School of Environment and Sustainability Royal Roads University (British Columbia, Canada)

Rationale: Water is essential to our existence—ecological, biological, and cultural—and our ability to address water problems is a litmus test of our society's capacity to address other environmental challenges.

Focus: I explore the social-psychological variables underpinning multi-scaled water decisions within a context of climate change. With established SSHRC funding, I mentor a team of emerging student scholars through my <u>Society, Environment and Emotions Lab</u>. Our team examines how citizens, policymakers, and researchers make decisions outside of formal institutional rules, processes, and policies. We use mixed methods to test individuals' values, beliefs, and emotions (e.g., fear, awe, and disgust) that are socio-culturally derived, often implicit, and not easily quantifiable by standard metrics. Our research helps to reveal the assumptions at the foundation of conventional water decision explanations.

1. EMPLOYMENT & EDUCATION

2022 -	Full Professor, School of Environment and Sustainability (SES), Royal Roads University; Adjunct Associate Professor, SERS, University of Waterloo.
2020–21	Visiting Professor, School of Environment and Sustainability, Royal Roads University.
2017-21	Associate Professor: School of Environment, Resources and Sustainability (SERS), UWaterloo (2019: Associate Director of Undergraduate Studies).
2012-17	Assistant Professor (Tenure-track): School of Environment, Resources and Sustainability (SERS, formerly ERS as below), UWaterloo.
2009-11	Assistant Professor (CLTA): ERS, UWaterloo.
2006-9	Post-doctoral Fellow: Department of Environment and Resource Studies (ERS), UWaterloo.
2002-6	Doctor of Philosophy (2007), Department of Geography, University of Guelph. Dissertation: Commitment and Collaboration: Social networks and tacit knowledge in southern African and Canadian water demand management.
2004	Visiting Researcher: International Development Research Centre - The Middle East Regional Office. Cairo, Egypt.
2004	Visiting Researcher: International Union for the Conservation of Nature - South Africa Office. Pretoria, South Africa.
2001-2	Consultant, Food and Agriculture Organization (United Nations), Water Policy, Development and Management Service. Rome, Italy.
2001	Rapporteur, Walkerton Inquiry – Part II. Toronto, Canada.
2001	Research Intern, People, Land and Water Program, International Development Research Centre. Ottawa, Canada.
2000-1	Junior Professional, Food and Agriculture Organization (U.N.) – Water Policy, Development and Management Service. Rome, Italy.
2000	Master of Arts - Collaborative program in Political Science and Environmental Studies, University of Toronto.
1995-9	Bachelor of Arts – Collaborative Program in International Development in 'Biophysical Environment' stream, University of Guelph.

2. RESEARCH ACTIVITIES

2.1. PUBLICATIONS

2.1.1. In Progress, Under Review or R&R (*undergraduate; **graduate; ^SSHRC-funded):

- ^Ross, H., D.M. Jones** and S.E. **Wolfe**. "Save water! Evidence of emotions and psychological defenses in urban water efficiency campaigns' communications." *In Progress*
- [^]Devon M. Jones^{*}, Avery Doeber-Smith^{**}, and S.E. **Wolfe**. ["]Awe and pro-environmental behaviour: A scoping review of the interdisciplinary literature." *In Progress*
- ^Smith**, L., and S.E. **Wolfe**. "Beyond the watery grave: Death and water reminders as (un)expected ways to increase pro-environmental identity and behaviour." *In Progress*
- 2.1.2. Articles in refereed journals (*undergraduate; **graduate; ^SSHRC-funded):
- ^Smith**, L., and S.E. **Wolfe** (In Press 2023). "Dead in the water: Mortality salience in water communication." *People and Nature*.
- Robichaud, C.D., R.C. Rooney, B.M.H. Larson, S.E. **Wolfe**, Z. Nyssa, K. P. Kowalski, H. Braun. (In Press 2023). "A decision framework for the management of established biological invasions." *Facets*.
- [^]Smith, L.**, Ross, H., Shouldice, S**. and **Wolfe**, S. (2022) "<u>Mortality management and climate action: A</u> review and reference for using Terror Management Theory methods in interdisciplinary environmental research." *WIREs Climate Change*. https://doi.org/10.1002/wcc.776
- ^Ross**, H.C. and S.E. Wolfe (2021). "Mortality awareness and lawn watering: Using terror management theory to understand residential water consumption." *The International Journal of Social Sustainability in Economic, Social, and Cultural Context*. DOI: <u>https://doi.org/10.18848/2325-1115/CGP/v17i02/29-53</u>
- Andrews, Evan, Sarah Wolfe, Prateep Kumar Nayak, Derek Armitage (2021). Coastal Fishers Livelihood Behaviours and their Psychosocial Explanations: Implications for Fisheries Governance in a Changing World. Frontiers in Marine Science (Marine Affairs and Policy). (IF: 4.912) <u>https://www.frontiersin.org/articles/10.3389/fmars.2021.634484/full</u>
- Smith**, Lauren K. M., Jennifer K. Lynes, and S. E. Wolfe (2019). Community-Based Social Marketing— Creating Lasting, Sustainable, Environmental Change: Case Study of a Household Stormwater Management Program in the Region of Waterloo, Ontario. *Social Marketing Quarterly*, 25(4), 308–326. <u>https://doi.org/10.1177/1524500419883288</u>
- ^ Wolfe S.E. and A. Tubi (2018). "Terror Management Theory and Mortality Awareness: A Missing Link in Climate Response Studies?" WIREs Climate Change. (IF:7.385) <u>https://doiorg.proxy.lib.uwaterloo.ca/10.1002/wcc.566</u>
- ^Cote**, S. A., H. C. Ross**, K. David**, and S. E. Wolfe (2017). "Walkerton revisited: how our psychological defenses may influence responses to water crises." *Ecology and Society* 22(3):32. <u>https://www.ecologyandsociety.org/vol22/iss3/art32/</u>
- ^Cote**, S.A. and S.E. Wolfe (2017). "Evidence of mortality salience and psychological defenses in bottled water campaigns." *Applied Environmental Education & Communication*, doi.org/10.1080/1533015X.2017.1399836
- ^ Wolfe, S.E. (2017). "Fear, Anger and Responsibility: Using emotions and Terror Management Theory to assess historic speeches about water and policy." Water History. DOI 10.1007/s12685-016-0189-3
- ^ Wolfe, S.E. and D. Brooks (2016). "Mortality awareness and water decisions: A social psychological analysis of supply management, demand management and soft path paradigms." *Water International*. <u>https://doi.org/10.1080/02508060.2016.1248093</u>

