles), Department of Sociology, College of Arts and Science, University of Saskatchewan, 2010.
- Regional and Urban Planning Committee (Member), Department of Geography and Planning, College of Arts and Science, University of Saskatchewan, 2009-2012.
- RUP Curriculum Electives Sub-Committee (Chair), Department of Geography and Planning, College of Arts and Science, University of Saskatchewan, 2010.

### ***Professional and Community Service***

- Association of Canadian University Planning Programs, Accreditation Program Committee, 2012.
- Director-at-Large, Stonebridge Community Association, Saskatoon, Canada, 2012.
- Co-Master of Ceremonies, Jan Gehl Lecture Series, Remai Arts Center Saskatoon, Canada, 2009.
- Canadian Institute of Planners Board of Examiners, 2011-2012.

Saskatoon Environmental Advisory Committee, 2010-2011.  
Book Reviews Editor, Environments Journal, 2009-2011.  
Organizing Committee Member, Jan Gehl Public Lecture Series, 2009.  
National Council Student Representative Canadian Institute of Planners, 1996-1997.

***Professional Positions***

Consulting Associate. Aura Environmental Research and Consulting Limited. Saskatoon, Saskatchewan, 2008-2009, 2012.  
Associate. Prairie Wild Consulting Limited. Saskatoon, Saskatchewan, 2009-2012.  
Sessional Lecturer. University of Saskatchewan. Saskatoon, Saskatchewan, 2006, 2007.  
Planner II. City of Saskatoon. Saskatoon, Saskatchewan, 2003-2004.  
Sessional Lecturer. University of Northern British Columbia. Prince George, British Columbia, 2001-2002.  
Consultant to BC Hydro. Prince George, British Columbia, 1997-2002.  
Assistant Project Officer, Forest Renewal BC, Prince George, British Columbia, 1999.

***Professional Memberships***

International Association for Impact Assessment  
Canadian Institute of Planners  
Association of Professional Community Planners of Saskatchewan



**SUMMARY**

Douglas Skinner is a Principal Wildlife Biologist for ecological services with WorleyParsons. He received both his Honours B.Sc. (1977) and his M.Sc. (1984) from the University of Alberta, and has over 30 years experience in wildlife research, management, monitoring, and the preparation of Environmental Impact Assessments. Areas of expertise include the ecology and management of wildlife, wildlife/habitat associations, wildlife responses to development and disturbance, and assessing the effects of chemical deposition on wildlife populations.

Prior to attending university, Mr. Skinner was involved in a study of woodland caribou in Jasper National Park. Since that time, he has gained extensive experience with a variety of wildlife species, which include ungulates, furbearers, small mammals, water birds, raptors, and amphibians. Some of his work has involved assessing the impacts of various types of development, such as oil sands operations, water storage projects, landfills, military operations, and linear developments, on wildlife and biodiversity. In addition, he has provided critical reviews of Environmental Impact Assessments for both the Alberta Government and First Nations groups. He has also prepared wildlife management plans for areas of Alberta and British Columbia, and has been involved in a several studies and monitoring programs to assess the effects of chemical deposition on wildlife populations. Mr. Skinner has undertaken projects in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Labrador, Yukon and the Northwest Territories. He is a registered Professional Biologist (P.Biol.) in Alberta.

**EXPERIENCE**

**2019 - Present Principal Wildlife Biologist, WorleyParsons, Edmonton, AB, Canada**

**Suncor Energy MacKay River Project – Wildlife Monitoring Program, Fort McMurray, Alberta.** Senior Wildlife Biologist involved in long-term wildlife monitoring in relation to the phased development of a steam assisted gravity drainage oil sands development near Fort McMurray, Alberta.

**Galore Creek Mining Corporation – Wildlife Assessment, Stewart, British Columbia.** Conducted an assessment of available wildlife information and identified data requirements in relation to a modified plan for a proposed gold mine in north-western British Columbia.

**Defence Construction Canada – Species at Risk Assessments, CFB Suffield, Alberta.** Senior Wildlife Biologist responsible for identifying species at risk and their habitat at CFB Suffield.

**Defence Construction Canada – Wetland Risk Assessments, CFB Edmonton, Alberta.** Wildlife biologist involved in conducting a wetland assessment that included vegetation and waterfowl communities; the development of a risk assessment matrix for waterfowl in wetlands as it pertains to the operation of aircraft; and the development of management strategies to reduce the risks to aircraft operations from waterfowl.

**2002 - 2010 Principal, Douglas L. Skinner Wildlife Biology, Edmonton, AB, Canada**

**Mackenzie Valley Gas Pipeline – Joint Review Panel Submissions and Hearings.** Senior wildlife biologist responsible for reviewing the Mackenzie Gas Pipeline Environmental Impact Assessment on behalf of Gwich'in First Nations, the preparation of position papers regarding biodiversity/cumulative and effects to wildlife, including woodland caribou. This project also included presenting information at Joint Review Panel hearings.



**Resume**

**Gwich'in Renewable Resource Board – Wildlife Survey Protocols, Inuvik, Northwest Territories.** Senior wildlife biologist responsible for conducting a literature review and designing protocols for surveys of woodland caribou, moose, and grizzly bears.

**Anvil Range Mine – Environmental Studies.** Senior biologist responsible for coordinating, directing, and conducting multidisciplinary studies to determine the impacts of lead and zinc deposition from the abandoned Anvil Range Mine on soils, vegetation, and wildlife, including woodland caribou, near Faro, Yukon.

**Environmental Assessments.** Critically reviewed environmental assessments for oil sands and upgrader developments for the Alberta Government and First Nations Groups.

2000 – 2002

**Provincial Habitat Programs Manager, Alberta Conservation Association, Edmonton, AB, Canada**

Manager responsible for the overall administration of the Association's habitat programs and the preparation of strategic plans to conserve wildlife and fish habitat. Cooperated with other non-governmental organizations to undertake habitat conservation and enhancement projects.

1990 – 2000

**Senior Wildlife Biologist, Westworth Associates Environmental Ltd., Edmonton, AB, Canada**

**Burnt River Landscape – Biophysical Inventory and Management Plan, Chetwynd, British Columbia.** Senior biologist involved in inventories to determine distribution and habitat use by ungulates, carnivores, small mammals, bats, and birds in relation to forestry operations; and the development of strategies to manage the impacts of forestry on wildlife populations. A strategy to maintain woodland caribou populations in the Forest Management Area was an important component of the plan.

**Cold Lake Air Weapons Range – Biophysical Inventory and Impact Assessment.** Wildlife biologist involved in studies on the Cold Lake Air Weapons Range to determine the species composition, abundance, and distribution of avian and mammalian wildlife; an assessment of the impacts of military aircraft operations on wildlife, which included woodland caribou; and the development of strategies to mitigate the impacts of military operations.

**Cold Lake Heavy Oil Operations – Wildlife Ecology.** Senior biologist involved in studies to determine the response of native ungulates to the phased development of a steam assisted gravity drainage oil sands facility near Cold Lake, Alberta. The responses of wildlife to elevated pipelines were also documented as part of the study.

**Swan Hills Treatment Centre – Wildlife Monitoring and Research.** Senior wildlife biologist responsible for directing long-term monitoring studies to determine the effects of chemical deposition on wildlife, conducting studies to determine the distribution of native ungulates and furbearers in the Swan Hills, determining the nature of the wildlife harvest in the Swan Hills, and designing and directing joint ecological/toxicological studies to assess the risks to representative wildlife species from Treatment Centre operations in response to a government enforcement order.

**Natural Resources Conservation Board – Bow Valley Corridor.** Senior wildlife biologist seconded to the Natural Resources Conservation Board to review and prepare information related to the potential effects to wildlife of golf course development in the Bow Valley Corridor near Canmore, Alberta.



**Resume**

**1984 - 1990**

**Wildlife Biologist, Alberta Fish and Wildlife, Edmonton, AB, Canada**

**Carnivore Trapping Study.** Senior wildlife biologist responsible for directing a two-year study to determine the effectiveness of various types of foot-holding devices for coyotes and wolves, assessing injuries to captured animals, and developing recommendations for the use of traps based on their efficiency and humaneness.

**Trapper Questionnaire.** Senior wildlife biologist responsible for determining the distribution of Alberta mammals based on the responses of 1,700 trappers to a questionnaire, assessing the accuracy of the survey, and comparing the characteristics of trappers among years.

**Rochester Wildlife Habitat Management Area - Management Plan.** Senior wildlife biologist responsible for undertaking studies to determine the abundance and distribution of mammalian wildlife in the Rochester, Alberta area, and developing a plan to manage wildlife by means of habitat manipulation and altered hunting regulations.

**1977 - 1981**

**Wildlife Biologist, D.A. Westworth and Associates Ltd., Edmonton, AB, Canada**

**Small Mammal/Vegetation Study, Fort McMurray, Alberta.** Wildlife biologist involved in a multi-year study to determine the relationship between vegetative characteristics and small mammal abundance in relation to the natural revegetation and reclamation of oil sands mining areas.

**Wildlife Monitoring, Fort Saskatchewan, Alberta.** Wildlife biologist involved in a multi-year monitoring program to determine the effects of chemical deposition on small mammals, waterfowl, and raptors.

**Whitehorse Indian Village Relocation, Whitehorse, Yukon.** Wildlife biologist responsible for assessing wildlife habitat at the site of a proposed First Nation's village and developing recommendations to mitigate the impacts of village development.

**River Valley and Ravine Wildlife Inventory, Edmonton, Alberta.** Wildlife biologist involved in an inventory of wildlife in Edmonton's river valley and ravine system in relation to the development of Capital City Park.

**EDUCATION**

M.Sc., Zoology, University of Alberta, Edmonton, AB, 1984

B.Sc. (Honours), Zoology, University of Alberta, Edmonton, AB, 1977

**REGISTRATIONS/AFFILIATIONS**

Alberta Society of Professional Biologists

The Wildlife Society



## **PUBLICATIONS/PRESENTATIONS**

---

Skinner, D.L. 2012. Baseline technical volume 9: wildlife. Prepared by WorleyParsons Canada for Galore Creek Mining Corporation.

Skinner, D.L. (Contributing Author). 2012. Wildlife monitoring update – 2012 for Suncor Energy MacKay River SAGD project. Prepared by WorleyParsons Canada for Suncor Energy Services Inc., Calgary, Alberta.

Skinner, D.L. (Contributing Author). 2011. Brine Pond #4 baseline environmental review: Fort Saskatchewan Fractionation Plant and brine storage ponds. Prepared by WorleyParsons Canada for Keyera Corporation, Fort Saskatchewan, Alberta.

Skinner, D.L. (Contributing Author). 2011. Yemen Masila and Terminal (Block 14): data compilation and baseline assessment. Prepared by WorleyParsons Infrastructure and Environment for Nexen Inc., Calgary, Alberta.

Skinner, D.L. 2008. Pembina Area Landfill: review of the wildlife monitoring program: 1998 – 2007. Prepared for Westworth Associates Environmental Ltd. on behalf of Pembina Area Landfill Ltd.

Skinner, D.L. 2007. Wildlife movements in the vicinity of Highway 63 near Mariana Lake, Alberta. Prepared for Spencer Environmental Management Services Ltd.

Skinner, D.L. (Contributing Author). 2007. Gwich'in Renewable Resource Board Submission to the Joint Review Panel for the Mackenzie Gas Project – Topic #15 Cumulative Effects.

Skinner, D.L. (Contributing Author). 2007. Highway 43 alternative routes functional planning study: environmental overview. Prepared by Spencer Environmental Management Services Ltd. for Earth Tech Canada on behalf of Alberta Transportation.

Skinner, D.L. (Contributing Author). 2007. Grande Prairie Resource Road alternative routes functional planning study: initial environmental evaluation. Prepared by Spencer Environmental Management Services Ltd. for Infrastructure Systems Ltd. on behalf of Alberta Transportation.

Kranrod, K., T. Zimmerling, and D. Skinner. 2006. A review of information on moose, woodland caribou, and grizzly bear populations within the Gwich'in Settlement Area. Prepared for Gwich'in Tribal Council by Gartner Lee Ltd., Whitehorse, Yukon.

Skinner, D.L. (Contributing Author). 2006. Gwich'in Tribal Council and Gwich'in Renewable Resource Board Submission to the Joint Review Panel for the Mackenzie Gas Project – Topic #7 Wildlife and Wildlife Habitat.

Skinner, D.L. (Contributing Author). 2006. Anvil Range Mine Complex –Terrestrial effects study: investigation into metal concentrations in vegetation, wildlife, and soils. Prepared by Gartner Lee Ltd., CE Jones & Associates, Gamberg Consulting, Geological Survey of Canada, and RWDI Air Inc. for Deloitte & Touche Inc.

Skinner, D.L. 2003. Hunter harvest and comparative ecology of moose and deer in the Swan Hills. Prepared for Stantec Consulting, Edmonton, Alberta.





**Resume**

Skinner, D.L. (Contributing Author). 2000. A literature review of the potential impacts of the Churchill hydro development on moose in Labrador. Prepared by Westworth Associates Environmental Ltd. for Labrador Hydro.

Skinner, D.L. (Contributing Author). 2000. An environmental assessment of a proposed winter road in Wood Buffalo National Park. Prepared by Westworth Associates Environmental Ltd. for Parks Canada and Canadian Heritage.

Skinner, D.L. (Contributing Author). 1999. Wildlife. Chapter 9. In: Assessment plan report - Enforcement Order 97-01. Prepared by Westworth Associates Environmental Ltd. and CanTox Environmental Inc. for Chem-Security (Alberta) Ltd.

Skinner, D.L. (Contributing Author). 1998. Wildlife inventories in the Burnt River Landscape Unit. Volume I. Rare plants, birds, small mammals, bats and grizzly bears. Prepared by Westworth Associates Environmental Ltd. for Canadian Forest Products, Chetwynd Division.

Skinner, D.L. (Contributing Author). 1998. Wildlife inventories in the Burnt River Landscape Unit. Volume II. Furbearers, carnivores and ungulates. Prepared by Westworth Associates Environmental Ltd. for Canadian Forest Products, Chetwynd Division.

