## **Contact Information**

200 University Avenue West Waterloo, ON, Canada N2L 3G1 +1-519-888-4567, ext. 31544

ipittman@uwaterloo.ca

#### **Research interests**

- Environmental policy and governance in the Anthropocene
- Landscape- and seascape-scale approaches to planning
- Human communities in an interconnected world
- Social-ecological connectivity

## **Current Positions and Affiliations**

#### **Assistant Professor**

School of Planning, University of Waterloo

#### **Liber Ero Postdoctoral Fellow**

University of Waterloo and University of California, Davis

#### **Social Science Immersion Fellow**

National Socio-Environmental Synthesis Center

#### **Adjunct Professor**

School of Environment and Sustainability University of Saskatchewan

# **Career Highlights**

- Over \$121,000 CAD in research funding as an early-career researcher (since 2014)
- Thirteen highly competitive awards valued at over \$300,000 CAD
- Twenty-three peer-reviewed publications

#### Education

## University of Waterloo, Waterloo, Ontario

Doctor of Philosophy, Social and Ecological Sustainability School of Environment, Resources and Sustainability September 2012 to September 2016

#### University of Regina, Regina, Saskatchewan

Master of Science in Geography, April 2009

## University of Regina, Regina, Saskatchewan

Bachelor of Science in Geography, December 2004

### **Honours and Awards**

As an early-career researcher, I am proud of the honours and awards I have received. I have won several highly-competitive awards and been nominated for multiple prestigious honours.

#### Received:

- SESYNC Social Science Immersion Fellowship, 2016
- Liber Ero Postdoctoral Fellowship Award, 2015
- Ontario Graduate Scholarship Doctoral Award, 2015
- SSHRC Canada Graduate Scholarship Joseph Armand Bombardier Doctoral Award, 2012
- University of Waterloo President's Scholarship, 2012
- Johnson-Shoyama Graduate School Entrance Scholarship, 2012 (declined)
- Saskatchewan Innovation and Opportunities Scholarship, 2012 (declined)
- University of Regina FGSR Travel Grant, 2009
- Institutional Adaptations to Climate Change (SSHRC #412-2003-1001) Fellowship, 2007
- BMO Fellowship in Rural and Northern Studies, 2007
- University of Regina Academic Scholarship, 2000
- University of Regina Scholars Award, 1999-2002
- University of Regina Dean's Honours List, 1999-2002

#### Nominated:

- Trudeau Foundation Scholarship, 2014-15 (Nominated by the University of Waterloo)
- SSHRC Talent Award, 2013-14 (Nominated by the University of Waterloo)

# **Funded Research Projects**

# Indigenous communities: promoting social and ecological sustainability in the face of climate change

\$25,000 CAD March 2017 to present

Role: Co-principal Investigator Funder: National Social-Environmental Synthesis Center

## Fostering transformations to secure sustainable small-scale fisheries in Uruguay

\$26,000 CAD January 2017 to present

Role: Co-principal Investigator Funder: Food and Agriculture Organization of the United

**Nations** 

#### Governance and surprise in social-ecological systems

\$45,800 CAD December 2014 to present

Role: Co-principal Investigator Funder: National Social-Environmental Synthesis Center

#### Strengthening teamwork to confront socio-ecological challenges

\$25,000 CAD September 2014 to present

Role: Co-principal Investigator Funder: Inter-American Institute for Global Change

Research

## **Teaching and Mentorship**

#### **PhD Student Committees**

Walker, Heidi (PhD Student) University of Saskatchewan

Research topic: Intersectionality and climate change vulnerability to wildfires

#### **Guest Lectures**

Pittman J. (2010) Climate change vulnerability and adaptation in First Nations communities. University of Regina, October 12, 2010, GEOG 2100 Human-Environment Relationships.

Pittman, J. (2009) Coming to know: My experience with traditional knowledge as a wêmistikôsiw in the land of the nêhiyawak. University of Guelph, March 20, 2009, GEOG 4220 Local Environmental Management.

#### **Organized Training Sessions**

An introduction to community-based climate change vulnerability assessment. July 23 to August 3, 2012. Soufriere, Saint Lucia.