2.1.2. Articles in refereed journals continued (*undergraduate; **graduate; ^SSHRC-funded):

- [^]Mann^{*}, C. and S.E. **Wolfe** (2016). "Risk perceptions and Terror Management Theory: assessing public responses to urban flooding in Toronto, Canada." *Water Resources Management*. 30(8): 2651-2670
- [^]Ross^{*}, H. and S.E. **Wolfe** (2016). 'Life after death: evidence of the Hoover Dam as a hero project that defends against mortality reminders'. *Water History*, 1-19
- ^ Wolfe, S.E. (2014). "Women's choices and Canadian water research and policy: a study of professionals' careers, mentorship and experiential knowledge." *Environmental Practice*. 16: 37–51
- Cote*, S. and **Wolfe**, S.E. (2014). "Assessing the Social and Economic Barriers to Permeable Surface Utilization for Residential Driveways in Kitchener" *Environmental Practice*.16: 6–18
- ^ Wolfe, S.E., S. Davidson** and T. Reid* (2013). "Mentorship, knowledge transmission and female professionals in Canadian water research and policy." *Water Policy*. 15:610-627
- ***Wolfe**, S.E. (2012) "Water cognition and cognitive affective mapping: identifying priority clusters within a Canadian water efficiency community." *Water Resources Management*. 26(10): 2991-3004
- [^]Elton*, K. and S.E. **Wolfe** (2011). "Water Efficiency and the Professional Plumbing Sector: How capacity and capability influence knowledge acquisition and innovation." *Water Resources Management*. 26(2): 595-608
- **^Wolfe**, S.E and E. Hendriks** (2011). "Building Towards Water Efficiency: The influence of capacity and capability on innovation adoption in the Canadian home-building and resale industries." *Journal of Housing and Built Environment*. 26(1): 47-72
- ***Wolfe**, S.E. (2010). "Beyond a Pipe Dream The role of social capital in the development of a community's water efficiency strategy." *Environmental Practice*. 12 (3): 214-226
- ***Wolfe**, S.E. (2009). "What's your story? Practitioners' tacit knowledge and water demand management policies in Southern Africa and Canada." *Water Policy*.11: 489-503.
- ***Wolfe**, S.E. (2009). "A Social Innovation Framework for Water Demand Management Policy: Practitioners' capabilities, capacity, collaboration and commitment." *Society and Natural Resources*. 22(5): 474-483
- ^Wolfe, S.E. (2008). "Capacity, capability, collaboration and commitment: How social networks influence practitioners of municipal water demand management policy in Ontario, Canada." *Environmental Practice*. 10(2): 42-52
- ***Wolfe**, S.E. and D.B. Brooks (2003). "Water Scarcity: an alternative view and its implications for policy and for capacity building." *Natural Resources Forum.* 27(1): 99-107

2.1.3. Book Chapters (**graduate)

- Brooks, David and S.E. Wolfe (2011). "Gains, Gaps and Institutional Change." Chapter in: Hammou Laamrani, Joshua Paglia and Lamia El-Fattal (Eds.). Water Demand Management in the Middle East and North Africa: Policy, Practice and Power. International Development Research Centre. Cairo, Egypt and Ottawa, Canada. pp. 15-34
- Wolfe, S.E. and K. Elton** (2009). "Pushing the boundaries: shifting water soft paths philosophy toward hard policy in municipal water management." Chapter in: Brooks, David, Oliver Brandes, and Stephen Gurman (Eds.). Making the Most of the Water We Have: The Soft Path Approach to Water Management. EarthScan, London, UK. pp. 165-181
- Brooks, D. and S. Wolfe (2007). "Water Demand Management as Governance: Lessons from the Middle East and South Africa." Chapter in: Shuval, Hillel and Hassan Dweik (Eds.). Water Resources in the Middle East: Israel-Palestinian Water Issues – From Conflict to Cooperation. Hexagon Series on Human and Environmental Security and Peace, Vol. 2. Springer-Verlag. pp. 311-324

