

Kevin D. Bladon, PhD

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Research Profile

- Primary research interests focused on linking hillslope- and stand-scale hydrological and biogeochemical processes to catchment-scale responses following forest disturbances (e.g., wildfire, insects, logging). In particular, research is focused on the effects of wildfire and post-fire land management responses on soil hydraulic properties (hydraulic conductivity, sorptivity, soil moisture), which impact surface hydrology (water yields, peak flows, timing of flows) and water quality (physical, chemical, and biological) in forested headwater catchments.
 - h-index: 13 (Google Scholar), 10 (Scopus), 10 (Web of Science)
 - Google Scholar: <https://scholar.google.com/citations?user=w3daILIAAAAJ&hl=en&oi=ao>
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Professional Experience

ASSISTANT PROFESSOR – FOREST ECOHYDROLOGY AND WATERSHED SCIENCE 2014-Present
Department of Forest Engineering, Resources, and Management, Oregon State University, Corvallis, OR

RESEARCH ASSOCIATE – ECOHYDROLOGY/WATERSHED HYDROLOGY 2012-2014
Department of Renewable Resources, University of Alberta, Edmonton, AB

ASSISTANT PROFESSOR (3-YEAR TERM) – ECOHYDROLOGY 2009-2012
Department of Natural Resource Sciences, Thompson Rivers University, Kamloops, BC

RESEARCH & EXTENSION SPECIALIST – WATERSHED MANAGEMENT 2008-2009
FORREX Forum for Research & Extension in Natural Resources, University of British Columbia, Kelowna, BC

POSTDOCTORAL FELLOW – ECOHYDROLOGY 2007-2008
Department of Renewable Resources, University of Alberta, Edmonton, AB

NATURAL RESOURCE PLANNER – FOREST HYDROLOGY 2006-2007
Silvacom Consultants Ltd., Edmonton, AB

RESEARCH ASSISTANT 2001-2002
Centre for Enhanced Forest Management, University of Alberta, Edmonton, AB

RESEARCH ASSISTANT 1999-2000
MCH Forestry Ltd., Hinton, AB

Education and Knowledge Development

WATERSHED MANAGEMENT CERTIFICATE 2007-2009
Institute for Resources, Environment and Sustainability, University of British Columbia, Vancouver, BC

- Integrated, Forest, Agricultural, and Urban Watershed Management

PhD (FOREST HYDROLOGY / ECOHYDROLOGY) 2002-2006
Department of Renewable Resources, University of Alberta, Edmonton, AB

- Dissertation addressed terrestrial-atmospheric coupling of evapotranspiration by several economically important boreal mixedwood tree species (*Populus tremuloides*, *Populus balsamifera*, *Betula papyrifera*, *Picea glauca*) in response to microclimate change.
- Professors: Victor J. Lieffers and Uldis Silins

BSc (WITH DISTINCTION)

1999-2002

Environmental and Conservation Sciences (Land Remediation and Reclamation), Department of Renewable Resources, University of Alberta, Edmonton, AB

COMMUNICATIONS DIPLOMA

1991-1993

School of Business and Media, British Columbia Institute of Technology, Burnaby, BC