Skinner, D.L. 1997. Ecological evaluation of the decommissioned generator site at Moose Lake, Manitoba. Prepared by Westworth, Brusnyk & Associates Ltd. for Toxcon Inc.

Skinner, D.L. 1997. Ecological evaluation of the decommissioned generator site at Nelson House, Manitoba. Prepared by Westworth, Brusnyk & Associates Ltd. for Toxcon Inc.

Skinner, D.L. 1997. Preliminary studies of ungulate habitat use and distribution in the vicinity of the Alberta Special Waste Treatment Centre. Prepared by Westworth Associates Environmental Ltd. for Chem-Security (Alberta) Ltd.

Skinner, D.L. 1996. Wildlife inventory of oil sands leases 12, 13, and 34. Prepared by Westworth, Brusnyk & Associates Ltd. for Syncrude Canada Ltd. Edmonton, Alberta.

Skinner, D.L. 1996. Habitat suitability models for selected wildlife species in the Suncor study area. Prepared by Westworth, Brusnyk & Associates Ltd. for Golder Inc. and Suncor Oil Sands Group. Fort McMurray, Alberta, Canada.

Skinner, D.L. and L.M. Brusnyk. 1996. Abundance and distribution of moose and other mammals in the Suncor study area. Prepared by Westworth, Brusnyk & Associates Ltd. for Golder Inc. and Suncor Oil Sands Group.

Skinner, D.L. (Contributing Author). 1996. Impact analysis: Suncor Steepbank Mine: environmental wildlife component. Prepared by Westworth, Brusnyk & Associates Ltd. for Golder Inc. and Suncor Oil Sands Group.

Skinner, D.L. (Contributing Author). 1995. Cold Lake Air Weapons Range. Vol. I. Natural Resources Inventory. Prepared by D.A. Westworth and Associates Ltd. for Department of National Defense.



**Resume**

Skinner, D.L. (Contributing Author). 1995. Cold Lake Air Weapons Range. Vol. II. Environmental Impact Study. Prepared by D.A. Westworth and Associates Ltd. for Department of National Defense

Skinner, D.L. and L.M. Brusnyk. 1993. An assessment of ungulate habitat at three potential landfill sites near Edson, Alberta. Prepared by D.A. Westworth and Associates Ltd. for Bromley Engineering, Edmonton, Alberta.

Brusnyk, L.M., D.A. Westworth, and D.L. Skinner. 1991. Ecology of ungulates in relation to the phased development of the Cold Lake heavy oil extraction facility. Prepared by D.A. Westworth and Associates Ltd. for Esso Resources Ltd. Calgary, Alberta.

Skinner, D.L. and L.M. Brusnyk. 1991. Distribution and habitat use by moose in Holloway Township. Prepared by D.A. Westworth and Associates Ltd. for Hemlo Gold Mines Inc., Toronto, Ontario.

Skinner, D.L. 1990. A proposed management plan for the Rochester Wildlife Habitat Management Area. Alberta Forestry, Lands, and Wildlife, Fish and Wildlife Division, St. Paul, Alberta, Canada.

Skinner, D.L. 1984. Selection of winter foods by beavers at Elk Island National Park. M.Sc. Thesis. University of Alberta. Edmonton, Alberta.

Skinner, D.L. and D.A. Westworth. 1981. A preliminary inventory of mammalian wildlife in the Project 80 study area. Prepared by D.A. Westworth and Associates Ltd. for Nova, an Alberta Corporation Petro-Canada, Calgary, Alberta.

Skinner, D.L. 1980. Habitat inventory and assessment for the Whitehorse Indian Village relocation. Prepared by D.A. Westworth and Associates Ltd. for Department of Indian and Northern Affairs and the Whitehorse Indian Band, Whitehorse, Yukon.

**SPECIFIC TECHNICAL EXPERTISE/SPECIALIST COURSES**

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**Specific expertise:**

Ecology of native ungulates, furbearers and small mammals

Habitat assessment and evaluation

Impacts of development on wildlife and their habitat

Effects of industrial contaminants on wildlife

**Specialist courses:**

Risk- based Corrective Action Workshop, University of Alberta, 1997

**Safety courses:**

Off-Highway Defensive Driving, 2010



**WorleyParsons**

resources & energy

**Douglas L. Skinner, M.Sc., P.Biol.**  
**Principal Wildlife Biologist**

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**Resume**

H<sub>2</sub>S Alive, 2010

Standard First Aid – Level C CPR and AED, 2010

WHMIS (Workplace Hazardous Materials Information System), 2010

Petroleum Safety Training (PST), 2011

# Gordon L. Brown, Ph.D. Senior Environmental Scientist

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## **G & P Resource Services Inc.**

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Calgary, Alberta T2J 4W9  
Phone: 403-279-4782  
Cell: 403-815-0940  
browns@shaw.ca

### **EDUCATION**

1990            PhD, Environmental Science, University of British Columbia.  
1977            Master of Natural Resources Management, University of Manitoba.  
1973            Bachelor of Science in Zoology, University of Manitoba.

### **EMPLOYMENT HISTORY**

1998-Present    Intrinsic Environmental Sciences Inc., (formerly Cantox Environmental Inc.),  
Senior Scientist and Principal  
1993-1998       Cantox Inc., Senior Scientist and Director, Western Region  
1988-1992       Bovar Environmental Services Manager, Environmental Services Department  
1977-1983       Western Research, Manager, Environmental Services Department

### **AREAS OF SCIENTIFIC INTEREST**

- Human health and ecological risk assessment
- Health and environmental effects associated with air toxics
- Health and environmental effects associated with contaminated sites
- Communication of chemical risks to public and stakeholders
- Stakeholder consultation and communication
- Wildlife toxicity monitoring

### **CERTIFICATION**

- Qualified Environmental Professional (QEP) since 1994
- Alberta Society of Professional Biologists (P.Biol.) since 1979

### **COMMITTEE MEMBERSHIPS**

1992-2002       Science Council of British Columbia, Environmental Technology and Waste  
Management Committee.

### **PROFESSIONAL SOCIETIES**

- Air and Waste Management Association (AWMA)
- Canadian Society of Environmental Biologists (CSEB)

### **PROJECT EXPERIENCE**

- MPE Engineering. Village of Longview, AB, environmental health risk assessment of a proposed municipal wastewater treatment facility discharging to the Highwood River (2010/2011).

- Enmax Energy. Human health risk assessment of a proposed gas-fired power plant in the Shepard area, City of Calgary. (2009/2010)
- Applied Aquatic Consultants. City of Camrose, AB, environmental health risk assessment of a proposed municipal wastewater treatment facility discharging to the Battle River (2010).
- Town of Strathmore. Human health risk assessment of effluent from a proposed water treatment plant discharging to the Bow River (2008/2009).
- Bears paw Development Limited Partnership. Environmental health risk assessment of a proposed residential community wastewater treatment system discharging to the Bow River upstream of Calgary (2009).
- AECOM Earth Tech. Annual ecotoxicological monitoring program in the vicinity of the Swan Hills Waste Treatment Centre (annual since 1995).
- Saskatchewan Ministry of the Environment. Peer review in response to a formal RFP issued by the Saskatchewan Ministry of the Environment seeking an independent peer review of the Consumers' Co-operative Refinery Limited (CCRL) HHRA (2008).
- Teck Cominco Ltd. Wide Area Ecological risk assessment for Teck Cominco's Trail operations (2001 to present).
- Earth Tech Inc. Public health risk assessment of wild game meat consumption and evaluation of Swan Hills game meat public health advisory (2006 – 2007).
- Earth Tech Environmental Inc. Ecotoxicological monitoring program in the vicinity of Swan Hills Waste Treatment Centre. (formerly operated by Bovar Waste Management) (1996 to present).
- Devon Canada. Human health risk assessment of proposed Jackfish 2 SAGD project (2006).
- Petro Canada inc. Human health risk assessment of proposed Sturgeon oil sands upgrader (2006).
- Curtis Environmental Inc. Human health risk assessment of petroleum hydrocarbon contamination resulting from gasoline storage tanks on 17th Avenue SW, Calgary (2006).
- Manchester Properties. Human health risk assessment of arsenic contamination on commercial industrial site in northeast Calgary (2006).
- Bel MK Engineering. Human health risk assessment of contamination associated with former Eau Claire Greyhound Bus maintenance facility in Calgary (2005- 2006).
- Shell Canada Ltd. Human health risk assessment of Carmon Creek SAGD project (2005 – 2006).
- Shell Canada Ltd. Human health risk assessment of Shell Scotford Expansion project (2005 – 2006).
- Petro Canada. Human health risk assessment of McKay River II SAGD project (2005).
- North West Upgrader Ltd. Human health risk assessment of proposed North West Upgrader (2005).
- Husky Oil Ltd. Human health risk assessment of Husky Sunrise SAGD project (2005).
- Deer Creek Energy. Human health risk assessment of SAGD project (2005).
- Deer Creek Energy. Human health risk assessment of Deer Creek Mine project (2005).
- MEG Energy. Human health risk assessment for MEG SAGD project (2005).
- Sovereign Castings Ltd. Screening level health and environmental risk assessment associated with metal contamination in surface soils (2005).

**Gordon L. Brown, Ph.D.**  
**Senior Environmental Scientist**

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- Earth Tech Inc. Annual health and ecological risk assessment based on biomonitoring program data (2004).
- City of Edmonton. Human health risk assessment of PCB release from light capacitors in Commonwealth Stadium (2004).
- Alberta Environment. Preparation of draft Alberta air quality guidelines for five VOCs (2004).
- Imperial Oil. Ecological risk assessment of former oil and gas battery at Whitecourt (2003).
- Husky Oil. Human health risk assessment of proposed Kearl Lake SAGD project (2003).
- Imperial Oil. Ecological risk assessment of former gas plant site near Battle Lake (2003).
- Husky Oil. Human health risk assessment of proposed Tucker SAGD project (2003).
- Devon Canada. Human health risk assessment of proposed Jackfish SAGD project (2003).
- Inland Cement. Human health risk assessment of Edmonton cement plant fuel conversion project (natural gas to coal) (2002).
- Fording Coal Limited. Human health risk assessment of proposed Brooks coal-fired power plant (2002).
- Shell Canada Ltd. Human and ecological health risk assessment of Shell Canada Lease 13 Site (2002).
- Heritage Partners. Human health risk assessment of a former Cominco fertilizer plant site (2002).
- AMEC Earth and Environmental. Human health risk assessment for the Petro-Canada Lewis SAGD oil sands project (2002).
- TransAlta Corporation. Human health risk assessment for the TransAlta Keephills coal-fired power plant expansion project (2001).
- EPCOR Corporation. Human health risk assessment for the EPCOR Genesee coal-fired power plant expansion project (2001).
- True North Energy. Ecological impact risk assessment and human health impact risk assessment for the Koch Petroleum/True North Fort Hills oil sands expansion project (2001).
- Axy's Environmental Consulting Ltd. Screening level human health risk assessment for the Gulf Surmont oil sands project (2001).
- AT Plastics Ltd. Human health/ecological risk assessment of air emissions related to intermittent decomposition incidents at Edmonton polyethylene plant (2000).
- Anderson Exploration Ltd. Human health risk assessment of residual TPH contamination at former oilfield sites (1999).
- Focus Equity/Summit Real Estate. Environmental liability review for purchase of property formerly used for industrial processing (1999).
- Golder Associates. Cumulative effects assessment framework for the Athabasca Oil Sands (1999).
- Petro-Canada Oil and Gas Ltd. Human health risk assessment of air emissions from proposed Fort McKay heavy oil project (1999).
- Parks Canada. Ecological risk assessment of mercury in soils (1999).
- Shell Canada Ltd. Human health risk assessment and preparation and participation at hearing regarding Shell's proposed Ferrier well (1999).
- Three Sisters Resorts. Risk assessment of proposed development options for former coal tar processing site (1999).

- Anderson Exploration Ltd. Human health risk assessment of air emissions from Puskwaskau flare (1998).
- Weyerhaeuser Canada Ltd. Human health risk assessment of air emissions from Slave Lake OSB mill (1998).
- Weyerhaeuser Canada Ltd. Human health risk assessment of air emissions from Prince Albert Pulp Mill (1998).
- Shell Canada Ltd. Human health and livestock risk assessment related to air emissions from proposed Scotford oil sands upgrader (1998).
- Syncrude Canada Ltd. Human health and ecological risk assessment of air emissions from proposed Mildred Lake oil sands upgrader (1998).
- Amoco Canada Ltd. Human health and ecological risk assessment of the Gregoire Lake Oil Sands Research Facility site (1998).
- Amoco Canada Ltd. Human health and livestock risk assessment of Amoco Evansburg (08-08) spill site (1998).
- Wascana Energy Ltd. Human health/ecological risk assessment of the Okotoks sour gas plant site (1998).
- Bovar Waste Management. Accidental release of PCBs, dioxins and furans from the Swan Hills Treatment Centre: Assessment of potential ecological and human health effects (1997).
- Weyerhaeuser Canada Ltd. Human health risk assessment for renewal of Drayton Valley OSB mill/saw mill operating permit under the Alberta Enhancement and Protection Act (1997).
- EBA Engineering Consultants Ltd. Human health risk assessment of a former commercial/industrial property near the Bow River in the City of Calgary (1997).
- Parks Canada. Ecological risk assessment of soil-based chemicals from a former industrial operation within a national park (1997).
- Confidential Client. Ecological risk assessment of mercury in soils at an operating golf course (1997).
- CETAC-West. Air Toxics Risk Management Workshop (1997).
- CXY Chemicals. Preliminary human health risk assessment of a chlorine and caustic plant in Brandon, Manitoba (1997).
- Amerada Hess Canada Ltd. Cattle toxicity assessment associated with survey activities (1996).
- Express Pipeline Ltd. Human health risk assessment of air emissions from a natural gas pipeline terminal and estimation of risks associated with an oil spill (1996).
- Kerr McGee Canada Ltd. Human health/ecological risk assessment of a well site (1996).
- Weyerhaeuser Canada Ltd. Log deck runoff water quality study, Drayton Valley (1996).
- Amerada Hess Canada Ltd. Assessment of potential effects on livestock associated with ingestion of sulphate in drinking water (1995).
- Amoco Canada Ltd. Human health/ecological risk assessment of an abandoned battery site at Ricinis, AB (1995).
- Amoco Canada Ltd. Human health/ecological risk assessment of a well site, Sundre (1995).
- Canadian Occidental Petroleum Ltd. Assessment of produced water spill effects on cattle (1995).