- 2.1.4. Other publications: News Articles, Trade, and New Media (*undergraduate; **graduate)
- Smith, Lauren and S.E. **Wolfe** (Jan/Feb 2022 issue). "Leaks in the Professional Water Pipeline: representation and decision-making power in Canada's water sectors". <u>Water Canada Magazine</u>
- Wolfe, S.E. (2020). "To understand coronavirus transmission, we have to understand our wastewater." *Globe and Mail*. March 21, 2020. Opinion: print and <u>https://www.theglobeandmail.com/opinion/article-to-understand-covid-19-transmission-we-have-to-understand-our/</u>
- Hodson, J. and S.E. **Wolfe** (2020). "Stockpiling Bottled Water? Maybe Social Media is To Blame" Opinion post to <u>https://one.aom.org/covid-19-insights-from-business-sustainability-scholars</u> and others
- Wolfe, S.E. (2019). "Flush your disgust. We can't let emotions dampen our water policies." *Globe and Mail.* March 22, 2019 (World Water Day) Opinion: print and <u>https://www.theglobeandmail.com/opinion/article-flush-your-disgust-we-cant-let-emotions-dampen-our-water-policies/</u>
- Hammond, R., Lewis, G. and **Wolfe**, S.E. (Summer 2019). "Feature: Green Versus Blue Roofs" High Performing Buildings. <u>http://www.hpbmagazine.org/</u>
- Wolfe, S.E. (2018). How to change the way we value, use and manage water. Invited Commentary for *OpenCanada.org*. <u>https://www.opencanada.org/features/how-change-way-we-value-use-and-manage-water/</u>
- Lynes, J. and S.E. **Wolfe** (2017). "It's time to rethink our messaging about environmental change" *Globe and Mail. Report on Business.* May 7, 2017 <u>https://www.theglobeandmail.com/report-on-business/rob-</u> <u>commentary/its-time-to-rethink-our-messaging-about-environmental-change/article34914924/</u>
- Wolfe, S.E. (2016). "Sounding the water alarm will backfire thanks to human nature." *Globe and Mail*. March 22, 2016 (World Water Day) Opinion online. <u>https://www.theglobeandmail.com/opinion/sounding-the-water-alarm-will-backfire-thanks-to-human-nature/article29315519/</u>
- Wolfe, S.E., S. Cote** and H. Ross* (2015). "It came from the water." Alternatives Journal. 41(4): 44-47
- Wolfe, S.E. and S. Wismer (2010). "Gender and Careers in the Canadian Water Policy Community." *Women* and Environments International Magazine. Special Issue, 82-83
- Wolfe, S.E. and E. Hendriks** (2010). "Building Toward Water Efficiency in Canada Policy Innovation and Education in New and Existing Homes." *Water Efficiency*. Jan/Feb 2010
- Wolfe, S.E. and A. Craig (2010). "What are you doing today? Mentoring, gendered work, and an academic career." Invited submission to the Canadian Federation of Social Sciences and Humanities Equity Matters <u>https://www.ideas-idees.ca/blog/mentoring-gendered-work-and-academic-career</u>
- **Wolfe**, S.E. (2009). "How to keep women on the career ladder." *Globe and Mail*. December 23rd: Opinion: print and on online.

https://www.theglobeandmail.com/opinion/how-to-keep-women-on-the-career-ladder/article1206161/

Homer-Dixon, T. and S.E. Wolfe (2008). "Everything is not Peachy." *Globe and Mail*. Opinion: print and online August 18th, 2008

https://www.theglobeandmail.com/opinion/everything-is-not-peachy/article794050/

- Wolfe, S.E. (2007). "Reforming and Rebuilding: Water Efficiency Initiatives in Hermanus, South Africa." Water Efficiency: The journal for water resource management. Nov/Dec - 2(6)
- Wolfe, S.E. and T. Homer-Dixon (2003). "The matrix of our troubles." *Globe and Mail*. August 16th: Opinion: print and online <u>https://www.theglobeandmail.com/opinion/the-matrix-of-our-troubles/article794051/</u>
- Wolfe, S.E. (2003). "Networks." Invited paper for the *UN Chronicle Magazine* (Water Resources Special Issue). XL (1): 33-35
- 2.1.5. Other publications: Technical Reports deleted for brevity