# **Engagement with Policy and Practice**

Expert, Task Team on Equitable Management for Local Communities as part of the Pathway to Canada Target 1 Initiative. http://www.conservation2020canada.ca/

Expert witness, the Government of Canada's Standing Committee on Environment and Sustainable Development. Federal Protected Areas and Conservation Objectives. October 25, 2016. http://www.parl.gc.ca/Committees/en/ENVI/StudyActivity?studyActivityId=8852776

Director, Canadian Water Resources Association, Saskatchewan Branch

Core team member, Transboundary Grassland Partnership

# **Peer-reviewed Publications**

Blasiak, R., Durussel, C., Pittman, J. et al. (2017) The role of NGOs in negotiating the use of biodiversity in marine areas beyond national jurisdiction. *Marine Policy DOI*: 10.1016/j.marpol.2017.03.004.

Hadarits, M., Pittman, J., et al. (2017) The interplay between incremental, transitional, and transformational adaptation: A case study of Canadian agriculture. Regional Environmental Change. DOI 10.1007/s10113-017-1111-y.

Blasiak, R., Pittman, J., et al. (2016) Negotiating the use of biodiversity in marine areas beyond national jurisdiction. Frontiers in Marine Science. DOI: 10.3389/fmars.2016.00224.

# **Peer-reviewed Publications (continued)**

- Hadarits, M., Santibañez, P. and **Pittman, J.** (2016). Drought and agricultural vulnerability in Chile. In Diaz, H., Warren, J. and Hurlbert, M. (Eds) Vulnerability and Adaptation to Drought on the Canadian Prairies. Calgary: University of Calgary Press.
- Natcher, D., Bachmann, E., Pittman, J. et al. (2016) Knowledge diffusion and the adoption of fertilizer microdosing in northwest Benin. Sustainable Agricultural Research 5:3, pp 1-10.
- Pittman, J. and Armitage, D. (2016) Governance across the land-sea interface: A systematic review. Environmental Science & Policy 64, pp. 9-17
- Pittman, J., Tiessen, H. and Montaña, E. (2016) The evolution of interdisciplinarity over 20 years of global change research by the IAI. Current Opinion in Environmental Sustainability 19, pp. 87–93.
- Pittman, J., Hurlbert, M., Hadarits, M. and Corkal, D. (2016). Bridging knowledge systems for drought preparedness: Case study from the Swift Current Creek Watershed (Canada). In Diaz, H., Warren, J. and Hurlbert, M. (Eds.) Vulnerability and Adaptation to Drought on the Canadian Prairies. Calgary: University of Calgary Press.
- Turner II, B., Esler, K. J., Bridgewater, P., Tewksbury, J., Sitas, J. N., Abrahams, B., Chapin, F. S., Chowdhury, R. R., Christie, P., Diaz, S., Firth, P., Knapp, C., Kramer, J., Leemans, R., Palmer, M., Pietri, D., Pittman, J. et al. (2016). Socio-Environmental Systems (SES) research: What have we learned and how can we use this information in future research programs. Current Opinion in Environmental Sustainability 19, pp. 160–168.
- Wandel, J., Diaz, H., Warren, J., Hadarits, M. and **Pittman, J.** (2016) Drought and Vulnerability: A Conceptual Approach. In Diaz, H., Warren, J. and Hurlbert, M. (Eds.) Vulnerability and Adaptation to Drought on the Canadian Prairies. Calgary: University of Calgary Press.
- Armitage, D., Alexander, S., Andrachuk, M., Berdej, S., Dyck, T., Nayak, P., Pittman, J., and Rathwell, K. (2015). Emerging concepts in adaptive management. In Garmestani, A. and Allen, C. (Eds) Adaptive Management. Berlin: Springer.
- Epstein, G., Pittman, J., et al. (2015) Institutional fit and the sustainability of social–ecological systems. Current Opinion in Environmental Sustainability 14, pp. 34-40.
- Pittman, J., Armitage, D., Alexander, S., Alleyne, M., Campbell, D. (2015) Building fit for climate change in a coastal-marine context: Case study from St. Lucia. Marine Policy 51, pp. 486-498.
- Hurlbert, M. and **Pittman, J.** (2014) Exploring adaptive management in environmental farm programs in Saskatchewan, Canada. Journal of Natural Resources Policy Research 6:2-2, pp. 195-212.
- Pearce, T., Ford, F., Pittman, J., Duerden, F. and Prno, J. (2014) Climate change and mining in Canada. In Lemmen, D. (Ed) National Assessment on Climate Change. Ottawa: NRCan.
- Ermine, W. and **Pittman, J.** (2011) Nikan oti (the future): Adaptation and adaptive capacity in two First Nations communities. In Filho, W. L. (Ed.) The Economic, Social and Political Elements of Climate Change. New York: Springer. pp. 69-80.