# Gordon L. Brown, Ph.D.

## Senior Environmental Scientist

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- Weyerhaeuser Canada Ltd. Risk assessment of air emissions from Edson OSB mill for renewal of operating permit under the Alberta Enhancement and Protection Act (1995).
- Weyerhaeuser Canada Ltd. Risk assessment of air emissions from Grande Prairie pulp mill for renewal of operating permit under the Alberta Enhancement and Protection Act (1995).
- Trus Joist MacMillan Ltd. Evaluation of indoor air quality associated with "Timberstrand" manufacturing operations, Deerwood, MN (1994).
- Drayton Valley Power Ltd. Environmental protection plan for a wood waste-fired power plant in Drayton Valley (1994).
- Lafarge Canada Ltd. Human health/environmental risk assessment of air emissions from cement manufacturing operations at Exshaw (1994).
- Weyerhaeuser Canada Ltd. Human health and occupational health risk assessment of air emissions associated with a proposed oriented strand board facility at Grande Prairie (1994).
- Weyerhaeuser Canada Ltd. Environmental protection plan application for a proposed OSB facility and harvesting operations at Grande Prairie (1994).
- Lafarge Canada Inc. Cement kiln secondary plume formation: sources, potential human health and ecological effects, Exshaw (1994).
- Centech Solutions Inc. Human health risk assessment associated with BTEX air emissions from an oilfield incinerator in Kindersley, Saskatchewan (1994).
- Lafarge Canada Inc. Human health and ecological risk assessment associated with tire test burns at the Exshaw plant (1993).
- Weyerhaeuser Canada Ltd. Environmental site selection study for a proposed oriented strand board plant near Grande Prairie, Alberta (1993).
- Atomic Energy Canada Ltd. Review of EIS on the "Concept for Disposal of Canada's Nuclear Fuel Waste." Assistance with preparation of Executive Summary (1993).
- Dow Chemical Canada Inc. Environmental monitoring of air, water, vegetation, wildlife and noise in the vicinity of Dow's Fort Saskatchewan complex (1993).
- Alberta Environment, Wastes and Chemicals Division. Phase II site investigations and risk assessments of three wood preserving sites (1993).
- Weyerhaeuser Canada Ltd. Environmental protection plan, "Clean Air" and "Clean Water" applications to construct a wood waste-fired electrical generating plant in Drayton Valley (1993).

### **PUBLICATIONS/CONFERENCE PRESENTATIONS**

- Brown, G.L., Phillipps, K., Shuetz, D. and Standford, D. 2009. Human health risk assessments of a treated municipal wastewater discharge in Alberta. Canadian Water and Wastewater Association. National Wastewater Conference. Niagara Falls Ontario. September 2009.
- Brown, G.L. and Stanford, D., (Town of Strathmore, Alberta) 2009. Human health risk assessments of a treated municipal wastewater discharge in Alberta. 61st Annual Western Canada Water Conference and Trade Show, September 20 – 23, 2009, Winnipeg, Manitoba
- Brown, G.L. and Lee, M. (Habitat Health Impact Consulting). 2009. Human health risk assessment and beyond: Community Health Risk Assessment. ASPB, Calgary, AB April 16, 2009



- Brown G.L. and Dennis, J. (SolAero). 2008. Human health risk assessments – and beyond. Envirogate Conference, Calgary, AB. February 11, 2008.
- Brown, G.L. and Dennis, J. (SolAero). 2008. Human health risk assessments – and beyond. CPANS Luncheon Series, Calgary, AB. November 2008.
- Brown, G.L. 2002. "Human health risk assessment of proposed TransAlta Keephills coal-fired power plant expansion." Invited presentation to Clean Air Strategic Alliance (CASA) Electricity Committee.
- Brown, G.L., and Davies, D.B. 1999. "Human Health Issues and the Uncertainties Surrounding the Effects of Gas Flaring." Invited paper presented at the Insight Conference: Dealing with the Gas Flaring Problem in the Petroleum Industry. April, 1999. Calgary, AB
- Brown, G.L., and Davies, D.B. 1998. "Integrated Risk Management." Invited course presented to the Environmental Services Association of Alberta, Edmonton, AB. February, 1998 and September, 1998.
- Brown, G.L., Wilson, R.M., Yee, D., Schroeder, M.B., Olson, R., and Woods, M. 1997. "Integrated Human Health Risk Assessment of Air Emissions From an Oriented Strand board Mill, Sawmill and Wood-Fired Power Plant near a Rural Alberta Community." Presented at the International Specialty Conference, Air and Waste Management Association, September, 1997.
- Brown, G.L., and Chollak, D. 1997. "Risk assessment of the Okotoks Gas Plant Site." Presented at various venues including Aquatic Toxicity Workshop, Calgary, September, 1996; Air and Waste Management Association, Annual Meeting, Kananaskis, April, 1997; Canadian Society of Petroleum Geologists, Annual Meeting, Calgary, June 1997; and Canadian Waste Management Conference, St. John, NF, September, 1997.
- Brown, G.L., Knafla, T. M., Nerbas. 1996. "Development of Risk-Based Clean-Up Criteria at a Well Site in Alberta." Prepared for presentation at the Society of Petroleum Engineers International Conference on Health, Safety and Environment. June 9-12, 1996. New Orleans, LA.
- Brown, G.L., and Davies, D.B. 1994. "Human Health and Ecological Risk Assessment of Contaminated Sites." Insight Conference: Clean-Up of Contaminated Sites in Alberta. October 12-13, 1994. Calgary, Alberta.
- Brown, G.L., and M.D. Treissman. 1994. "Ecological Assessment of Contaminated Sites." 16th Annual Canadian Waste Management Conference. September 13-16, 1994. Calgary, Alberta.
- Brown, G.L., and Treissman, M.D. 1994. "Consideration of Cumulative Effects in Human Health and Ecological Risk Assessments of Air Emissions." The Alberta Society of Professional Biologists. Cumulative Effects Assessment in Canada: From Concept to Practice. April, 13 and 14, 1994. Calgary, Alberta.
- Brown, G.L. 1992. "Attributes of Experts in Air Pollution Effects Research." Air and Waste Management Association International Annual Meeting, Kansas City, Missouri, June 21-26, 1992. Paper 92 150.06.
- Brown, G.L. 1991. "Dealing with Uncertainty in Air Pollution Policy Analysis." Air and Waste Management Association International Annual Meeting, Vancouver, British Columbia, June, 1991. Paper 91-165.1.

# Gordon L. Brown, Ph.D.

## Senior Environmental Scientist

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- Brown, G.L., Runeckles V.C., and Vertinsky, I.B. 1988. "Risk Assessment of Crop Losses Due to Photochemical Oxidants in the Fraser Valley of British Columbia." Air and Waste Management Association 25th Annual Meeting, Whistler, British Columbia, November 11, 1988.
- Brown, G.L. 1987. "Assessment of the Impact of Ozone Air Pollution on Agricultural Resources of the Fraser Valley, British Columbia: Sources of Uncertainty and Risk Assessment Methodology." Prepared for the Canadian Environmental Assessment Research Council, Ottawa, Ontario. 49 pp.
- Runeckles, V.C., and Brown, G.L. 1986. "Risk Assessment and Management of Ecological Effects of Ozone." Annual Meeting of the Air Pollution Control Association, Minneapolis, Minnesota, June 22-27, 1986.
- Brown, G.L. 1986. "The Effects of Air Pollution on Forests: Current Understanding, Uncertainty and Analysis and Elicitation of Expert Opinion." Prepared for the Canadian Environmental Assessment Research Council, Ottawa, Ontario. pp 59.
- Brown, G.L., and Runeckles, V.C. 1985. "Predicting the Impact of Air Pollutants on Agricultural Crops: A Review of the Techniques and Sources of Uncertainty." PNWIS APCA Annual Meeting, Calgary, Alberta.
- Brown, G.L. 1981. "Site and Route Selection for Sour Gas Processing Developments." Presented at The Route Selection Process: Environmental Approaches. Conference hosted by Alberta Energy and Natural Resources, Edmonton, Alberta.
- Leahey, D.M., Brown, G.L., and Findlay, R.L. 1980. "Air Quality Impact Associated with a Sour Gas Well Blow-out in South-western Alberta." JAPCA, 30:7:787-789. Also presented at PNWIS APCA Annual Meeting, Edmonton, Alberta.

### **SHORT COURSES GIVEN**

- Integrated Risk Management. ESSA two-day course conducting usually in Edmonton and Calgary.
- Human Health and Ecological Risk Assessment of Contaminated Sites. June, 1997. (Saskpower and SEAM, Regina, SK).
- Risk Assessment, Management and Communication, June, 1997. (Calgary Chamber of Commerce).
- Risk Assessment of Air Toxics. November, 1996. (American Industrial Hygiene Association, Alberta Local Section).
- Human Health and Ecological Risk Assessment of Contaminated Sites. February, 1995, 1996, and 1997. (Environmental Services Association of Alberta).
- Human Health and Ecological Risk Assessment. Continuing Education course lecture. 1994 and 1996. (University of Calgary).
- Ecological Risk Assessment. December, 1993. (Imperial Oil Resources Ltd.).

### **CONFERENCE ORGANIZATION**

- 1997                      Technical Program Chair for "Risk Based Approaches for Managing Environmental Issues for the Oil and Gas Industry." Air and Waste

Management Association, Annual General Meeting and Technical Conference, April 24 & 25, 1997. Kananaskis, Alberta.

**PROFESSIONAL DEVELOPMENT**

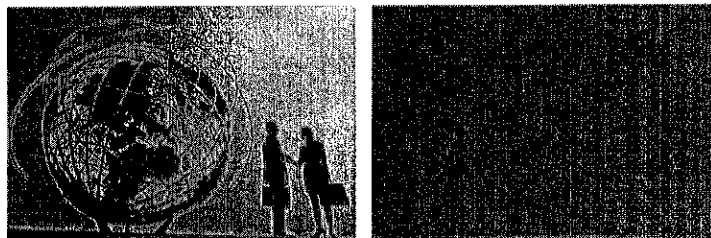
- 1997 Entrepreneur to CEO. A Workshop for Emerging Business Executives. CETAC West/Banff School. 5-day course.
- 1993 Quality Education System™ (QES). Philip Crosby Associates Inc.
- 1989 Environmental Risk Assessment. Banff School of the Environment.
- 1982 Environmental Monitoring Workshop. Alberta Society of Professional Biologists. Fort McMurray, Alberta.
- 1979 Environmental Impact Assessment. Banff School of the Environment.

**AWARDS**

- 1987 Air Pollution Control Association Scholarship Award.
- 1987 University of British Columbia Special Graduate Fellowship.
- 1986 Canadian Environmental Assessment Research Council Fellowship.
- 1985 Air Pollution Control Association award for quality of paper and presentation.
- 1985 Canadian Environmental Assessment Research Council Fellowship.
- 1985 University of British Columbia Graduate Student Summer Scholarship.

# Murray Lee

Senior Partner  
Habitat Health Impact Consulting Corp.  
Calgary, Canada  
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Website: www.habitatcorp.com



Murray Lee, MD, MPH, is a practicing physician who specializes in rural and remote medicine and has worked extensively with Aboriginal populations in the Canadian North, as well as with indigenous populations in New Mexico, California and Alaska. For the past eight years, he has worked in the Kivalliq region of Nunavut and is currently the regular visiting GP for Repulse Bay.

Dr. Lee is also a Clinical Assistant Professor in the Department of Community Health Sciences at the University of Calgary; a Master Teacher in Calgary's Medical School; and a Research Affiliate with the Population Health Intervention Research Centre. In addition to his medical qualifications, Dr. Lee holds a Master's Degree in Public Health from the University of California, Berkeley, with a special emphasis on the impact of the built environment on community health and human health behaviours. He has been extensively involved in the creation, delivery and evaluation of undergraduate medical school curriculum at the University of Calgary and has mentored many students interested in pursuing electives or careers in northern, aboriginal and other resource constrained settings.

As part of his work with Habitat, Dr. Lee has been the principal investigator for human health studies examining the toxicological impacts on population health of various resource extraction projects. For other Habitat projects, Dr. Lee has been instrumental in directing the approach to health research. He brings to the project an on-the-ground understanding of health issues that are relevant for First Nations and Northern populations and he understands the realities of health care delivery in small and isolated communities.

## Professional Affiliations & Registrations

- Clinical Assistant Professor, Department of Community Health Sciences, University of Calgary
- Master Teacher, Faculty of Medicine, University of Calgary
- Research Affiliate, Population Health Intervention Research Centre, University of Calgary
- Vice Chair, Society of Practitioners of Health Impact Assessment International Association of Impact Assessment, Member
- Institute for Population Health, member
- International Association for Impact Assessment, member

## Fields of Competence

- Rural and northern medicine
- Population health research design
- Health Impact Assessment to IFC and NEPA standards
- Design and implementation of HIA guidelines

## Education

- PhD candidate, Epidemiology, University of California, Berkeley, 2010 (USA)
- MPH, Public Health, University of California, Berkeley, 2006 (USA)
- Family Medicine Residency, Queen's University, 1996 (Canada)
- MD, Medicine, University of Calgary, 1994 (Canada)
- BSc., Physiology, McGill University, 1990 (Canada)

## Selected Publications and Presentations

Devetten G, Buntain B, Lee M. *Exploring the cultural connection between walrus, trichinellosis and the Inuit People of Repulse Bay, Nunavut*. 2011 Global Health Conference, Montreal PQ

Auger J, Tamburrini A, Orenstein M, Lee M. *Towards an Indigenous View of Health: A Report to the Bigstone Health Commission and Shell Canada*. March, 2009.