- 2.2. RECORD OF PENDING and SUCCESSFUL FUNDING APPLICATIONS (All CAD unless otherwise indicated; all grants as PI unless otherwise indicated)
- 2.2.1. Proposals Currently Under Evaluation:
- 2022 Dismantle, decolonize, diversify (D³): a multi-scaled analysis of RRU's institutional structures, practices, and JEDI. \$100 000. Robbins-Ollivier Award for Excellence in Equity (Co-PI with J. Hobson, RRU). Submitted July 2022.
- 2.2.2. Funded Full Professor Research 2022 ongoing
- 2023 Emotional responses to a changing climate, development, and densification in southern Vancouver Island's sub-regions. \$5 000. SSHRC Institutional Grant (SIG), Royal Roads University. (Co-Applicant with C. Ling; 100% funded, all funds to masters' student research).
- 2022 Do facts matter? Emotional responses to a changing climate, development, and densification in southern Vancouver Island's sub-regions. \$6 000. Internal Grants for Research (IGR), Royal Roads University. (Co-Applicant with C. Ling; 100% funded, all funds to masters' student research).
- 2.2.3. Funded Associate Professor Research Total <u>Successful</u> grants \$409 124 (2017-2021)
- 2021 The Affective Load of Sustainability Education: The implications of emotion for students' engagement and knowledge retention. \$197 200. SSHRC Partnership Development Grant (PI; 100% funded).
- 2020 Global Classrooms Virtual Exchange Program, \$4 000 USD applicant team; University of California, Santa Cruz (Co-PI; 100% funded).
- 2019 Stronger than fear: awe, ritual, identity, and water decisions, \$72 274; SSHRC Insight Development Grant (PI; 98% funded).
- 2019 Dead in the Entrepreneurial Water: Is gender bias activated by mortality messages in water Cleantech pitches? \$10 000; HeForShe Gender Equity Research Grants (PI; 100% funded; all funds to L. Smith).
- 2018 Do mortality reminders influence our water decisions? A new variable for the era of climate change, drought and uncertainty, \$125 650; SSHRC Insight Grant (PI; 100% funded). **Note:** I ranked 4th of 49 Established Scholar applicants in the 'Geography' committee.
- 2.2.4. Funded CLTA & TT Assistant Professor Research Total Successful grants \$232 704 (2009-2016)
- 2014 Cognition and Terror Management Theory in water decision-making on policy and infrastructure development, \$22 000; SSHRC Connection Grant (PI; 100% funded).
- Something in the water: using TMT to explore and explain the decisions we make about water, \$8 000, Waterloo International: UW International Research Partnership Grant (PI; 100% funded); \$3 000, Halbert Centre for Canadian Studies, Hebrew University, Israel (PI; 100% funded); \$1 000, Faculty of Environment UW: Faculty support (PI; 100% funded)

- 2013 Thinking about Water: what, why and how we teach to engage the next generation of interdisciplinary water leaders, \$15 000; Water Institute UW: Interdisciplinary Water Workshops or Symposia Grant (PI; 100% funded).
- 2012 Cognition and Terror Management Theory in water decision-making on policy and infrastructure development, \$74 884, SSHRC Insight Development Grant (PI; 100% funded). **Note:** I ranked 3rd of 61 Emerging Scholar applicants in the 'Geography' committee.
- 2012 Research Seed/Start Up Grant, \$15 000, Faculty of Environment, University of Waterloo
- 2012 Graduate Student Support by New Faculty Members Award, \$5 500, Faculty of Environment, University of Waterloo
- 2012 Governing water in the face of uncertainty, proposal for a Canada-Israel Workshop, including \$11 550;
 University of Waterloo: International Research Partnership Grant, (Co-PI with P. Kay; 100% funded; 40% proposal contribution by Wolfe); \$12 000, Halbert Centre for Canadian Studies, Hebrew University, Israel (Co-PI with P. Kay; 100% funded; 40% proposal contribution by Wolfe)
- 2011 Song my paddle sings: gender, work, and practices in the Canadian water policy community, \$41 770, SSHRC Standard Research Grant (PI; 28.5% funded)
- 2011 University of Haifa Research Stipend, \$10 000, University of Waterloo (PI;100% funded)
- 2009 Social capital assessment of the Water Master Plan process in the Township of Centre Wellington, \$13 000; Grand River Conservation Authority: Grant (PI; 100% funded)
- 2.2.5. Funded Post-doctoral Research Total <u>Successful</u> grants \$234 010 (2006-2008)
- 2008-06 Building toward water efficiency: policy innovations and education in new and existing home builders (total: \$194 010; consisting of \$24 505, British Columbia Real Estate Foundation: Research Grant (PI; 100% funded; 2008); \$24 505, Alberta Real Estate Foundation: Research Grant (PI; 100% funded; 2008); \$100 000, Walter and Duncan Gordon Foundation: Research Grant (PI; 100% funded; 2007); \$ 20 000, Canadian Water and Wastewater Association: Grant for Post-Doctorate (PI; 100% funded; 2006); \$ 25 000, Canada Mortgage and Housing: Grant for Post-Doctorate (PI; 100% funded; 2006)
- 2007 Thinking about the soft path for water: from idea to implementation (workshop), \$25 000, Walter and Duncan Gordon Foundation: Research Grant (PI; 100% funded)
- 2006 Post-Doctoral Fellowship, \$15 000, Walter and Duncan Gordon Foundation
- 2.2.5. Funded Young Professional & Graduate Research Total <u>Successful</u> grants \$124 581 (2001-2004)
- 2004 Canadian Window on International Development Award: Renewal, \$9 581, International Development Research Centre (IDRC) (100% funded)
- 2003 Doctoral Research Award, \$59 000, Social Sciences and Humanities Research Council Canadian Window on International Development Award, \$20 000, IDRC
- 2002 Ontario Graduate Scholarship in Science and Technology, \$5 000, University of Guelph
- 2001 Centre Internship Water, \$31 000, International Development Research Centre

2.3. PRESENTATIONS *speaker

Note: My travel options since 2008 were constrained by childcare, eldercare/hospice, relocation, and the pandemic. During these years, I prioritized various guest lectures and allocating available research funds to students' conference presentations. I've deeply committed to reducing my carbon footprint by avoiding unnecessary flights while providing opportunities for emerging scholars to attend events.