# **Peer-reviewed Publications (continued)**

- Pearce, T., Ford, J., Prno, J., Duerden, F., Pittman, J., Beaumier, M., Berrang-Ford, L. and Smit, B. (2011) Climate Change and Mining in Canada, Mitigation and Adaptation Strategies for Global Change 16:3, pp. 347-368.
- Pittman, J. (2010) Nêhiyawak (Cree) and Climate Change in Saskatchewan: Insights from the James Smith and Shoal Lake First Nations. *Geography Research Forum* 30, pp. 88-104.
- Pittman, J., Wittrock, V., Kulshreshtha, S. and Wheaton, E. (2010) Vulnerability to Climate Change in Rural Saskatchewan: Case Study of the R.M. of Rudy #284. Journal of Rural Studies 27:1, pp. 83-94.
- Pittman, J. (2010). The vulnerabilities of First Nations communities: The cases of Shoal Lake and James Smith. In Sauchyn, D. J., Diaz, H. P. and Kulshreshtha, S. (Eds.) The New Normal: The Canadian Prairies in a Changing Climate. Regina, SK: CPRC Press. pp. 326-325.
- Wandel, J., Pittman, J., and Prado, S. (2010) Rural vulnerability to climate change in the South Saskatchewan River Basin. In Sauchyn, D. J., Diaz, H. P. and Kulshreshtha, S. (Eds.) The New Normal: The Canadian Prairies in a Changing Climate. Regina, SK: CPRC Press. pp. 245-258.
- Marchildon, G., Pittman, J. and Sauchyn, D. (2009). The Dry Belt and Changing Aridity in the Palliser Triangle, 1895-2000. In G. Marchildon (Ed.), A Dry Oasis: Institutional Adaptation to Climate Change in the Canadian Prairies. Regina, SK: CPRC Press. pp. 31-44.
- Pittman, J., Cook, E., Diaz, P. and Sauchyn, D. (2009) Coping with Change Family Camp at the Shoal Lake Cree Nation, In: Oakes, J., Riewe, R. and Cogswell, A. (Eds.) Sacred Landscapes, Aboriginal Issues Press, University of Manitoba, Winnipeg, Manitoba.

## **Conference Presentations**

- Pittman, J. (2017) The governance dimensions of species at risk conservation. Native Prairie Restoration and Reclamation Workshop. February 8-9, 2017, Regina, Saskatchewan.
- Pittman, J. (2017) Habitat connectivity for prairie restoration. Native Prairie Restoration and Reclamation Workshop. February 8-9, 2017, Regina, Saskatchewan.
- Bennet, N., Alexander, S., Klain, S. and Pittman, J. (2016) Contributions of perceptions to evidence-based marine conservation and management. International Marine Conservation Congress. July 30 to August 3, 2016, St. John's, Newfoundland.
- Pittman, J. and Armitage, D. (2016) Governance for marine conservation across the land-sea interface. International Marine Conservation Congress. July 30 to August 3, 2016, St. John's, Newfoundland.
- Pittman, J. (2016) Collaborative partnerships and collective action for advancing species at risk conservation on Canada's grasslands. North American Congress for Conservation Biology. July 17-20, 2016, Madison, Wisconsin