Lee MC, Orenstein MR, Richardson MJ. *Systematic Review of Walking to School and Children's Physical Activity and Weight*. *Journal of Physical Activity and Health* 2008, 5, 930-949.

McLaren, L., Kirkpatrick, S., McIntyre, L., Lee, M., Rock, M. (2008). Speak up to fix unhealthy imbalance. *The Calgary Sun*, October 30, 2008

*Safe Routes to School Safety and Mobility Analysis: Report to the California Legislature* (2007). Prepared for the California Department of Transportation and University of California, Berkeley, Traffic Safety Center.

*Health Impact Assessment Training Workshop* for the Ministry of Public Health of Brazil, organized by the World Health Organization, Brasilia, June 17-19 2008.

*Health Impact Assessment*, invited speaker, Conference Board of Canada Roundtable on the Socioeconomic Determinants of Health, Vancouver, February 2008.

*Health and the Human Environment*, invited lecture, Interdisciplinary MPH Seminar, University of California, Berkeley, March 2008.

*Health Impact Assessment*, Health and Society Seminar Series, Population Health Interventions Research Centre, University of Calgary, January 2008.

## Selected Key Projects

**Evaluation of Environmental Contaminant Exposure in Children in Flin Flon, Man. and Creighton, Sask.** Client: Hudson Bay Mining and Smelting Company. April 2009 - ongoing

**Health Impact Assessment for Alexco Silver Mine Developments, Keno City, Yukon.** Client: Yukon Department of Health and Social Services. April 2012 - ongoing.

**Public Health sections of the Environmental Impact Statement (EIS) being prepared for the effects of seismic and exploratory drilling activities in the Arctic Ocean.** Client: North Slope Borough Alaska. Sept 2010 - ongoing

**Public Health sections for the Environmental Impact Statement (EIS) of the National Petroleum Reserve Alaska Leasing Plan.** Client: North Slope Borough Alaska. Sept 2010 - ongoing

**Roca Honda Uranium Mine EIS - Public Health Chapters, New Mexico, USA.** Client: US Forest Service and Mangi Environmental. October 2010-ongoing.

**Wild Steer Butte Wind Energy Project Integrated Assessment, Alberta, Canada.** Client: Shell Canada. 2009-2011.

**Shell Grosmont Venture Commercial Project Baseline Data Collection, Alberta, Canada** Client: Royal Dutch Shell. 2007-2010.

**Shell Grosmont Venture North Field Test Integrated Impact Assessment, Alberta, Canada.** Client: Royal Dutch Shell. 2007-2010.

# Marla Orenstein

Senior Partner  
Habitat Health Impact Consulting Corp.  
Calgary, Alberta, Canada  
Tel: (403) 451-0097  
Email: [marla@habitatcorp.com](mailto:marla@habitatcorp.com)  
Website: [www.habitatcorp.com](http://www.habitatcorp.com)



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**Marla Orenstein** is an epidemiologist with a particular interest in lifestyle and environmental risk factors for chronic disease and injury. She works with decision-makers in business, government and academia to assess the health of communities, the factors that influence it, and how social, economic or physical change might impact community health. Her recent work has focused on the health implications of natural resource development, including in areas such as British Columbia, Alaska and the Alberta oil sands and within the US NEPA process.

Marla holds an M.Sc. in Epidemiology from the University of Edinburgh. As part of her work with the Alberta Cancer Board and the University of California, Marla was involved in designing, conducting, analyzing and publishing results of population-level research studies including studies on physical activity and cancer risk, chronic disease in rural populations, and environmental determinants of disease. Marla's work with Habitat has involved numerous projects that analyze, synthesize and communicate complex health data for a wide variety of audiences. This includes developing a guidance tool that helps different stakeholders to anticipate the health effects commonly associated with natural resource development projects.

Marla is a founding partner of Habitat Health Impact Consulting, and is a leader in the field of Health Impact Assessment (HIA). She has led HIAs, has helped develop HIA practice standards, and has provided mentoring and assistance to external agencies to help them complete their own HIAs. She has worked with government to help develop HIA processes for public policy and has offered HIA training in Brazil, Mexico, Portugal, the US and Canada.

Ms. Orenstein's publications include journal articles and book chapters on HIA and on other aspects of chronic disease and injury. She is currently co-authoring a textbook on HIA that will be published by Springer in 2013.

## Professional Affiliations & Registrations

- International Association of Impact Assessment, Member
- Society for Practitioners of Health Impact Assessment (SOPHIA), founding member
- Institute for Population Health, member

## Committee/Board Activities

- Member, Scientific Committee, Health Impact Assessment international conferences, 2009 and 2012.
- Organizer, Health Impact Assessment in the Americas Workshop (2008, 2010, 2011)
- Member, North American HIA Practice Standards Group

## Fields of Competence

- Epidemiology
- Health Impact Assessment (HIA)
- Integrated assessment
- Natural resource and energy sectors
- Qualitative and quantitative health research study design

## Education

- M.Sc. Epidemiology, University of Edinburgh, Scotland, 1997
- B.A. English Literature, McGill University, Canada 1990

# Habitat

HEALTH IMPACT CONSULTING

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## Selected Key Projects

**Community health assessment of the Trans-Mountain Pipeline Expansion Project.** Kinder Morgan. British Columbia, Canada. 2012-2013.

**Health Impact Assessment of mining activities in Keno City, Yukon.** Yukon Department of Health & Social Services. Yukon, Canada. 2012.

**Environmental Impact Statement for New Mexico's proposed Roca Honda Uranium Mine.** Strathmore Minerals Inc. / U.S. Forestry Service / State of New Mexico. New Mexico, USA. 2010-2012.

**Development of a Canadian Rapid Mental Health Impact Assessment Toolkit.** Public Health Agency of Canada. Ontario, Canada. 2012.

**Public Health Strategy Baseline Indicators Report and Evaluation Framework.** Nunavut Department of Health & Social Services. Nunavut, Canada. 2011-2012.

**Public Health sections of the Environmental Impact Statement (EIS) for the National Petroleum Reserve Alaska Leasing Plan.** North Slope Borough Department of Health & Social Services. Alaska, USA. 2010-2012.

**Public Health sections of the Environmental Impact Statement (EIS) on the effects of seismic and exploratory drilling activities in the Arctic Ocean.** North Slope Borough Department of Health & Social Services. Alaska, USA. 2010-2012.

**Integrated Impact Assessment for Shell's Groundbirch Venture.** Shell Canada. British Columbia, Canada. 2010-2012.

**Quest Carbon Capture & Storage Health Impact Assessment.** Shell Canada. Alberta, Canada. 2010-2011.

**Wild Steer Butte Wind Energy Project Integrated Assessment.** Shell Canada. Alberta, Canada. 2009-2010.

**Health Impact Assessment for Public Policy (HIAPP) Project.** Government of Alberta / Alberta Health and Wellness. Alberta, Canada. 2009-2010.

**Development of the Health Effects Assessment Tool (HEAT): An Innovative Guide for HIA in Resource Development Projects.** Association of Public Health Observatories / HIA Gateway. UK. 2009.

**Scan of Health Equity Impact Assessment Tools.** Public Health Agency of Canada. Ontario, Canada. 2009.

**North Field Test Integrated Assessment.** Royal Dutch Shell. Alberta, Canada. 2007-2008.

**Technical assistance for an HIA of the Lower Duwamish Waterway Superfund Cleanup.** University of Washington / Pew Charitable Trusts. Washington, USA. 2012-2013.

**Technical assistance for an HIA of a natural gas development in Garfield County.** Colorado School of Public Health / Pew Charitable Trusts. Colorado, USA. 2010-2011.

**Evaluation of Environmental Contaminant Exposure in Children in Flin Flon, Man. and Creighton, Sask..** Hudson Bay Mining and Smelting Company. Manitoba, Canada. 2009-2010.

**Follow-up evaluation of lead exposure among child residents of the Flin Flon area.** Hudson Bay Mining and Smelting Company. Manitoba, Canada. 2011-2012.

**Economic Burden of Occupational Cancer in Alberta.** Alberta Health Services – Alberta Cancer Board. Alberta, Canada. 2009.

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## Selected Publications and Presentations

A Froese K and Orenstein M. Integrating Health in Environmental Risk Assessments (chapter). In: *Environmental Risk Assessment and Management from a Landscape Perspective*; L. Kapustka & WG Landis, ed. Hoboken: John Wiley & Sons (2010)

Orenstein, M. *The Canadian Rapid Mental Health Impact Assessment Toolkit*. January, 2012.

Orenstein M, Fossgard-Moser T, Hindmarch T, Dowse S, Kuschminder J, McCloskey P, Mugo RK. (2010) *Case study of an integrated assessment: Shell's North Field Test in Alberta, Canada*. Impact Assessment and Project Appraisal. 28:2; 147-157.

Barron T, Orenstein M, and Tamburrini A-L. *Health Effects Assessment Tool (HEAT): An Innovative Guide for HIA in Resource Development Projects*. HIA Gateway / Association of Public Health Observatories. August, 2009.

Lee MC, Orenstein MR, Richardson MJ. *Systematic Review of Walking to School and Children's Physical Activity and Weight*. Journal of Physical Activity and Health 2008, 5, 930-949.

*Safe Routes to School Safety and Mobility Analysis: Report to the California Legislature* (2007). Prepared for the California Department of Transportation and University of California, Berkeley, Traffic Safety Center.

Friedenreich CM, Orenstein MR. *Physical activity and cancer prevention: etiologic evidence and biological mechanisms*. Journal of Nutrition, 2002 Nov;132(11 Suppl):3456S-3464S.

Orenstein MR, Schenker MB. *Environmental asbestos exposure and mesothelioma*. Current Opinion in Pulmonary Medicine, 2000 Jul;6(4):371-7.

**Alan Diduck  
Curriculum Vitae  
September 2012**

**A) BUSINESS ADDRESS**

Department of Environmental Studies and Sciences  
The University of Winnipeg  
515 Portage Avenue  
Winnipeg, Manitoba R3B 2E9  
Office: 2RC055

**B) BUSINESS TELEPHONE, FAX, E-MAIL**

Tel: +1 (204) 786-9777  
Fax: +1 (204) 774-4134  
E-mail: a.diduck@uwinnipeg.ca  
Website: ion.uwinnipeg.ca/~adiduck

**C) DEGREES HELD**

Doctorate, Department of Geography, University of Waterloo, June 2001  
Master of Natural Resources Management, Natural Resources Institute, University of Manitoba, February 1995  
Bachelor of Law, Faculty of Law, University of Manitoba, May 1984

**D) CURRENT RANK AT THE UNIVERSITY OF WINNIPEG**

Associate Professor, Tenured

**E) PROFESSIONAL MEMBERSHIPS**

Environmental Studies Association of Canada, 1997-  
Canadian Association of Geographers, 1999-  
- Chairperson, Resources and Environment Study Group, 2005-2008  
International Association for Impact Assessment, 1999-2006  
International Association for Public Participation, 1999-2006  
Law Society of Manitoba (inactive status), 1985-present

**F) ACADEMIC EMPLOYMENT HISTORY**

Director, Environmental Studies Program, The University of Winnipeg, August 2002 to June 2008  
SSHRC Postdoctoral Fellow, Natural Resources Institute, University of Manitoba, August 2001 to July 2002



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Sessional Instructor, Natural Resources Institute, University of Manitoba, September 1999 to July 2002

Research Associate, Natural Resources Institute, University of Manitoba, September 1997 to July 2002

Teaching Assistant, Department of Geography, University of Waterloo, September 1997 to May 1998

## **G) PROFESSIONAL EMPLOYMENT HISTORY**

Executive Director, Community Legal Education Association, Winnipeg, Manitoba, January 1990 to August 1997

Program Coordinator, Community Legal Education Association, Winnipeg, Manitoba, October 1985 to January 1990

Articling Student, Legal Aid Manitoba, Brandon, Manitoba, June 1984 to June 1985

## **H) SCHOLARLY AND PROFESSIONAL ACTIVITIES**

### **i) Journal Editorial Boards**

Environments, February 2008 -

### **ii) Journal and Book Referee**

Journal of Business Ethics, July 2012

Ecology and Society, June 2012

Journal of Business Ethics, August 2011

A book proposal for Wilfrid Laurier University Press, December 2010

Environments, June 2010

Environment and Planning A, March 2010

Ecology and Society, December 2009

One chapter of Adaptive Capacity: Building Environmental Governance in an Age of Uncertainty, Heidelberg: Springer, October 2009

A book proposal for Fernwood Publishing, July 2009

Environmental Education Research, June 2009

One chapter of Adaptive Capacity: Building Environmental Governance in an Age of Uncertainty, Heidelberg: Springer, March 2009

Impact Assessment and Project Appraisal, February 2009

Environments, March 2008

Four chapters of Humans in the Landscape: Introducing Environmental Studies, New York: Norton and Company, February 2008

Impact Assessment and Project Appraisal, December 2007

Environmental Management, July 2007

Geoforum, March 2007

Environmental Management, December 2005

One chapter of Adaptive Co-Management: Moving Beyond the Critiques of Co-Management, Vancouver: University of British Columbia Press, October 2005

Environments, April 2005

Environments, December 2004

Prairie Perspectives, May 2004

Our Environment: A Canadian Perspective, Scarborough, ON: Nelson Thomson Learning, November 2003

One chapter of Breaking Ice: Renewable Resource and Ocean Management in the Canadian North, Calgary: University of Calgary Press, November 2003