- 2013 Craig, AK* and S.E. Wolfe. "Are you my mentor? Daily strategies for symbiotic mentorship between academic mothers". Motherhood Initiative for Research and Community Involvement Conference. Toronto, ON
- 2010 Wolfe, S.E. "The cognitive-affective sciences and water governance" <u>Invited Lecture</u> to the International Development Research Centre, Ottawa.
- 2010 Wolfe, S.E. and E. Hendriks*. "Chasing the Dream: the myth of work-life balance in the water sector". <u>Invited Keynote</u> to the 2010 Young Professionals Summit, Water Environment Federation and the American Water Works Association. San Juan, Puerto Rico.
- 2009 Wolfe, S.E. and E. Hendriks*. "Building towards Water Efficiency: Policy Innovation and Education in New and Existing Homes." WaterSmart Innovations Conference, Las Vegas, Nevada.
- 2009 Wolfe, S.E. and E. Hendriks^{*}. "Building towards Water Efficiency Research Findings". National Conference on Water Efficiency and Conservation, Canadian Water & Wastewater Association.
- 2008 Wolfe, S.E. "Social Capital in Community-Level Water Efficiency Programs: Reports from South Africa and Canada." 2nd National Conference and Policy Forum on Water Efficiency and Conservation.Canadian Water & Wastewater Association, Waterloo, ON.

3. TEACHING ACTIVITIES

I was **awarded** Royal Roads University's "Kelly New Teacher" award (2022) for my teaching and graduate advisory work.

3.1. GRADUATE TEACHING & ADVISOR

3.1.1. Graduate Courses: At Royal Roads University (2020-ongoing), I rebuilt the existing ENVR655 Innovations in Governance for Sustainability graduate course in the Masters of Environment and Management program. In Fall 2020 and 2021, I taught the blended course via Zoom with a Residency period (15 days) of daily synchronous classes, tutorial sessions, office hours and Slack-based community building.

As service to the University of Waterloo's Water Institute, I co-taught WATER 601 – Integrated Water Management. This course is the first of two core, campus-wide courses in the Collaborative Water Program for masters and doctoral students (67 students in 2019). By co-teaching across faculties – my colleague is in civil/environmental engineering – we successfully model the challenges and victories of collaborative water problem-solving. A highly interactive, three-hour teaching block, we introduce students from civil and chemical engineering, biology, chemistry, geography, architecture, public health etc to concepts of inter/transdisciplinary water research and practice, complexity, and global/local water ethics. I am deeply committed to the training of interdisciplinary water researchers and practitioners.

3.1.2 Current Graduate Students and Post-Doctoral Fellows (as Advisor) at RRU and UWaterloo

- 1. Collette, Emma. UW-MES thesis student (co-advise with Barbeau). Fall 2022-ongoing. Ontario Graduate Scholarship, \$15 000, President's Graduate Scholarship (UW), \$5 000
- 2. Deboer–Smith, Avery. RRU MEM-MA thesis student. Fall 2019 ongoing
- 3. Gill-English, Samuel. RRU MEM-MA thesis student. Winter 2023 ongoing
- 4. Grant, Beth. UW-MES thesis student (co-advise with Barbeau). Fall 2022-ongoing. Ontario Graduate Scholarship, \$15 000, President's Graduate Scholarship (UW), \$5 000
- 5. Gruber, Wesley. RRU MEM-MA thesis student. Fall 2021 ongoing
- 6. Kim, Mirae. RRU MEM-MSc thesis student. Winter 2022 ongoing
- 7. Oliver, Gillian. RRU MEM-MA thesis student. Fall 2020 ongoing
- 8. Rudestam, Kirsten. Two-year SSHRC Post-Doctoral Fellow at Royal Roads. \$90 000.
- 9. Shouldice, Stephanie. RRU doctoral student. Winter 2020 ongoing. SSHRC Doctoral award, three years (2020-2023), \$105 000; Royal Roads University entrance awards, \$22 000.
- 10. Smith, Lauren. SERS doctoral student. Fall 2018 ongoing. Vanier Canada Graduate Scholarship, three years (2020-2023), \$150 000; President's Graduate Scholarship, three years, \$30 000; 2020-2021 Ontario Graduate Scholarship (OGS) and Queen Elizabeth II Graduate Scholarship in Science & Technology (declined); Deans Doctoral Initiative \$112 000, 2018-2022; SERS Entrance Scholarship, \$2 000; Exceptional Doctoral Award, \$10 000
- 11. Woods, Deanna. RRU MEM-MA thesis student. Winter 2023 ongoing

3.1.3 Current Doctoral and Masters Graduate Students (as Committee Member)

- 1. Battaglia, Maria B. (Armitage, SERS): Comp exam/ dissertation committee 2019 ongoing
- 2. Splichalova, Dacota (Harris, UBC): Comp exam/dissertation committee 2020 -ongoing