Refereed Journal Articles

- **Bladon, K.D.**, Segura, C., Cook, N.A., Bywater-Reyes, S, and Reiter, M. 2018. A multi-catchment analysis of headwater and downstream temperature effects from contemporary forest harvesting. *Hydrological Processes*. 32: 293-304.
- Hatten, J.A., Segura, C., **Bladon, K.D.**, Hale, V.C., Ice, G.G., and Stednick, J.D. 2018. Effects of successive forest harvests on suspended sediment dynamics in the Oregon Coast Range: Alsea Watershed Study Revisited. *Forest Ecology and Management*. 408: 238-248.
- Robinne, F.-N., **Bladon, K.D.**, Miller, C., Parisien, M.-A., Mathieu, J., and Flannigan, M.D. 2018. A spatial evaluation of global wildfire-water risks to human and natural systems. *Science of the Total Environment*. 610-611: 1193-1206.
- Bywater-Reyes, S., Segura, C., and **Bladon, K.D.** 2017. Geology and geomorphology influence suspended sediment transport and modulate increases following harvest in temperate headwater catchments. *Journal of Hydrology*. 548: 754-769.
- Hallema, D.W., Sun, G., **Bladon, K.D.**, Caldwell, P.V., Norman, S.P., Liu, Y., and McNulty, S.G. 2017. Regional patterns of post-wildfire streamflow in the Western United States: The importance of scale-specific connectivity. *Hydrological Processes*. 31: 2582-2598.
- **Bladon, K.D.**, Cook, N.A., Light, J.T., and Segura, C. 2016. A catchment-scale assessment of stream temperature response to contemporary forest harvesting in the Oregon Coast Range. *Forest Ecology and Management*. 379: 153-164.
- Emelko, M.B., Stone, M., Silins, U., Allin, D., Collins, A.L., Williams, C.H.S., Martens, A.M., and **Bladon, K.D.** 2016. Sediment-phosphorus dynamics can shift aquatic ecology and cause downstream legacy effects after wildfire in large river systems. *Global Change Biology*. 22(3): 1168-1184.
- Robinne, F.-N., Miller, C., Parisien, M.-A., Emelko, M.B., **Bladon, K.D.**, Silins, U., and Flannigan, M. 2016. A global index for mapping the exposure of water resources to wildfire. *Forests*. 7(1): 22.
- Spencer, S.A., Anderson, A., and **Bladon, K.D.** 2016. Long-term forest watershed research in Alberta. *The Forestry Chronicle*. 92(1): 3-5.
- Silins, U., Anderson, A., **Bladon, K.D.**, Emelko, M.B., Stone, M., Spencer, S.A., Williams, C.H.S., Wagner, M.J., Martens, A.M., and Hawthorn, K. 2016. Southern Rockies Watershed Project. *The Forestry Chronicle*. 92(1): 39-42.
- Faramarzi, M., Srinivasan, R., Irvani, M., **Bladon, K.D.**, Abbaspour, K.C., Zehnder, A.J.B., and Goss, G. 2015. Setting up a hydrological model: Data discrimination analyses prior to calibration. *Environmental Modelling and Software*. 74: 48-65.
- **Bladon, K.D.**, Emelko, M.B., Silins, U., and Stone, M. 2014. Wildfire and the future of water supply. *Environmental Science & Technology*. 48: 8936-8943.
- Silins, U., **Bladon, K.D.**, Kelly, E.N., Esch, E., Spence, J.R., Stone, M., Emelko, M.B., Boon, S., Wagner, M.J., Williams, C.H.S., and Tichkowsky, I. 2014. Five-year legacy of wildfire and salvage logging impacts on nutrient runoff and aquatic plant, macroinvertebrate, and fish productivity. *Ecohydrology*. 7(6): 1508-1523.

- Wagner, M.J., **Bladon, K.D.**, Silins, U., Williams, C.H.S., Martens, A.M., Boon, S., MacDonald, R.J., Stone, M., Emelko, M.B., and Anderson, A. 2014. Catchment-scale stream temperature response to land disturbance by wildfire governed by surface-subsurface energy exchange and atmospheric controls. *Journal of Hydrology*. 517: 328-338.
- Bothwell, M.L., Kilroy, C., Taylor, B.W., James, D.A., Gillis, C-A., **Bladon, K.D.**, and Silins, U. 2012. Iron not involved in *Didymosphenia geminata* bloom success in phosphorus-poor rivers. *Canadian Journal of Fisheries and Aquatic Sciences*. 69(11): 1723–1727.
- Emelko, M.B., Silins, U., **Bladon, K.D.**, and Stone, M. 2011. Implications of land disturbance on drinking water treatability in a changing climate: demonstrating the need for “source water supply and protection” strategies. *Water Research*. 45(2): 461–472.
- Silins, U., Stone, M., Emelko, M.B., and **Bladon, K.D.** 2009. Sediment production following severe wildfire and post-fire salvage logging in the Rocky Mountain headwaters of the Oldman River Basin, Alberta. *Catena*. 79(3): 189–197.
- **Bladon, K.D.**, Silins, U., Wagner, M.J., Stone, M., Emelko, M.B., Devito, K.J., Mendoza, C.A., and Boon, S. 2008. Wildfire impacts on nitrogen export and production from headwater streams in southern Alberta’s Rocky Mountains. *Canadian Journal of Forest Research*. 38: 2359–2371.
- **Bladon, K.D.**, Lieffers, V.J., Silins, U., Landhäusser, S.M., and Blenis, P.V. 2008. Elevated mortality of residual trees following variable retention harvesting of mixedwood forest. *The Forestry Chronicle*. 84: 70–75.
- Silins, U., Stone, M., Emelko, M., and **Bladon, K.** 2008. Impacts of wildfire and post-fire salvage logging on sediment transfer in headwater regions of the Oldman Watershed, Alberta. *Sediment Dynamics in Changing Environments. IAHS Red Book Series*. 325: 510–515.
- **Bladon, K.D.**, Silins, U., Landhäusser, S.M., Messier, C., and Lieffers, V.J. 2007. Carbon isotope discrimination and water stress in trembling aspen following variable retention harvesting. *Tree Physiology*. 27: 1065–1071.
- **Bladon, K.D.**, Silins, U., Landhäusser, S.M., and Lieffers, V.J. 2006. Differential transpiration by three boreal tree species in response to increased evaporative demand after variable retention harvesting. *Agricultural and Forest Meteorology*. 138: 104–119.