Environments, August 2003

Mitigation and Adaptation Strategies for Global Change, April 2003

Environmental Management, May 2002

Natural Hazards, November 2001

Journal of Environmental Management, July 2000

### iii) Research Grant Application Referee

CRC SSHRC Tier 1 Renewal Application July 2011

CRC SSHRC Tier 2 Renewal Application February 2011

SSHRC Standard Research Grant Program, 2004, 2005, 2006

Research Council of Norway Outstanding Young Investigators Scheme, 2004

Shastri Indo-Canadian Institute Student Research Application Program, 2003

### I) AWARDS AND HONOURS

The University of Winnipeg, Award of Exceptional Merit, 2002/03, 2003/04, 2004/05, 2005/06, 2007/08, 2010/11

SSHRC Doctoral Fellowship, 1999-2001, \$16,620 per annum

Ontario Graduate Scholarship, 1999, \$11,859 (declined)

University of Waterloo Merit Scholarship, 1999, \$3,000

Ontario Graduate Scholarship, 1998, \$11,859

University of Waterloo Entrance Scholarship, 1997, \$3,500

University of Manitoba, Faculty of Law, Harry Ginpil Memorial Bursary, 1982, \$500

**J) CURRENT AREAS OF SCHOLARLY INTEREST**

Resource and environmental management, environmental impact assessment, sustainable development, public involvement, transformative learning, social learning, adaptive governance

**K) COURSES TAUGHT**

ENV-1600/3 Human-Environmental Interactions, Fall and Winter, 2002/03, Fall and Winter 2003/04, Fall 2004, Winter 2006, Fall 2006, 2007, 2009, 2010, 2011

ENV-2401/1 Forest Field Skills Camp (Coordinator) Spring 2004, 2006, 2008

ENV-2600/3 Business and the Environment, Fall 2009, Winter 2012

ENV-3035/3 Law and the Environment, Winter 2005, 2006, 2007, 2008, 2010, 2011, 2012

ENV-3610/3 Research Projects, Winter 2011

ENV-4613/3 Directed Readings in Environmental Studies, Fall 2004 (two students), Winter 2005, Fall 2005 (two students), Winter 2008 (two students), Spring 2010, Fall 2010 (two students)

GEOG-4701/3 Directed Readings in Human Geography, Spring 2011, Fall 2011

POL-7335/3-UM-19.947 Politics Directed Readings: Community-based Methodologies in Resource and Environmental Management, University of Manitoba-University of Winnipeg Joint Masters of Public Administration Program, Spring 2004

UIC-4001/6 Directed Readings in Urban and Inner-City Studies, Fall / Winter 2010/11

UM-056.725 Resource and Environmental Management Tools, Natural Resources Institute, University of Manitoba, Winter 2002, (three credit hour graduate seminar)

UM-056.707 Readings in Natural Resources Management, Natural Resources Institute, University of Manitoba, Winter 2008, 2011

**L) MENTORING AND STUDENT TRAINING**

At the undergraduate level, I have supervised 19 research assistants, 12 research course projects, and three honours theses.

At the graduate level, as an Adjunct Professor in the Faculty of Environment, Earth and Resources at the University of Manitoba:

- I supervise two Masters students, one PhD student and one Postdoctoral fellow, and sit on the advisory committees for two Masters students and three PhD students.
- I have supervised four Masters students, and sat on the advisory committees for 15 Masters and two PhD students, who successfully completed their theses.

## **M) RESEARCH FUNDING**

### **i) Peer Reviewed External Grants**

2009-2014, SSHRC Community University Research Alliance, \$1,000,000, Common Ground Research Forum: a cross-cultural learning platform for resource sharing (Co-investigator) (John Sinclair, Principal Investigator)

2008-2011, SSHRC Aid to Small Universities, \$90,000, Environment, sustainability and health (Co-investigator) (Sandra Kirby, Principal Investigator)

2006-2010, SSHRC Standard Research Grant, \$114,784, Transformations des politiques publiques forestières au Canada (Collaborator) (Guy Chiasson, Principal Investigator)

2008-2009, SSHRC Community University Research Alliance, Letter of Intent, \$20,000, Tunnel Island research forum: a cross-cultural learning platform for resource sharing (Co-investigator) (John Sinclair, Principal Investigator)

2008-2009, Canadian International Development Agency / Shastri Indo-Canadian Institute, \$20,000, Encouraging conservation and sustainable development in the Indian Himalaya through partnerships and participatory governance (Co-investigator) (John Sinclair, Principal Investigator)

2006-2008, SSHRC Research Development Initiative, \$58,000, Charting the new territory of adaptive co-management: collaborating, learning and adapting through complexity (Collaborator) (Ryan Plummer, Principal Investigator)

2003-2007, SSHRC Standard Research Grant, \$92,157, Responding to complexity, uncertainty, and conflict: case studies of social learning in resource and environmental management

2003-2005, Canadian International Development Agency / Shastri Indo-Canadian Institute, \$112,000, The roles of the public, private and civic sectors in sustainable environmental management: a search for balance (Co-investigator) (John Sinclair, Principal Investigator)

2001-2002, SSHRC Postdoctoral Fellowship, \$35,028 per annum, Social learning for sustainable development: a transformative approach to environmental assessment

### **ii) Internal Grants**

2010, The University of Winnipeg Travel Grant, \$2,000, Royal Geographical Society, London, England

2010-2011, SSHRC 4A Research Grant, \$4,500, Case studies of multi-level learning in resource and environmental governance in Canada

2009-2010, SSHRC 4A Research Grant, \$3,500, Case studies of multi-level learning in resource and environmental governance in Canada

2008-2009, SSHRC 4A Research Grant, \$5,000, "Scaling up" the learning imperative: a longitudinal and regional perspective on social learning in resource and environmental governance

2007-2008, SSHRC 4A Research Grant, \$5,000, A longitudinal and regional perspective on social learning (processes, results, barriers and dynamics) in resource and environmental governance systems

2006, The University of Winnipeg Travel Grant, \$1,800, International Disaster Reduction Conference, Davos, Switzerland

2005-2006, The University of Winnipeg President's Innovative Projects Fund, \$2,000, Supporting the SunSet project in the development of a comprehensive sustainability plan for The University of Winnipeg

2005-2006, The University of Winnipeg Erica and Arnold Roger Teaching and Learning Fund, \$2,000, Supporting the SunSet project in the development of a comprehensive sustainability plan for The University of Winnipeg

2003, The University of Winnipeg Travel Grant, \$1,000: Annual Meeting of the Canadian Association of Geographers

2002, The University of Winnipeg Start Up Research Grant, \$10,000: Unpacking social learning in social-ecological systems

2002, University of Manitoba-SSHRC Research Grant, \$5,000: Social learning for sustainable development: a transformative approach to environmental assessment

## **N) LIFETIME PUBLICATIONS**

### **i) Peer Reviewed**

2013. (in press). Sinclair, A.J., Diduck, A.P., and M. McCandless. A comparative case study of small hydro development in the Indian Himalaya. In Spatial Diversity and Dynamics in Resources and Urban Development (Regional Resources - Volume I), edited by A.K. Dutt, A.G. Noble, F.G. Costa, S.K. Thakur and H.S. Sharma. Heidelberg: Springer, 25 pages.

2012. Diduck, A.P., A.J. Sinclair, G. Hostetler and P. Fitzpatrick. Transformative learning theory, public involvement, and natural resource and environmental management. Journal of Environmental Planning and Management. DOI:10.1080/09640568.2011.645718

2012. Kent, J., Sinclair, A.J., and A. Diduck. Stakeholder engagement in sustainable adventure tourism development in the Nanda Devi Biosphere Reserve, India. International Journal of Sustainable Development & World Ecology, 19(1) 89-100.

2010. Diduck, A.P. The learning dimension of adaptive capacity: untangling the multi-level connections. In Adaptive Capacity: Building Environmental Governance in an Age of Uncertainty, edited by D. Armitage and R. Plummer. Heidelberg: Springer, 199-222.

2010. Diduck, A.P. Incorporating participatory approaches and social learning. In Resource and Environmental Management in Canada: Addressing Conflict and Uncertainty 4<sup>th</sup>, edited by B. Mitchell. Toronto: Oxford University Press, 495-525.

2009. Sinclair, A.J., and A.P. Diduck. Public participation in Canadian environmental assessment: enduring challenges and future directions. In Environmental Impact

- Assessment: Participation and Practice 2<sup>nd</sup>, edited by K.S. Hanna. Toronto: Oxford University Press, 58-82.
2009. Armitage, D., Plummer, R., Berkes, F., Arthur, R., Davidson-Hunt, I., Diduck, A.P., Doubleday, N., Johnson, D., Marschke, M., McConney, P., Pinkerton, E., and L. Wollenberg. Adaptive co-management for social- Frontiers in Ecology and the Environment ecological complexity. 7(2) 95-102.
2008. Moyer, J., Fitzpatrick, P., Diduck, A.P., and B. Froese. Toward community-based monitoring in the hog industry in Manitoba. Canadian Public Administration 51(4) 637-658.
2008. Sinclair, A.J., Diduck, A.P., and P. Fitzpatrick. Conceptualizing learning for sustainability through environmental assessment: critical reflections on 15 years of research. Environmental Impact Assessment Review 28(7) 415-428.
2007. Hayward, G., Diduck, A.P., and B. Mitchell. Social learning outcomes in the Red River Floodway environmental assessment. Environmental Practice 9(4) 239-250.
2007. Diduck, A.P., Sinclair, A.J., Pratap, D., and G. Hostetler. Achieving meaningful public involvement in the environmental assessment of hydro development: case studies from Chamoli District, Uttarakhand, India. Impact Assessment and Project Appraisal 25(3) 219-231.
2006. McGurk, B., Sinclair, A.J., and A.P. Diduck. An assessment of forest management stakeholder advisory committees: case studies from Manitoba, Canada. Society and Natural Resources 19(9) 809-826.
2005. Diduck, A.P., Moyer, J., and E. Briscoe. A social learning analysis of recent flood management initiatives in the Red River basin, Canada: systemic impediments to double-loop learning. In Sustaining Our Futures: Reflections on Environment, Economy and Society, edited by D. Shrubsole and N. Watson. Waterloo, ON: Department of Geography Publication Series No. 60, University of Waterloo, 127-164.
2005. Sinclair, A.J., and A.P. Diduck. Public participation in Canadian environmental assessment: enduring challenges and future directions. In Environmental Impact Assessment: Participation and Practice, edited by K.S. Hanna. Toronto: Oxford University Press, 53-74.
2005. Diduck, A.P., Bankes, N., Clark, D., and D. Armitage. Unpacking social learning in social-ecological systems: case studies of polar bear and narwhal management in northern Canada. In Breaking Ice: Renewable Resource and Ocean Management in the Canadian North, edited by F. Berkes, R. Huebert, H. Fast, M. Manseau, and A.P. Diduck. Calgary: University of Calgary Press, 269-290.
2005. Huebert, R., Manseau, M., and A.P. Diduck. Conclusion: integration, innovation, and participation. In Breaking Ice: Renewable Resource and Ocean Management in the Canadian North, edited by F. Berkes, R. Huebert, H. Fast, M. Manseau, and A.P. Diduck. Calgary: University of Calgary Press, 363-372.
2005. Berkes, F., R. Huebert, H. Fast, M. Manseau, and A.P. Diduck. eds. Breaking Ice: Renewable Resource and Ocean Management in the Canadian North. Calgary, AB: University of Calgary Press.

2004. Diduck, A.P. Incorporating participatory approaches and social learning. In Resource and Environmental Management in Canada: Addressing Conflict and Uncertainty, edited by B. Mitchell. Toronto: Oxford University Press, 497-527.
2003. Sinclair, A.J., Diduck, A.P., Morris-Oswald, T., and M. Olzyck. Public involvement in flood management in the Red River basin: an assessment of a recent initiative. Canadian Water Resources Journal 28(3) 461-480.
2003. Diduck, A.P., and B. Mitchell. Research note: "Curing" affected communities and publics. In Environmental Impact Assessment: Practical Solutions to Recurrent Problems, by D.P. Lawrence. New York: Wiley and Sons, 268-269.
2003. Diduck, A.P., and B. Mitchell. Learning, public involvement and environmental assessment: a Canadian case study. Journal of Environmental Assessment Policy and Management 5(3) 339-364.
2002. Sinclair, A.J., Diduck, A.P., and P. Fitzpatrick. Public hearings in environmental assessment: towards a civics approach. Environments 30(1) 17-36.
2002. Diduck, A.P., and A.J. Sinclair. Public involvement in environmental assessment: the case of the nonparticipant. Environmental Management 29(4) 578-588.
2001. Sinclair, A.J., and A.P. Diduck. Public involvement in EA in Canada: a transformative learning perspective. Environmental Impact Assessment Review 21(2) 113-136.
2000. Sinclair, A.J., and A.P. Diduck. Public involvement in environmental impact assessment: a case study of hydro development in Kullu District, Himachal Pradesh, India. Impact Assessment and Project Appraisal 18 (1):63-75.
1999. Diduck, A.P. Critical education in resource and environmental management: learning and empowerment for a sustainable future. Journal of Environmental Management 57:85-97.
1997. Diduck, A.P., and A.J. Sinclair. Testing the concept of critical environmental assessment (EA) education. In Canadian Environmental Assessment in Transition, edited by A.J. Sinclair. Waterloo, ON: Department of Geography Publication Series No. 49, University of Waterloo, 77-124.
1997. Diduck, A.P., and A.J. Sinclair. The concept of critical environmental assessment (EA) education. The Canadian Geographer 41 (4):294-307.
1995. Sinclair, A.J., and A.P. Diduck. Public education: an undervalued component of the environmental assessment public involvement process. Environmental Impact Assessment Review 15 (3):219-240.

## ii) Not Peer Reviewed

2011. Cameron, A., Cotton, C., Davidson-Hunt, I., Diduck, A.P., Findlay, J., Newton, T., and A.J. Sinclair. Common Ground Research Forum: a cross-cultural learning platform for resource sharing. In Social Learning and Sustainability: Exploring Critical Issues in Relation to Environmental Change and Governance, Workshop proceedings. Stockholm

Resilience Centre, Stockholm, Sweden 1-2 June 2010. Stockholm: Stockholm Environment Institute, 23.