3.1.4 Completed Masters Graduate Students (as Advisor)

- Anderson, Sarah. "Remembering Water: Immigrant water narratives in Waterloo Region". MES thesis in the Department of Environment and Resource Studies (ERS). 2009 –2015. SSHRC: Joseph-Armand Bombardier Canada Graduate Scholarship (\$17 500; 2011); University of Waterloo: President's Graduate Scholarship (\$4 998; 2011)
- Cote, Stephanie. "Applying Terror Management Theory to Understand Canadians Water Consumption Decisions and Improve Environmental Campaigns that Aim to Motivate Sustainable Behaviours" MES major research project in ERS. 2013 – 2015. University of Waterloo Awards: Environmental Studies Graduate Experience Award (\$2 000; 2014); University of Waterloo Graduate Scholarship (\$1 000; 2014); UW Special Graduate Student Entrance Award (\$2 750; 2013)
- 3. Fortier, Julia (co-supervisor with Kay). "Social, technical and economic assessment of residential cistern use in the Region of Waterloo." MES thesis in ERS. 2007 –2010.
- 4. Kerr, Meghann. Society be Dammed! A Terror Management Analysis of Water Infrastructure as a Conduit to Immortality. MES thesis in ERS. 2013–2016.
- 5. Kimantas, Janet (co-supervisor with McAllister). "Sustainable buildings and equity in Waterloo" MES major research project in ERS. 2014 2016
- 6. Patch, William (co-supervisor with Kay). "Examining the institutional structures for implementation of water soft paths in Canada." MES thesis in ERS. 2008 –2010.
- 7. Ross, Hanna. M.E.S. major research project in the School of Environment, Resource and Sustainability (SERS). 2015 2017. University of Waterloo Graduate Scholarship, \$2 000, 2016
- Wilkes, Taylor. "Hydro-psychology in Water Governance: how knowledge and identity influence professional behaviours in Israel" MES thesis in ERS. 2011 – 2016. University of Waterloo Awards: David Johnson International Experience Award (\$2 500; 2012); The Water Institute: ARCADIS Graduate Scholarship (\$5 000; 2012)

9. Yessie, Steven. "Policy and Performance of Public Water Agencies: How current demographic transitions are affecting workplace knowledge and skill." MES thesis in ERS. 2010 – 2012.

3.1.5 Completed Masters Graduate Theses (as Committee Member)

- 1. Carter, Blair (Armitage). "Water and Social Well-Being in the Northwest Territories" MES thesis, ERS. 2013–2014.
- 2. Coore, Danielle (Dresher, SEED): MES thesis, School of Planning. 2017 2019.
- 3. Cotcheire, Heather (Larson). "The efficacy of voluntary initiatives for reducing horticultural introductions of invasive species" MES thesis, Department of Geography, UW. 2010–2012.
- 4. Creelman, Kyle (Larson). "The effect of education about invasive species on adolescent's relationship with nature" MES thesis, ERS. 2010–2011.
- 5. Davis, Heather (Murphy). "Testing the application of a community resilience assessment: a case study of the Town of Huntsville, Ontario" MES thesis, ERS. 2010–2011.
- 6. Fries, Sarah Lynn (Lynes). "From Paper to Practice: Exploring Five Canadian Case Studies of Water Efficiency Programs using Community-Based Social Marketing" MES Thesis, SEED. 2018-2019
- 7. Hendriks, Elizabeth (Kay). "Water Soft-path Application in Industrial Systems: A Pulp and Paper Case Study" MES thesis, ERS. 2007-2008
- 8. Leighton, Catherine (Wismer). "Bottled Water and Packaging Waste: Policy Options and Instruments for Ontario." MES thesis, ERS. 2009.
- 9. Roth, Alyssa (deLoe). MES thesis, ERS. 2013–2014.

3.1.6 Completed Doctoral Graduate Comprehensive Exam and/or Theses (as Committee Member)

- 1. Andrews, Evan (Armitage, SERS): Comprehensive exam and dissertation committee 2016 2020.
- 2. Aponte, Alessandra (deLoe, SERS): Comprehensive exam 2019 2020
- 3. Davy, Barbara (Quilley, SERS): Comprehensive exam and dissertation committee 2016 2020
- 4. Emami, Parastoo (deLoe, SERS). Comprehensive exam committee 2016-2017
- 5. Hooykaas, Amanda (McAllister, SERS). "Enduring Gardens: Woven by Friends into the Fabric of the Canadian Community" Doctoral dissertation in the Department of Geography. 2010–2012.
- 6. Jatel, Nelson (Pittman, RRU): Dissertation committee 2020 2022.
- 7. Philpot, Simone (Johnson, GEOG): Comprehensive exam and dissertation committee 2014 2019.
- 8. Rathwell, Kaitlyn (Armitage). "Inuit art and environmental change: Examining the significance of artworks and artistic process to bridge knowledge systems". Doctoral dissertation in ERS 2015 2016.
- 9. Revilla, Fabiola Alvarado (deLoe, SERS): Dissertation committee 2019-2021
- 10. Whitney, Stephanie (Lynes, SEED); Rowlands, ERS): Comprehensive exam committee. 2014–2015.

3.1.7 Completed Graduate Masters Theses or Doctoral Dissertations (as External Examiner/Reader)

- 1. Dawson, Elizabeth. MES. Geography and Environmental Management, Waterloo. 2010.
- 2. Folifac, Fidelis. Ph.D. School of Urban Planning, McGill University. 2013.
- 3. Kingsbury, Janet. MES. Geography and Environmental Management, Waterloo. 2014.
- 4. Shannon, Alexandrina. MES. SERS, Waterloo. 2015.
- 5. Spurgeon, Joslyn. MES (paper). Geography and Environmental Management., Waterloo. 2012.
- 6. Turner, Scott (M. Arch). School of Architecture, Waterloo. 2016.