Refereed Technical & Extension Publications

- Wiensczyk, A., Gayton, D., Redding, T., **Bladon, K.**, Leach, J., Swift, K., Ran, S., Krishnaswamy, A., Simmons, E., Joseph, L., Almuedo, P.L., and Cuzner, D. 2012. Climate-induced changes to natural disturbance regimes and management responses in British Columbia: Impacts on natural and human systems. FORREX Forum for Research and Extension in Natural Resources, Kamloops, B.C., FORREX Series 27. 28 pp.
- Pike, R.G., Redding, T., Moore, R.D., Winkler, R.D., and **Bladon, K.D.** (editors). 2010. Compendium of forest hydrology and geomorphology in British Columbia. B.C. Ministry of Forests and Range, Forest Science Program, Victoria, B.C. and FORREX Forum for Research and Extension in Natural Resources, Kamloops, B.C. Land Management Handbook 66. 805 pp.
- Silins, U., **Bladon, K.D.**, Anderson, A., Diiwu, J., Emelko, M.B., Stone, M., and Boon, S. 2009. Southern Rockies Watershed Project: How wildfire and salvage logging affect water quality and aquatic ecology. *Streamline*. 12(2):1–7.
- Boon, S., Davis, R., **Bladon, K.**, and Wagner, M. 2009. Comparison of field techniques for measuring snow density at a point. *Streamline*. 12(2):8–12.