2006. Diduck, A.P., Briscoe, B., and B. Mitchell. Community-based social learning in flood management: a Canadian case study. In Proceedings of the International Disaster Reduction Conference, IDRC Davos 2006, Davos, Switzerland, August 27-September 1, 2006, Volume 2, Extended Abstracts A-R, edited by W.J. Ammann, J. Haig, C. Huovinen and M. Stocker, Davos: Swiss Federal Research Institute WSL, 142-144.

2006. Diduck, A.P., Briscoe, E., and B. Mitchell. After the storm: a case study of community-based social learning in flood management. In Proceedings for the 59<sup>th</sup> Annual Conference of the Canadian Water Resources Association, Toronto, Canada, June 4-7, 2006, Ottawa: Canadian Water Resources Association.

2006. Diduck, A.P., and A.J. Sinclair. Public involvement in environmental assessment: case studies of hydro development in Chamoli District, Uttarakhand, India. Canadian Association of Geographers, Environment and Resources Study Group Newsletter, February 2006.

2006. Davidson-Hunt, I., A.P. Diduck, and T. Richards. Exploring social networks in NVivo: the story of a wild duet in Winnipeg. Nsight: the QSR Newsletter, Number 28, January 2006.

2005. Berkes, F., R. Huebert, H. Fast, M. Manseau, and A.P. Diduck. eds. Breaking Ice: Renewable Resource and Ocean Management in the Canadian North, Plain Language Version (Prepared by Monica Schuegraf). Winnipeg, MB: Natural Resources Institute, University of Manitoba.

2004. Briscoe, E., Diduck, A.P., and J. Moyer. Social learning and flood management in the Red River basin, Canada. Canadian Association of Geographers, Environment and Resources Study Group Newsletter, May 2004.

2001. Diduck, A.P., and B. Mitchell. Learning, public involvement and environmental assessment: a Canadian case study. Canadian Association of Geographers, Environment and Resources Study Group Newsletter, November 2001.

2001. Diduck, A.P. Learning through Public Involvement in Environmental Assessment: A Transformative Perspective. PhD Thesis, Department of Geography, University of Waterloo, Waterloo, ON.

2000. Diduck, A.P., Sinclair, A.J., and R. Shymko. Congruence of barriers to public involvement in local climate change initiatives and environmental assessment processes. In An International Conference on Climate Change Communication, edited by D. Scott, B. Jones, J. Andrey, R. Gibson, P. Kay, L. Mortsch and K. Warriner. Kitchener-Waterloo, ON: Environment Canada, University of Waterloo, C3:1-C3:11.

1999. Diduck, A.P. Manitoba says no to hearing on hogs. Alternatives Journal 25 (4):3.

1999. Sinclair, A.J., and A.P. Diduck. Development and EIA in the Kullu Valley: an environmental view of Himachal Pradesh, India. The R Report Summer:6-7.

1998. Diduck, A.P. Diamond mine still lacks environmental safeguards. Alternatives Journal 24 (1):4.



1995. Diduck, A.P. Critical Education for Environmental Assessment. MNRM Thesis, Natural Resources Institute, University of Manitoba, Winnipeg.
1993. Diduck, A.P. The incorporation of non-profit organizations in Manitoba. In Non-Profit Organizations: Incorporation and Directors' Liabilities. Winnipeg: The Law Society of Manitoba.
1992. Diduck, A.P. Creating an awareness of the law. Education Manitoba 19 (5):29-31.
- 1990-1992. Diduck, A.P. A Look at the Law (Monthly Column). Inner City Voice.
1990. Diduck, A.P. Making it Legal: A Handbook for Community Arts Councils. Winnipeg, MB: Community Legal Education Association, Manitoba Association of Community Arts Councils.
1989. Diduck, A.P. Understanding the Law: Beginning and Incorporating a Non-Profit Organization. Winnipeg, MB: Community Legal Education Association.
- 1988-1990. Diduck, A.P. The Law and You (Weekly Column). Winnipeg Free Press.
1988. Diduck, A.P. Know Your Welfare Rights. 3rd ed. Winnipeg, MB: Manitoba Anti-Poverty Organization.

### iii) Unpublished documents

2011. Young, K., and A.P. Diduck. An Overview of the Environmental, Social, and Economic Impacts of Transmission Lines: A Paper Submitted to the Public Interest Law Centre of Manitoba. March 2011. Winnipeg: Environmental Studies Program, The University of Winnipeg, 35p.
2007. Moyer, J., P. Fitzpatrick, and A.P. Diduck. Toward Community-Based Monitoring in the Hog Industry in Manitoba: A Paper Submitted to the Manitoba Clean Environment Commission Hog Production Industry Review 2007. June 2007. Winnipeg: Public Interest Law Centre of Manitoba, 75p.
2001. Diduck, A.P., Fitzpatrick, P., and A.J. Sinclair. Improving the Hearings Process: A Report to the Manitoba Clean Environment Commission. July 27, 2001. Winnipeg: Natural Resources Institute, University of Manitoba, 63p.
1999. Sinclair, A.J., and A.P. Diduck. Public Involvement in Hydro Development in Kullu District, Himachal Pradesh, India: Shastri Project on Urban Development and Environmental Impacts in a Mountain Context: Technical Report No. 13. Winnipeg: Natural Resources Institute, University of Manitoba, 50p.
- 1990-1997. Diduck, A.P. Community Legal Education Association (CLEA) Annual Report. Winnipeg, MB: Community Legal Education Association.
- 1990-1996. Diduck, A.P., ed. Annual Human Rights Conference Proceedings and Final Report. Winnipeg, MB: Community Legal Education Association.

## O) PRESENTATIONS

### i) Papers and Posters at Conferences and Symposia

2012. Diduck, A.P., Pratap, D. and A.J. Sinclair. Perceptions of impacts, public participation, and learning in the planning, assessment and mitigation of two hydroelectric projects in Uttarakhand, India. Environmental Studies Association of Canada, May 30-June 2, 2012, Waterloo, ON.
2012. Diduck, A.P., Pratap, D., Deane, S. and A.J. Sinclair. On the need for strategic and cumulative effects assessments in hydropower development in Uttarakhand, India. Canadian Association of Geographers, May 28-June 2, 2012, Waterloo, ON.
2011. Diduck, A.P., Mikulec, P., Unger, H., Froese, B. and K. MacKenzie. Legal and policy barriers to community gardening in Winnipeg, Canada (Poster). International Symposium on Society & Resource Management, June 4-8, 2011, Madison, WI.
2010. Diduck, A.P. Public participation in resource and environmental management: an entry point for research into transformational learning in geography. Royal Geographical Society, September 1-3, 2010, London.
2009. Diduck, A.P. The learning dimension of adaptive capacity: untangling the multi-level connections. Canadian Association of Geographers, May 26-30, 2009, Ottawa.
2009. Griffith, J., Diduck, A.P., and J. Tardif. Transformation in governance: the evolution of Manitoba's forest policy regime (Poster). Sustainable Forest management Network, April 21-23, 2009, Gatineau, PQ.
2007. Diduck, A.P. A conceptual framework of learning for sustainability through participation in environmental assessment. Canadian Association of Geographers, May 29-June 2, 2007, Saskatoon, SK.
2006. Diduck, A.P., Briscoe, E., and B. Mitchell. Community-based social learning in flood management: a Canadian case study. International Disaster Reduction Conference, August 27-September 1, 2006, Davos, Switzerland.
2006. Diduck, A.P., Briscoe, E., and B. Mitchell. After the storm: a case study of community-based social learning in flood management. Canadian Water Resources Association, June 4-7, 2006, Toronto.
2006. Diduck, A.P., and A.J. Sinclair. Civic engagement, hydro development and local sustainability: case studies from Chamoli District, Uttaranchal, India. Canadian Association of Geographers, May 29-June 2, 2006, Thunder Bay, ON.
2004. Diduck, A.P., Moyer, J., and E. Briscoe. A social learning analysis of recent flood management initiatives in the Red River basin, Canada. Environmental Studies Association of Canada, June 3-5, 2004, Winnipeg, MB.
2003. Diduck, A.P., Bankes, N., Clarke, D., and D. Armitage. Unpacking social learning in social-ecological systems: case studies of polar bear and narwhal management in northern Canada. Canadian Association of Geographers, May 27-June 1, 2003, Victoria, BC.

2002. Diduck, A.P., and N. Bankes. Unpacking social learning in social-ecological systems: a case study of the Nunavut Wildlife Management Board's introduction of community-based management of narwhal. Oceans Management Research Network Conference: Canada's Oceans - Research, Management and the Human Dimension, October 25-27, 2002, Ottawa.
2002. Diduck, A.P., Berkes, F., and A.J. Sinclair. A social learning approach to impact assessment: responding to uncertainty and conflict. International Association for Impact Assessment Annual Meeting, June 17-21, 2002, The Hague.
2002. Diduck, A.P., Berkes, F., and A.J. Sinclair. A social learning approach to impact assessment: responding to uncertainty and conflict. Canadian Association of Geographers, May 29-June 1, 2002, Toronto.
2002. Diduck, A.P. The civics approach, social learning and the sustainability transition. Environmental Studies Association, May 28-30, 2002, Toronto.
2001. Diduck, A.P. The educative function of public involvement in environmental assessment: a transformative perspective. Canadian Association of Geographers, May 29-June 3, 2001, Montreal.
2000. Sinclair, A.J., and A.P. Diduck. Public involvement in EA in Canada: a transformative learning perspective. Canadian Association of Geographers, May 30-June 4, 2000, St. Catharines, ON.
1999. Sinclair, A.J., and A.P. Diduck. Public involvement in hydro development in Kullu District, Himachal Pradesh, India. Canadian Association of Geographers, June 2-6, 1999, at Lethbridge, AB.
1998. Diduck, A.P. Critical education in resource and environmental management: learning and empowerment for a sustainable future. Environmental Studies Association of Canada, June 2-6, 1998, Ottawa.
1997. Diduck, A.P. Amalgamation, consolidation and partnerships in the non-profit sector. Manitoba Child Care Association and Family Day Care Association Joint Annual Meeting, June 10, 1997, at St. Andrews, MB.
1996. Diduck, A.P. Current initiatives in public legal education. Public Legal Education Association of Canada Annual Meeting, September 5, 1996, at Saskatoon, SK.
1995. Diduck, A.P. Access to justice: legal resources on the Internet. International Plain Language Network Annual Meeting, August 23, 1995, at Winnipeg, MB.
1994. Diduck, A.P. Towards operational funding for a centralized public legal education secretariat. Public Legal Education Association of Canada Annual Meeting, August 1994, at Ottawa.

## **ii) Session Chair at Conferences and Symposia**

2007. Environmental Impact Assessment, Canadian Association of Geographers, May 29-June 2, 2007, Saskatoon, SK.

2005. Is the True North Strong and Free? How Climate Change Could Impact Governance and Sovereignty in the North, QUEST: North, The Circumpolar Reality – Global Citizens Respond, March 4-5, 2005, at Winnipeg, MB.

2004. Research and Policy, Canadian Risk and Hazards Network Symposium, November 18-20, 2004, at Winnipeg, MB.

2004. Agriculture, Urban and Rural Environments, Environmental Studies Association of Canada annual meeting and conference, June 3-5, 2004, at Winnipeg, MB.

2004. Political Economy of Resources, Canadian Political Science Association annual meeting and conference, June 3-5, 2004, at Winnipeg, MB.

2003. Decision Making in Resource Management, Canadian Association of Geographers annual meeting and conference, May 30, 2003, Victoria, BC.

### iii) Presentations at Workshops and Seminars

2010. Cameron, A., Cotton, C., Davidson-Hunt, I., Diduck, A.P., Findlay, J., Newton, T., and A.J. Sinclair. Invited presenter, Common Ground Research Forum: a cross-cultural learning platform for resource sharing. Workshop at the Stockholm Resilience Centre, Stockholm University, June 1-2, 2010, Stockholm, Sweden.

2008. Diduck, A.P. Co-facilitator, Encouraging conservation and sustainable development in the Indian Himalaya through partnerships and participatory governance. Shastri Indo-Canadian Institute Partnership Development Workshop, December 7-10, 2008, Dehradun, India.

2008. Diduck, A.P., Pratap, D., and A.J. Sinclair. Community participation and social learning in hydropower development in Uttarakhand. Seminar at the Centre for the Study of Regional Development, Jawaharlal Nehru University, November 11, 2008, New Delhi, India.

2008. Diduck, A.P. Lessons from Canadian experiences. Power Projects in Alaknanda Valley: District Level Meeting on Dam-Related Issues, Gopeshwar Municipal Offices, October 14, 2008, Gopeshwar, India.

2005. Sinclair, A.J., Diduck, A.P., Pratap, D., Singh, R.B., and M. Panwar. Public involvement in hydel development in Chamoli District, Uttaranchal, India. Shastri Indo-Canadian Institute Applied Research Project Final Reporting and Dissemination Workshop on Environmental Management in Mountain Regions, December 8, 2005, Dehradun, India.

2005. Sinclair, A.J., Singh, R.B., Diduck, A.P., and M. Panwar. Project overview: the roles of the public, private and civic sectors in sustainable environmental management. Shastri Indo-Canadian Institute Applied Research Project Dissemination Workshop on the Role of Public-Private Cooperation in the Management of Estuaries in Kerala, India, October 27-29, 2005, Cochin, India.

2005. Sinclair, A.J., Diduck, A.P., Pratap, D., Singh, R.B., and M. Panwar. Public involvement in hydro development in Chamoli District, Uttaranchal, India. Shastri Indo-Canadian Institute Applied Research Project Dissemination Workshop on the Role of

Public-Private Cooperation in the Management of Estuaries in Kerala, India, October 27-29, 2005, Cochin, India.

2005. Sinclair, A.J., Singh, R.B., Diduck, A.P., and M. Panwar. Project overview. Shastri Indo-Canadian Institute Applied Research Project Dissemination Workshop on The Roles of the Public, Private and Civic Sectors in Sustainable Environmental Management: A Search for Balance, October 14-15, 2005, Dehradun, India.