3.2. UNDERGRADUATE TEACHING

- ERS 101 (new build in 2018): Conceptual and Practical Approaches to Decision Making for the Environment, Resources and Sustainability (120 students).
- Instructor median scores: 4.6/5 (2018 first offering); Course median scores: 4.5/5 (2018 first offering) ERS 111: Interdisciplinary Analysis and Problem Solving for Environmental Studies: Water (80+ students) Instructor median scores: 5/5 (2016; 2014; 2013); sabbatical 2015; 4/5 (2012; 2011) Course median scores: 5/5 (2016); sabbatical 2015; 4/5 (2014; 2013; 2012; 2011)
- ERS 265 Environmental and Social History of Water (25-30 students) Instructor median scores: 4.5/5 (2017); 5/5 (2016; 2014; 2013; 2011); sabbatical 2015; release (2012) Course median scores: 4.4/5 (2017); 5/5 (2016; 2014); sabbatical 2015; 4/5 (2013; 2011); release (2012)
- ERS 316 Integrated Urban Water and Wastewater Systems (50-75+ students; cross listed for 1) campus-wide Urban Studies minor & 2) Environmental Sciences, Water specialization)
 Instructor median scores: 4.7/5 (2017); release (2016); 4.5/5 (2015); 5/5 (2014; 2013); release (2012)
 Course median scores: 4.6/5 (2017); release (2016); 4/5 (2015; 2014; 2011); 5/5 (2013); release (2012)

3.4. UNDERGRADUATE THESIS ADVISOR

My philosophy is to 'invest early and often' in my undergraduate researchers. I have completed over 42 UG thesis (two semesters) students since 2011. I have experimented with various approaches to advising senior theses – optional one-on-one meetings, class-based 'working sessions', required set one-on-one consultation times. What I've found most effective is to meet with my students weekly, provide mini-lectures and working sessions, and use a marking scheme that includes both graded assignments and required milestones to support the thesis process. This approach is effective because that majority of students submit high quality theses on time, do well in their final presentations and self-report much less "stress" toward the end of the writing process.

Three undergraduate theses have now been published (Cote and Wolfe 2014; Mann and Wolfe 2016; Ross and Wolfe 2016). One of my UG thesis students was awarded an Academic Achievement Award (2014). Undergraduate students I've mentored have also received scholarships for their graduate studies at institutions such as UBC, Concordia (Joseph-Armand Bombardier CGS Master's Scholarship, \$17 500), Dalhousie (\$6 000 scholarships), McMaster (\$16 000 funding) York and Western.

In addition to undergraduate thesis supervision, I have funded 24 different undergraduate research assistant positions since 2009. These positions have included co-op positions, fieldwork and data collection, research searches and workshop organization.

3.5. TEACHING DEVELOPMENT

- Getting on the Syllabus: Integrating Equity, Diversity, Inclusion and Justice into Course Design and Delivery. Dr. Julian Agyeman, 2020 TD Walter Bean Professorship in Environment, University of Waterloo. (Nov 17, 2021)
- Slack for Teaching (self-directed learning Summer 2021)
- Transform your teaching with Perusall (April 5, 2021)
- Key Features in Virtual Meeting Platforms for Effective Synchronous Class Delivery (March 2, 2021)
- Bongo 1: Video Assignment and Group Project (March 3, 2021); Bongo 2: Video Assignment: Q&A and Interactive Video (March 3, 2021)
- Engaged Reading with Perusall's Online Annotation Software (March 4, 2021)
- Screen Recording Basics Mac (UW: May 6, 2020); How to Record Audio Podcasts (UW: May 4, 2020)

- How to Create Narrated PowerPoint Presentations for Mac OS (April 21, 2020); Simple and Effective Online Teaching (UW: April 8, 2020)
- Moodle: Getting Around (April 2, 2020); Getting Started with Collaborate Ultra (Feb 27, 2020)
- Writing Cases (~ 4 hours, 2016); Workplace Violence Awareness (~1 hour, 2014); Teaching Excellence Academy (~ 4+ days; 2013)
- LEARN (multiple sessions, multiple years); Teaching First Year Students (~2 hours, 2010)

4. SERVICE ACTIVITIES

University

- Thesis Defense Chair (**RRU**): multiple defenses 2021 ongoing
- Reviewer: **RRU**'s 3MT Competition Winter 2023
- Representative: Collaborative Water Program Committee + Pedagogy Review sub-committee, University of Waterloo Water Institute, 2018 2019
- Reviewer: Water Institute, Graduate scholarships adjudication, 2011 2014
- Reviewer: UW/SSHRC, Small Grants Committee Reviewer, 2014
- Representative: Status of Women and Equity Committee. University of Waterloo, 2011-2013

Faculty

- Representative: ENV committee to develop a new MES in Sustainable Cities, 2019
- Representative: Knowledge Integration Director hiring committee, 2018
- Representative: Faculty Tenure and Promotion Committee, 2017
- Representative: ENV Communications Group (UG curriculum review) 2014 2016
- Representative: Collaborative Water Management Program Sub-Committee, 2013 2014; 2018
- Representative: Arts Faculty Council. University of Waterloo, 2011 2014
- Representative: Academic Board of the Independent Studies Undergraduate Program. University of Waterloo, 2010 –2014