## **Conference Presentations (continued)**

- **Pittman, J.** and Armitage, D. (2015) Navigating the transition to ecosystem-based approaches to coastal governance in the Lesser Antilles. IMBER IMBIVO IV. October 26-30, 2015, Treiste, Italy.
- **Pittman, J.** (2015) Effective relationships in multilevel governance: A network perspective on fit. The 15<sup>th</sup> Biennial Global Conference of the International Association for the Study of the Commons. May 25-29, 2015, Edmonton, Alberta.
- **Pittman, J.**, Armitage, D., Alexander, S. and Campbell, D. (2014) Governance fit for climate change in a Caribbean coastal-marine context. The British-Caribbean Geography Society International Seminar 2014, The Caribbean Region: Adaptation and Resilience to Global Change. June 23-27, 2014, Kingston, Jamaica.
- Whitecap, Z. and **Pittman, J.** (2011) Red Earth First Nation Flood Preparedness. DRI Weather and Climate Extremes over Canada Workshop, Winnipeg, MB http://www.drinetwork.ca/extremes2011/whitecap.pdf
- **Pittman, J.**, et al. (2010) Linking institutional and agricultural adaptation to extreme dry conditions in the Canadian Prairies. NCCARF Climate Change Adaptation Futures. June 29-July 1, 2010, Gold Coast, Australia.
- **Pittman, J.** (2010) Extreme events preparedness planning in Indigenous communities in Canada. NCCARF Climate Change Adaptation Futures. June 29-July 1, 2010, Gold Coast, Australia.
- **Pittman, J.** (2010) Watershed drought and excessive moisture preparedness in Saskatchewan. Prairie Summit, Canadian Association of Geographers. June 1-5, 2010, Regina, SK.
- Hill, H. and **Pittman, J.** (2009) Drought, climate change, and water availability: Climate and human impact challenges. Climate and Hydrology Academic Network for Governance and the Environment Workshop, March 5-6, 2009, Mexico City, Mexico.
- **Pittman, J.** (2009) The Vulnerability of the James Smith and Shoal Lake First Nations to Climate Change and Variability. Association of American Geographers (AAG) Annual Conference, March 22-28, 2009, Las Vegas, Nevada.
- Diaz, P., Matlock, B., **Pittman, J.** and Prado, S. (2007) Local Institutions and Adaptation to Climate-Induced Water Problems. CWRA Annual Conference, Saskatoon, SK.

### **Invited Talks**

- **Pittman, J.** (2017) Governance across the land-sea interface in the Lesser Antilles. University of Saskatchewan, School of Environment and Sustainability 990 Seminar. March 10, 2017, Saskatoon, Saskatchewan.
- **Pittman, J.** (2016) Interdisciplinarity in the Collaborative Research Networks program. IAI. November 29, 2016, Puerto Plata, Dominica Republic.
- **Pittman, J.** (2015) The evolution of interdisciplinary in the IAI. SESYNC. October 19, 2015, Annapolis, Maryland.
- **Pittman, J.** (2013) Advancing climate change adaptation on the Canadian Prairies: Economic knowledge gaps and next steps. Prairies Regional Adaptation Collaborative II Forum. March 20, 2013, Calgary, Alberta.

# **Organized Special Sessions**

- Bennet, D. and **Pittman, J.** (2016) Innovative Conservation Approaches on Private Lands. North American Congress for Conservation Biology. July 17-20, 2016, Madison, Wisconsin
- **Pittman, J.** and Armitage, D. (2016) Governance for marine conservation across the land-sea interface. International Marine Conservation Congress. July 30 to August 3, 2016, St. John's, Newfoundland.
- **Pittman, J.**, Epstein, G. and Berdej, S. (2015) Institutional Fit in Social-Ecological Systems: The Same Old Problem or a New Frontier for Commons Research. The 15<sup>th</sup> Biennial Global Conference of the International Association for the Study of the Commons. May 25-29, 2015, Edmonton, Alberta.
- **Pittman, J.** (2014) Getting Future Ready: Planning for Climate Change and Sea Level Rise in Small Coastal Communities. Coastal Zone Canada 2014 Conference, Our Coasts: Legacies and Futures. June 15-19, 2014, Halifax, Nova Scotia.
- **Pittman, J.** and Mercer-Clarke, C. (2014) Joining Forces: A Joint Session on the Useful Application of Deliverables from Two International Community University Research Alliances. Coastal Zone Canada 2014 Conference, Our Coasts: Legacies and Futures. June 15-19, 2014, Halifax, Nova Scotia.

## **Science Communication and Outreach**

- Coristine, L., **Pittman, J.** and Schuster, R. (2016) Early-career researchers in Canada's science-policy landscape: barriers and opportunities. Canada Science Policy Centre.
- **Pittman, J.** (2016) Species at risk conservation on private lands must empower landowners. Policy brief submitted to Canada's Standing Committee on Environment and Sustainable Development.