2005. Sinclair, A.J., Diduck, A.P., Pratap, D., Singh, R.B., and M. Panwar. Public involvement in hydro development in Chamoli District, Uttaranchal, India. Shastri Indo-Canadian Institute Applied Research Project Dissemination Workshop on The Roles of the Public, Private and Civic Sectors in Sustainable Environmental Management: A Search for Balance, October 14-15, 2005, Dehradun, India.

2005. Diduck, A.P. Public involvement and social learning: promising developments from recent case studies of environmental assessment and community-based planning, Joint session of the Environmental Studies Association of Canada and the Canadian Association of Geographers, May 27 - June 3, 2005, London, ON.

2005. Diduck, A.P. Doing Social Network Analysis with QSR NVivo, A Workshop for Faculty and Students at the Natural Resources Institute, University of Manitoba, April 12, 2005, University of Manitoba, Winnipeg, MB.

2005. Diduck, A.P. Building a Database with QSR NVivo, A Workshop for Faculty and Students at the Natural Resources Institute, University of Manitoba, February 9, 2005, University of Manitoba, Winnipeg, MB.

2004. Diduck, A.P. Environmental education, curriculum development, and technology. Environmental Studies Association of Canada, June 3-5, 2004, Winnipeg, MB.

2003. Diduck, A.P. Resilience theory in oceans management: finding new bridges, avoiding barrier reefs. Oceans Management Research Network Conference: Canada's Oceans - Research, Management and the Human Dimension, November 13-15, 2003, Ottawa.

2002. Diduck, A.P. Conflict resolution, social learning and institutional resilience. Resilience Alliance Workshop on Institutions and Politics, February 27-March 1, 2002, Chiang Mai, Thailand.

#### **iv) Community Events**

2012. Public land trusts as a mechanism to improve security of tenure for community gardens in Winnipeg. Grass Roots Solutions 2012, The University of Winnipeg, March 16, 2012.

2007. Flooding in the Red River Basin. The University of Winnipeg, Division of Continuing Education, The University of Winnipeg, November 12, 2007.

2007. An introduction to climate change. The University of Winnipeg, Division of Continuing Education, The University of Winnipeg, March 14, 2007.

2006. Climate change and global warming: facts and fiction. Meadowood Manor Personal Care Home, June 29, 2006.

2004. They paved paradise and put up a parking lot .... The University of Winnipeg-Seven Oaks School Division College and University Bound Program, December 14, 2004.

2004. Take the nature challenge: how to reduce your ecological footprint. The University of Winnipeg Distinguished Speakers at the Wellington series, January 20, 2004.

2003. Take the nature challenge: reducing your ecological footprint. Atlantic-Garden City United Church, February 16, 2003.

2000. Dams, pigs and mosquitoes: a brief introduction to environmental law in Manitoba. Division of Continuing Education, The University of Winnipeg, October 25, 2000.

**P) ADMINISTRATIVE RESPONSIBILITIES**

**i) Department**

Chair:

- Program Advisory Committee, 2002-2008
- Departmental Review Committee, 2002-2008
- Departmental Curriculum Committee, 2002-2008
- Departmental Awards Committee, 2002-2008
- Departmental Research Committee, 2002-2010

Member:

- Program Advisory Committee, 2009-2010
- Departmental Personal Committee, 2002-2010
- Departmental Review Committee, 2009-2010
- Departmental Curriculum Committee, 2009-2008
- Departmental Awards Committee, 2009-2008

**ii) Faculty**

Member:

- Science Council, 2002-2008
- Environment Task Force, 2006-2008
- Task Force on Technology and Aboriginal Society, 2006-2008
- Curriculum Planning, 2003/04 and 2006/07
- Social Science Council, 2002-2005
- Science Council Website Committee, 2003

- Ad Hoc Interdepartmental Personnel Committee, 2003/04

**iii) University**

Member:

- Senate, 2002-2008
- Senate Executive Committee, 2003-2007
- Interdisciplinary Programs Committee, 2003-2008
- Senate Library Committee, 2004-2008
- Campus Sustainability Council, 2005-2010
- Campus Sustainability Council Academic Initiatives Working Group 2005-2010
- Seven Oaks School Division College and University Bound Program, 2005-2010
- President's ad hoc committee on new science facilities, 2005-2008
- Search Committee for the Principal, Richardson College for the Environment, 2007
- SSHRC Canada Graduate Scholarship Committee, 2004, 2007
- Vice-President's (Research) ad hoc committee on relations with University College of the North, 2006/07
- Vice-President's (Research) ad hoc committee to review the renewal application for the Canada Research Chair in Dendrochronology, 2006
- President's Advisory Committee on The Winnipeg Institute for Human Rights and Global Studies, 2004/05
- SunSet Steering Committee, 2004/05

Chair:

- SSHRC Canada Graduate Scholarship Committee, 2005-2007

**iv) External**

Manitoba Model Forest Inc. Board of Directors (The University of Winnipeg alternate representative), 2003-2008

COPSE Environmental Studies Articulation Committee, 2004-2008

Canadian University Environmental Science Network, 2006-2008

University of Manitoba Faculty of Environment, Earth and Resources Faculty Council, 2002-2004

**Q) OTHER RESPONSIBILITIES**

Student advisor for the Environmental Studies Program, 2002-2008

**R) COMMUNITY SERVICE**

Chair, Manitoba Eco-Network, 2007-2008

Board Member, Manitoba Eco-Network, 2004-2007

Judge, Preliminary Orals Competition, Canon Envirothon, North American  
Championship, Winnipeg, July 27-28, 2006

Advisory Committee member, Centre for Indigenous Environmental Resources, Winter  
Roads and Climate Change Research Project, 2005/06

Finance Officer, Nine Circles Community Health Centre, 2003-2005



CURRICULUM VITAE

**PATRICIA FITZPATRICK**

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**EDUCATION:**

**Bachelor of Arts (Honours)**, Anthropology and Applied Studies Co-op, University of Waterloo, Waterloo Ontario, 1993-1998.

**Masters of Natural Resources Management**, Natural Resources Institute, University of Manitoba, Winnipeg Manitoba, 1999-2001.

**Doctor of Philosophy**, Geography, University of Waterloo, Waterloo Ontario, 2001-2005.

**POSITIONS CURRENTLY HELD:**

- 2011 Associate Professor, Department of Geography, University of Winnipeg.
- 2011 University of Winnipeg Representative, Northern Manitoba Mining Academy.
- 2011 Chair, Research & Education Committee Churchill Northern Studies Centre.
- 2008 Adjunct Professor, Department of Geography, University of Waterloo.
- 2008 Board of Directors, Churchill Northern Studies Centre.
- 2006 Member, Centre for Forest Interdisciplinary Studies.

**PREVIOUS APPOINTMENTS:**

- 2011-12 Co-Chair, Department of Geography, University of Winnipeg.
- 2010-12 Vice Chair, Board of Directors, Churchill Northern Studies Centre.
- 2008-2011 Chair, Environment and Resource Study Group, Canadian Association of Geographers.
- 2006-2011 Assistant Professor, Department of Geography, University of Winnipeg.
- 2006-2010 Secretary to the Board (2006-2009) and Member of the Board (2010), Green Action Centre (formerly Resource Conservation Manitoba).
- 2006 Sessional Instructor, Natural Resources Institute, University of Manitoba. Graduate courses co-taught (with A. John Sinclair): "Environmental Assessment"; and, "Readings in Natural Resource Management: Individual and Social Learning."
- 2005-2006 SSHRC Post Doctoral Fellow, Natural Resources Institute, University of Manitoba.
- 2004-2005 Lecturer, Environmental Studies Program, University of Winnipeg. Course taught: "Human Environment Interactions" (1<sup>st</sup> year).
- 2004 Sessional Instructor, Department of Geography, University of Waterloo. Course taught: "The Regional Geography of Canada" (2<sup>nd</sup> year).
- 2001-2004 Teaching Assistant, Department of Geography, University of Waterloo. Courses: "Geography and Human Habitat" (1<sup>st</sup> year); "Introduction to Environmental Research Methods" (1<sup>st</sup> year); and, "Location of Economic Activity" (2<sup>nd</sup> year).
- 1998-1999 Project Secretariat, Diavik Diamonds Project, Indian and Northern Affairs Canada, Yellowknife, Northwest Territories.
- 1998 Junior Lands Specialist, Indian and Northern Affairs Canada, Yellowknife, Northwest Territories.
- 1997 Environmental Scientist, Indian and Northern Affairs Canada, Yellowknife, Northwest Territories.

**AWARDS:**

Merit for Academic Performance, University of Winnipeg, 2007-2008, 2008-2009, 2009-2010 and 2010-2011.

Outstanding Achievement in Graduate Studies, University of Waterloo	2005
Distinguished Teaching by a Registered Student, University of Waterloo	2005
SSHRC Post Doctoral Fellowship	2005
SSHRC Doctoral Fellowship	2003-2005
Incentive Award, University of Waterloo	2003-2005
Ontario Graduate Scholarship	2002
University of Waterloo Entrance Scholarship	2001
University of Manitoba Graduate Fellowship	2000
Arts Junior Work Report Award, University of Waterloo	1994
University of Waterloo Entrance Scholarship	1993

**RESEARCH FUNDING:**

**i) Peer Reviewed External Grants**

Social Sciences and Humanities Research Council of Canada (SSHRC) (2010-13), Award, \$112,210. Silos and systems, development and sustainability: Catalytic forces in mineral policy? (co-applicant: Mary Louise McAllister).

SSHRC (2009-10), 1A Award, \$12,775. Silos and systems, development and sustainability: Catalytic forces in mineral policy? (co-applicant: Mary Louise McAllister).

SSHRC, (2009-2012), \$250,000. Abandoned mines in northern Canada: Historical consequences and mitigation of current impacts (applicant: John Sandlos; co-applicants: Patricia Fitzpatrick, Arn Keeling, Julia Laite, Deborah Simmons, Yolanda Wiersma).

Aid to Small Universities SSHRC, (2008-2011), \$94,000. Environment, sustainability and health (applicant: Sandra Kirby; collaborators: Soham Bakshi, Alan Diduck, Patricia Fitzpatrick, Judith Harris, Doreen Smith).

**ii) Internal Grants**

SSHRC Aid to Small Universities Grant (Northern Sustainability Project 3), (2009-10), \$7,500. Place Attachment in Thompson, Manitoba.

SSHRC Aid to Small Universities Grant (Northern Sustainability Project 3), (2009-10), \$2,100. Sense of Place in Churchill, Manitoba (applicant: Brittany Shuwera (student); co-applicant: Patricia Fitzpatrick).

University of Winnipeg, Student work study grant, 2009/2010, \$1,270.

University of Winnipeg, Student work study grant, 2008/2009, \$790.

Internal 4A SSHRC Award, 2007, \$5,000. The mineral sector and organizational learning: Communication, rhetoric and practice.

University of Winnipeg, student work study grant, 2006/07, \$790.

Internal 4A SSHRC Award, 2006, \$5,000. Complexities surrounding multi-jurisdictional environmental assessment: Negotiating a place for public participation and learning.

University of Winnipeg Major Grant, 2006, \$5000. Complexities surrounding multi-jurisdictional environmental assessment: Negotiating a place for public participation and learning.

University of Winnipeg Start Up Research Grant, 2006, \$8,000.

**iii) Contracts**

Public Interest Law Centre, 2007, \$3,000: Towards community-based monitoring in the hog industry in Manitoba (co-applicant Alan Diduck).

**PUBLICATIONS:****i) Most significant contributions**

Fitzpatrick, P., Sinclair, A. J., & Mitchell, B. (2008). Deliberative democracy in Canada's North? The Mackenzie Resource Management Act. *Environmental Management*, 42, 1-18.

This paper explores the public participation-learning nexus provided for within environmental assessment, under the framework of deliberative democracy. It makes an important contribution by linking political theory and environmental assessment practice.

Fitzpatrick, P., & Sinclair, A. J. (2009). Multi-jurisdictional environmental impact assessment: Canadian experiences. *EIA Review*, 29, 252-260.

This paper is the outcome of research directed at understanding complexities associated with environmental assessment processes that meet the needs of two or more jurisdictions. It demonstrates the importance of federal involvement in assessment, and thus serves as a seed for my current research surrounding regulatory streamlining. Furthermore, it resulted in an invitation to participate in a workshop on streamlining regulation hosted by the Major Projects Management Office in October 2009, and to present at a workshop on multijurisdictional environmental assessment hosted by Canadian Environmental Network in March 2010.

Sinclair, A. J., & Fitzpatrick, P. (2002). Provisions for more meaningful public participation still elusive in proposed new Canadian EA bill. *Impact Assessment and Project Appraisal*, 20(3), 161-176.

This work considered the proposed new Federal environmental assessment legislation. It was the basis of a presentation to the House of Commons Standing Committee on the Environment and Sustainable Development regarding Bill C-19 and was subsequently requested by the Canadian Environmental Assessment Agency. The work impacted the development of the new Canadian Environmental Assessment Act (2003).

Shuwera, B., & Fitzpatrick, P. (2009). Through the ages: Sense of place in Caliento, MB. *Prairie Perspectives*, 12(1), 123-141.

This paper was originally submitted as a final research paper for a fourth year course on environmental perceptions. It, along with one other paper generated by a student in the course, was presented at the annual conference of the Prairie Division, Canadian Association of Geographers (2008). The publication of the paper marked my first co-authored with a student, which I felt very significant. As well, the paper launched my research agenda focusing on place attachment and has informed my subsequent participation on Masters and PhD committees.

## ii) Referred publications

Diduck, A., Sinclair, A. J., Hostetler, G., & Fitzpatrick, P. (2012). The place and potential of transformative learning theory in investigations of public involvement in natural resource and environmental management. *Journal of Environmental Planning and Management*.

McAllister, M. L., Fitzpatrick, P., & Fonseca, A. (Accepted). Unstable shafts and shaky pillars: institutional capacity and sustainable mineral policy in Canada. *Environmental Politics*.