Department/School

- SES-RRU Research Coordinator for Masters of Environment and Management Program (MA), 2022 ongoing
- SES-RRU Undergraduate Review and Proposal Development Committee, 2022 ongoing
- SERS Faculty Annual Performance Review Committee 2018; 2019
- SERS Associate Director Undergraduate, 2019 (cross-listed under employment)
- SERS Search and Hiring Committees x 2: Lecturer Position, 2017; Director, 2017
- SERS Communications Committee, 2017 2019
- Program development Accelerated Bachelors-to-Masters program option, 2015
- ERS Administrative Manager Hiring Committee, 2014
- ERS-WISER Hiring Committee, 2014
- Comprehensive Exam and Thesis Defense Chair: School of Environment, Resources and Sustainability, University of Waterloo, 2011 ongoing
- Member: Undergraduate Curriculum Committee, School of Environment, Resources and Sustainability, University of Waterloo, 2010 2013
- Recruitment Open Houses, new student Welcome Weekends, Meet-the-Prof events, convocations etc.

Service to the Academic Community

- Book Review Editor: *Water International* journal for the International Water Resources Association **2021**-**ongoing**
- Editorial Board: Editorial Board for the *Water International*, International Water Resources Association. <u>https://www.tandfonline.com/toc/rwin20/current</u> **2019 - ongoing**
- Scholarly manuscript reviews: Water International; Journal of Business Research; Journal of Environmental Planning and Management; Journal of Business Research; Journal of Sustainable Tourism; International Journal of Water; Society and Natural Resources; Journal of Urban Sustainable Development; Alternatives (water issue); Journal of Environmental Planning Education and Research; International Journal of Water; Journal of Environmental Management; Environmental Management
- Research Funding and Scholarship applications: External Grant Reviewer: SSHRC Connection Grant, 2012; External Scholarship Reviewer: Shastri Indo-Canadian Institute, 2009; 2010; Walter and Duncan Gordon Foundation "Water Fellowship" application proposals, 2007; 2008

Research Advisory

- "Save our Water" campaign in Fergus-Elora organizing against Nestle water taking permit in the community, 2015
- "Friends of Elora Water" on research perspective based on community activism against bottled water company and water extraction, 2015
- High River Community Group (Fowler): perspective based on 'water efficient residential builders' research, 2014
- CGIAR Research program on climate change, agriculture and food security, Kenya office (water efficiency and irrigation issues), 2012
- Great Lakes United knowledge management in water sector, 2012
- Policy and Priorities Directorate, Infrastructure Canada, 2011
- World Wildlife Foundation, water program, 2011

Community Representative

- Community representative (academic) to the Region of Waterloo's Urban Biosolids Master Plan Committee, 2016 2018.
- Community representative (academic) to the Region of Waterloo's Water Efficiency Advisory Committee (WEAC), 2016 2019 (committee disbanded).

Media Commentary

- September 6, 2022: coverage by Jackson Ryan, CNET. "Please Stop Calling It the 'Doomsday Glacier'". <u>https://www.cnet.com/science/climate/please-stop-calling-it-the-doomsday-glacier/</u>
- April 8, 2021: coverage by Barbara Jane Davy, The Conversation via PhysEd. "How gratitude for nature can rein in your existential angst about climate change". <u>https://phys.org/news/2021-04-gratitude-nature-rein-existential-angst.html</u>
- August 2019: "Life Without Plastic Rethinking Bottled Water" Suzanne Forcese. Water Today <u>https://www.watertoday.ca/ts-bottled-water-life-without-plastic-rethinking-bottled-water.asp</u>
- July 2019: "\$90 for a bottle of melted iceberg? Inside the world of luxury water" Adrienne Matei. The Guardian. <u>https://www.theguardian.com/lifeandstyle/2019/jul/16/luxury-bottled-water-is-absurd-so-why-is-it-so-popular</u>
- April 29th, 2019: coverage by John Ibbitson, Globe and Mail re flooding, climate change and behavior <u>https://www.theglobeandmail.com/politics/article-floods-push-conservatives-to-agree-on-need-to-fight-global-warming/</u> TMT and bottled water. One-week impact numbers: <u>https://impact.meltwater.com/reports/v35TEIL8TakP</u> and coverage online, print, radio for example, CBC

Marketplace (radio); CTV (video); Kitchener-Waterloo Record (print) <u>https://www.therecord.com/news-story/8105847-bottled-water-ads-tap-into-human-desire-for-immortality-uw-study/;</u> and various online sites such as Motherboard: <u>https://motherboard.vice.com/en_us/article/xw58dd/how-advertising-convinces-us-to-buy-bottled-water-nestle-evian</u>; Science Daily: <u>https://www.sciencedaily.com/releases/2018/02/180201085749.htm?utm_source=feedburner&utm_mediium=email&utm_campaign=Feed%3A+sciencedaily%2Fearth_climate%2Fwater+%28Water+Conservatiion+News+--+ScienceDaily%29_and Research2Reality: <u>https://research2reality.com/science-society/the-fountain-of-youth-in-a-plastic-bottle/?hilite=Sarah+Wolfe</u></u>

• Canadian Broadcasting Corporation, Sept and Oct 2015 x 2 interviews