# **Science Communication and Outreach (continued)**

- Armitage, D., **Pittman, J.** and Alexander, S. (2015) An analysis of the institutional framework influencing climate change adaptation in Jamaica's fisheries sector. Prepared for the CARIBSAVE Partnership.
- Armitage, D., Alexander, S. and **Pittman, J.** (2015) Climate change governance analysis for the fisheries sector in Jamaica. Prepared for the CARIBSAVE Partnership.
- GIVRAPD (Armitage, D., Pittman, J. and Alexander, S.). (2014) Multi-level governance for climate change adaptation in the Caribbean. Policy Brief. http://givrapd.org/about/
- Pittman, J., D. Armitage, S. Alexander, D. Campbell and M. Alleyne. (2014) Reflecting on climate change and governance in a coastal-marine context: The case of St. Lucia. GIVRAPD Working Paper. http://givrapd.org/about/.
- Pittman, J. (2014) Environmental Awareness Survey Report (Praslin, St. Lucia). Prepared for the Praslin Seamoss Farmers Association.
- Pittman, J., Pearce, T. and Ford, J. (2013) Adaptation to climate change and potash mining in Saskatchewan. Report prepared for Natural Resources Canada.
- Hill, H. and Pittman, J. (2012) Agriculture and Disaster Risk Reduction: Contributing Paper to the Global Assessment Review 13. Prepared for Agriculture and Agri-Food Canada and the United Nations Office for Disaster Risk Reduction.
- Pittman, J. (2012) St. Lucia Community-based Vulnerability and Adaptive Governance Assessment Fieldwork Report. Prepared for the CARIBSAVE Partnership.
- Pittman, J. and Gustavson, K. (2011) Advancing Climate Change Adaptation in the Prairies. Prepared for the Saskatchewan Watershed Authority.
- Pittman, J. and Gustavson, K. (2011) Advancing Climate Change Adaptation in Saskatchewan. Prepared for the Saskatchewan Watershed Authority.
- Pittman, J. and Gustavson, K. (2011) Water Conservation, Efficiency, and Productivity in Saskatchewan. Prepared for the Saskatchewan Watershed Authority.
- Pittman, J. 2010. Drought and excessive moisture preparedness. *Prairie Update* 45:1.
- Pittman, J. 2009. Climate change dictionary. Prairie Update 40:3.
- Ermine, W., Sauchyn, D. and **Pittman, J.** (2008) Nikan Oti: Future Understanding Adaptation and Adaptive Capacity in two First Nations, Final Report submitted Natural Resources Canada Climate Change Impacts and Adaptations Program. Natural Resources Canada, Ottawa, ON.
- Johnston, M., Williamson, T., Wheaton, E., Wittrock, V., Nelson, H., Vandamme, L., Hesseln, H., **Pittman, J.** and Lebel, M. (2008) Climate Change Adaptive Capacity of Forestry Stakeholders in the Boreal Plains Ecozone, Final Report submitted to Natural Resources Canada Climate Change Impacts and Adaptations Program. Natural Resources Canada, Ottawa, ON.

# **Participation in Invited workshops**

- Accelerating Synthesis for Conservation and Sustainability Science through Qualitative Data Sharing, February 27 to March 2, 2017, National Socio-Environmental Synthesis Center, Annapolis, Maryland. Organized by Drs. Steven Alexander and Kristal Jones, University of Maryland, National Socio-Environmental Synthesis Center.
- *International Symposium on Drought Crises in Federations*, June 7-8, 2016, University of Colorado-Boulder, Boulder, Colorado. Organized by Dr. Dustin Garrick, Oxford University.
- Integrated Natural –Social Science Stakeholder Projects Lessons Learned Workshop, October 19-21, 2015, National Socio-Environmental Synthesis Center, Annapolis, Maryland. Organized by Dr. Harold Mooney, Stanford University.

# **Professional Development**

- Short Course on Environmental Models and Bayesian Inference. University of Waterloo, February 21-24, 2017.
- *Introduction to Spatial Agent-based Models*. National Socio-Environmental Synthesis Center, December 5-9, 2016
- Transdisciplinary Approaches to Integrating Policy and Science for Sustainability. The Inter-American Institute for Global Change Research, November 28 to December 2, 2016.
- Computational Summer Institute: An Introduction to Data Analysis with R. National Socio-Environmental Synthesis Center, July 13-17, 2015.

# **Other Professional Experience**

Social and Economic Scientist, Rescan Environmental Services

May 2011 – June 2012

Climate Change Adaptation Specialist, Saskatchewan Water Security Agency

September 2009 – May 2011

Agro-climate Analyst, Agriculture and Agri-Food Canada

February 2009 – September 2009