Fitzpatrick, P., Fonseca, A., & McAllister, M. L. (2011). From the Whitehorse Mining Initiative Towards Sustainable Mining: Lessons learned. *Journal of Cleaner Production*, 19, 376-384.

Fitzpatrick, P., & Sinclair, A. J. (2009). Multi-jurisdictional environmental impact assessment: Canadian experiences. *EIA Review*, 29, 252-260.

Shuwer, B., & Fitzpatrick, P. (2009). Through the ages: Sense of place in Caliento, MB. *Prairie Perspectives*, 12(1), 123-141.

Fitzpatrick, P., Sinclair, A. J., & Mitchell, B. (2008). Deliberative democracy in Canada's North? The Mackenzie Resource Management Act. *Environmental Management*, 42, 1-18.

Moyer, J., Fitzpatrick, P., Diduck, A. P., & Froese, B. (2008). Towards community-based monitoring in the hog industry in Manitoba: A paper submitted to the Manitoba clean environment commission. *Canadian Public Administration Journal*, 51(4), 637-658.

Sinclair, A. J., Diduck, A. P., & Fitzpatrick, P. (2008). Canadian experiences with learning for sustainability through environmental assessment. *Environmental Impact Assessment Review*, 28, 415-428.

Fitzpatrick, P. (2007). A new staples industry? Complexity, governance and Canada's diamond mines. *Policy and Society*, 26(1), 87-103.

Fitzpatrick, P. (2006). In it together: Organizational learning through participation in environmental assessment. *Journal of Environmental Assessment Policy and Management*, 8(2), 157-183.

*This paper is one of the top five articles accessed by readers of the Journal of Environmental Assessment Policy and Management ( see <http://www.worldscinet.com/jeapm/mkt/top.shtml>).*

Fitzpatrick, P. (2006). The environmental assessment process-learning nexus: A Manitoba case study. *Prairie Perspectives*, 9(1), 1-30.

Stelmack, C. M., Sinclair, A. J., & Fitzpatrick, P. (2005). An overview of the state of environmental assessment education at Canadian universities. *International Journal of Sustainability in Higher Education*, 6(1), 36-53.

Fitzpatrick, P., & Sinclair, A. J. (2003). Learning through public involvement in environmental assessment hearings. *Journal of Environmental Management*, 67(2), 161-174.

Sinclair, A. J., Diduck, A. P., & Fitzpatrick, P. (2002). Public hearings in environmental assessment: Towards a civics approach. *Environments*, 30(1), 17-36.

Sinclair, A. J., & Fitzpatrick, P. (2002). Provisions for more meaningful public participation still elusive in proposed new Canadian EA bill. *Impact Assessment and Project Appraisal*, 20(3), 161-176.

**iii) Chapters in edited books**

McAllister, M. L., & Fitzpatrick, P. (2010). Canadian mineral resource development: A sustainable enterprise? In B. Mitchell (Ed.), *Resource and environmental*

*management in Canada: Addressing conflict and uncertainty* (4th ed., pp. 356-381). Toronto, ON, Canada: Oxford University Press.

Fitzpatrick, P., & Sinclair, A. J. (2009). Multi-jurisdictional environmental assessment. In K. Hanna (Ed.), *Environmental impact assessment: Process and practice* (2nd edition ed., pp. 173-192). Toronto, ON, Canada: Oxford University Press.

Fitzpatrick, P. (2008). Complexity, governance and Canada's diamond mines. In M. Howlett & K. Brownsey (Eds.), *The new staple state: Political economy and public policy regimes in Canada's primary industries* (pp. 167-187). Toronto, ON: Emond Montgomery Publications.

Fitzpatrick, P., & Sinclair, A. J. (2005). Multi-jurisdictional environmental assessment. In K. Hanna (Ed.), *Environmental impact assessment: Process and practice* (pp. 160-184). Toronto, ON, Canada: Oxford University Press.

#### **iv) Reports, contributions guest statements and other publications**

Fitzpatrick, P. (2012). Guest Statement: Accountability in resource management: Independent oversight of proponents and governments. In P. Dearden & B. Mitchell (Eds.), *Environmental Change and Challenge: A Canadian Perspective* (4th Edition ed.).

Fitzpatrick, P., & Shuwer, B. (2009). Churchill Community Profile and Sustainability Survey Results. Winnipeg, MB: Institute of Urban Studies, University of Winnipeg.

Moyer, J., Fitzpatrick, P., & Diduck, A. P. (2007). Towards community-based monitoring in the hog industry in Manitoba: A paper submitted to the Manitoba clean environment commission. University of Winnipeg, Winnipeg, MB.

Fitzpatrick, P. (2007). The environmental assessment process – learning nexus: A Manitoba case study. Pages 2-4. CAG Environment and Resources Study Group, CAG Newsletter.

Fitzpatrick, P. (2005). In it together: Organizational learning through participation in EA. unpublished PhD dissertation. University of Waterloo, Waterloo.

Fitzpatrick, P., & Sinclair, A. J. (2003). The benefits of procedural equity. In *Environmental impact assessment: Practical solutions to recurrent problems*, edited by D. Lawrence. Hoboken, NJ: John Wiley & Sons, 392-393.

Diduck, A. P., Fitzpatrick, P. & Sinclair, A. J. (2001). Improving the hearings process: A report to the Manitoba clean environment commission. Natural Resources Institute, Winnipeg, MB.

Fitzpatrick, P. (2001). The role of critical education in a panel that includes hearings. Masters. Natural Resources Institute, University of Manitoba, Winnipeg, MB.

Fitzpatrick, P. (1998). Esker habitat characteristics and traditional land use study in the Slave geological province: A study of the relationship between physical features and archaeological sites. Department of Indian Affairs and Northern Development, Yellowknife, NWT.

**v) Work in progress**

Fonseca, A., Fitzpatrick, P and McAllister, M. (submitted) Policy-making for sustainability in mining towns: a longitudinal analysis of Itabira, Brazil. *Environmental Science and Policy Journal*.

**STUDENT TRAINING:****i) Teaching**

Courses taught at the University of Winnipeg:

GEOG 1102 Introduction to human geography I  
GEOG 1103 Introduction to human geography II  
GEOG 2417 Introduction to economic geography  
GEOG 3330 Research methods (co-instructor)  
GEOG 3401 Population geography  
GEOG 3508 Geographical issues in the developing world  
GEOG 3512 Human geography of northern Canada  
GEOG 4441 Advanced issues in environmental perceptions  
GEOG 4701 Directed readings  
GEOG 4801 Churchill field course (co-instructor)  
GDP 7750 Managing for Environmental Stability (cross-listed with GEOG/ES 4450 Environment and Sustainability I)

**ii) Undergraduate Honours Thesis Supervision**

Wasylycia-Leis, J. (2012). Striving for Sustainability amid Single-Industry Dependence: Community Resilience and Vale in Itabira, Brazil

Shuwera, B. (2009). The dynamic of change: Place attachment in Yellowknife, NWT.

Lyon, C. (2008). Institutions, social resilience, and impact mitigation: A Mackenzie gas project community case study.

**iii) Committee Membership**

*In progress PhD*

Hooykaas, A. Community well-being: The evolution of disciplines into collaborative approaches and their application to urban public gardens. Program started September 2008, Department of Geography, University of Waterloo.

*In progress Masters*



Dykman, K. Learning for sustainability through integrated watershed management planning in Manitoba, Canada. Program started September 2009, Natural Resources Institute, University of Manitoba

*Completed PhD*

Fonseca, A., (2010). Requirements and barriers to strengthening sustainability reporting among mining corporations, Department of Geography, University of Waterloo.

*Completed Masters*

Foth, M., Identifying and assessing barriers to Aboriginal participation in environmental assessment. Program started September 2005, Natural Resources Institute, University of Manitoba.

Montes, J., (2008). Community environmental assessment in rural Kenya – decision making for a sustainable future, Natural Resources Institute, University of Manitoba.

Kerton, S., (2007). The role of transformative learning in fostering a more sustainable society: The case of consuming organic in Canada, Natural Resources Institute, University of Manitoba.

Wheeler, M. (2012) Common land, common ground: Imagining sense of place connections among local people, Natural Resources Institute, University of Manitoba.

**PRESENTATIONS:**

**i) Conference Presentations**

Fitzpatrick, P. (2010, 25 September). Who is regulating the regulators? The role of independent oversight in resource management. Paper presented at the annual meeting of Prairie Canadian Association of Geographers, North Battleford, SK.

Shuwer, B & Fitzpatrick, P. (2009, 19 September). When you can walk through the store or complex and you can say hello: A study of sense of place in Churchill, Manitoba. Paper presented at the annual meeting of Prairie Canadian Association of Geographers, Russell, MB. (presented by Fitzpatrick)

Fitzpatrick, P. (2009, May 31). Is it too much? The environmental assessment of the Mackenzie Gas project. Paper presented at the annual meeting of Canadian Association of Geographers, Ottawa, ON.

Fitzpatrick, P. (2008, September 27). A means to an end? The environmental review of the Mackenzie Gas project. Paper presented at the annual meeting of Prairie Canadian Association of Geographers, Bossevain, MB.

Fitzpatrick, P. (2007, May 31). Deliberative Democracy in Canada's North? The Mackenzie Resource Management Act. Paper presented at the annual meeting of Canadian Association of Geographers, Saskatoon, SK.

- Fitzpatrick, P. (2006, May 25). Learning through participation in EA: Case studies from Canada. Paper presented at the annual meeting of the International Association of Impact Assessment, Stavanger, Norway.
- Fitzpatrick, P. (2005, September 24). Strengthening public involvement in environmental assessment: A Manitoba case study. Paper presented at the annual meeting of Prairie Division, Canadian Association of Geographers, Winnipeg, MB.
- Fitzpatrick, P. (2005, June 4). I hear what you are saying: Organizational learning and EA. Paper presented at the annual meeting of Canadian Association of Geographers, London, ON.
- Fitzpatrick, P. (2005, June 2). Learning to affect change: Strengthening mineral resource management in the Northwest Territories. Paper presented at the annual meeting of Environmental Studies Association of Canada, London, ON.
- Fitzpatrick, P. (2005, April 9). Negotiating the rules: Strengthening interactive policy making in EA. Paper presented at the annual meeting of American Association of Geographers, Denver, CO.
- Fitzpatrick, P. (2003, June 2). Environmental Assessment in a "Harmonized" Arena: The Case of the Sable Gas Panel Review. Paper presented at the annual meeting of Environmental Studies Association of Canada, Halifax, NS.
- Fitzpatrick, P. (2002, June 1). A vision of environmental assessment: Ecological sustainability, public engagement and governance. Paper presented at the annual meeting of Canadian Association of Geographers, Toronto, ON.
- Fitzpatrick, P. (2002, June 19). Learning through public involvement in EA hearings. Paper presented at the annual meeting of International Association of Impact Assessment, The Hague, Netherlands.
- Fitzpatrick, P. (2001, May 31). Education and learning through an environmental assessment panel review. Paper presented at the annual meeting of Canadian Association of Geographers, Montreal, PQ.

## ii) Other Presentations

"Place attachment in Churchill Manitoba." Invited speaker at the Churchill Northern Studies Centre Summer Lecture Series, with Brittany Shuwera (August 26, 2010).

"Cooperation or mass confusion: Inter-jurisdictional coordination of EIA." Invited speaker to the Canadian Environmental Network workshop on multijurisdictional Environmental Assessment, with A. John Sinclair (March 12, 2010).

"Pipe dreams: The Mackenzie Gas Project Redux". Invited speaker, Distinguished Lecturer Series (University of Winnipeg): Fred Douglas Place (December 2007), The Wellington (December 2007).

"Resource management in Canada: Orienteering through the legislative and regulatory processes." Invited speaker to the University of Alaska, Anchorage Bookstore Canada

Colloquium, held in conjunction with the Alaska Energy Summit, Anchorage, Alaska (October 2007).

“Beyond graduate studies: The ins and outs of post-doctoral positions.” Panel Discussant, Annual meeting of Canadian Association of Geographers, Saskatoon, SK (June 1, 2007).

**SCHOLARLY AND ADMINISTRATIVE RESPONSIBILITIES:**

**i) Administrative Committees**

Department:

- Strategic Committee (2009-present)
  - Chair (2011-2012)
- Cultural Geography Committee (2006-present)
  - Chair (2011-2012)
- Curriculum Committee (2006-2011)
- Personnel Committee (2007-2012)
  - Non-voting member (2011-2012)
- Research & Ethics Committees (2006-2007, 2010-2011)
- SSHRC Committee (2008-2012)
- Library Committee (2009-2010)
- Departmental Review Committee (2006-2007)
- Visiting Speaker Committee (2006-2008)

University:

- Member, Senate, The University of Winnipeg (2011-2012)
- Member, Canadian Foundation for Innovation Internal Review Committee (2011-present)
- Member, SSHRC College of Reviewers (2011- present)
- Member, Academic Standards and Misconduct Committee, (2010- 12)
- Member of the Northern Research Committee (2007- present)
- Member, University Faculty Club Board (2006- 2009)
- Chair of the University of Winnipeg Research Committee (2008-2009), member (2007-2008)

**ii) Journal and Book Referee**

Journal articles:

- Canadian Public Policy/Analyse de Politiques: March 2010, January 2011
- Canadian Journal of Urban Research: January 2010, June 2011
- Geography Research Forum: February 2009
- Environmental Politics: July 2009
- Impact Assessment and Project Appraisal: October 2008, November 2008
- Journal of Environmental Assessment Management Policy and Management: April 2011
- Journal of Environmental Management: January 2007
- Regional and Federal Studies: January 2011, August 2011

#### Textbooks:

- McGraw-Hill Ryerson Limited: May 2009
- Oxford University Press: August 2007, December 2008, March 2010

#### Grant Proposals

- SSHRC Insight Grant - External Application Adjudicator (2011)

#### **PROFESSIONAL MEMBERSHIPS:**

Canadian Association of Geographers, 2000-present

International Association for Impact Assessment, 2000-present

Environmental Studies Association of Canada, 2007-2009

(updated September 9, 2012)