- Silins, U., **Bladon, K.D.**, Stone, M., Emelko, M.B., and Boon, S. 2009. Southern Rockies Watershed Project: Impact of natural disturbance by wildfire on hydrology, water quality, and aquatic ecology. Phase I Final Report (2004-2008). Alberta Sustainable Resource Development. Edmonton, AB. 89 pp.
- **Bladon, K.D.**, and Redding, T. 2009. Wildfire and watershed hydrology: Key findings from a workshop. *Streamline*. 13(1):1-4.
- Redding, T., and **Bladon, K.D.** 2009. Mountain pine beetle and watershed management. *Streamline*. 13:29-31.
- **Bladon, K.D.** 2009. One Watershed – One Water Conference Summary. *LINK*. 4:1–2.
- **Bladon, K.D.**, and Silins, U. 2008. Linking silviculture to watershed management. *Canadian Silviculture*. August 2008:6–10.
- Emelko, M.B., Silins, U., **Bladon, K.D.**, and Stone, M. 2008. Drinking water treatability implications of severe wildfire. In Proceedings of the AWWA Water Quality Technology Conference. Denver, CO.
- **Bladon, K.D.**, Rothwell, R., and Spillios, L. 2008. Chapter 12: Hydrologic concerns of cold climate harvesting. In Handbook of Control and Mitigation Measures for Silvicultural Operations. National Council for Air and Stream Improvement, Inc. (NCASI). Montreal, QC.
- **Bladon, K.D.**, Rothwell, R., and Spillios, L. 2008. Chapter 9: Control and mitigation measures for fire: Hydrologic considerations. In Handbook of Control and Mitigation Measures for Silvicultural Operations. National Council for Air and Stream Improvement, Inc. (NCASI). Montreal, QC.
- **Bladon, K.D.**, and Lieffers, V.J. 2008. What happens to structure trees that are left in variable retention cutovers? *Sustainable Forest Management Network*. Research Note No. 28.
- **Bladon, K.D.**, Silins, U., Lieffers, V.J., and Landhäusser, S.M. 2008. Lessons learned from observations of mortality of residual trees following variable retention in west-central Alberta. In Overcoming Obstacles to Variable Retention in Forest Management: Science to Management Forum Proceedings, September 25–27, 2007. *BC Journal of Ecosystems and Management*. 8(3): 73-76
- **Bladon, K.D.** 2006. Stress and mortality of four boreal tree species following variable retention harvesting. *Ph.D. Thesis. University of Alberta*, Edmonton, AB.
- **Bladon, K.D.**, Lieffers, V.J., Silins, U., Landhäusser, S. 2006. Residual trees are under water stress in variable retention stands. *Centre for Enhanced Forest Management. Advances in Forestry Research*. Research Note 08/06.
- **Bladon, K.D.** 2004. Brown trees in green-tree retention. *Environmental Research News in Alberta*. 5(1): 7-8.

Manuscripts in Review/Advanced Stages of Preparation

- Bywater-Reyes, S., Segura, C., and **Bladon, K.D.** *In Review*. Relative influence of landscape variables, hydrologic conditions, and forest management on sediment yields in temperate mountain catchments. *Water Resources Research*.
- Hallema, D.W., Sun, G., Caldwell, P.V., Norman, S.P., Cohen, E.C., Liu, Y., **Bladon, K.D.**, and McNulty, S.G. *In review*. Burning forests impact water supplies. *Nature Communications*.
- Hallema, D.W., Robinne, F.-N., and **Bladon, K.D.** *In review*. Reframing the challenge of global wildfire threats to clean water. *Nature Clean Water*.

Invited Oral Presentations (* Graduate student)

- **Bladon, K.D.** 2017. Wildfire effects on source water quantity, quality, and aquatic ecology. *Washington State University Vancouver*. Dec. 4, 2017. Vancouver, WA.
- **Bladon, K.D.** 2017. Linking wildfire effects on water quantity and quality in headwater catchments to challenges for downstream drinking water treatment. *North Santiam Watershed Council Quarterly Meeting*. Nov. 9, 2017. Stayton, OR.
- **Bladon, K.D.,** Bywater-Reyes, S., LeBoldus, J.M., Segura, C., Ritokova, G., and Shaw, D.C. 2017. Annual water yield response in Oregon catchments affected by Swiss needle cast. *Swiss Needle Cast Annual General Meeting*. Nov. 7, 2017. Corvallis, OR.
- **Bladon, K.D.** 2017. Wildfire effects on forested headwater streams and downstream water supply. *Salem Public Works, Water Quality Division Meeting*. Oct. 20, 2017. Salem, OR.
- **Bladon, K.D.** 2017. Burning forests impact downstream water supply. *South Santiam Watershed Council Quarterly Meeting*. Oct. 17, 2017. Lebanon, OR.
- **Bladon, K.D.,** Segura, C., Bywater-Reyes, S., Cook, N.A., and Reiter, M. 2017. Impacts of contemporary forest management on stream temperature in western Oregon. *Oregon Forest and Industries Council Policy Committee Meeting*. Sep. 20, 2017. Salem, OR.
- **Bladon, K.D.,** *Cole, R., and Post, S. 2016. Wildfire impacts on soil hydraulic properties and water quality in southern Oregon. *Southern Oregon Hydrologists Workshop*. May 23, 2016. Canyonville, OR.
- **Bladon, K.D.** 2016. Management implications of disturbance on forest hydrology. *State of the State and Forest Health Conference*. Feb. 16-17, 2016. Corvallis, OR.
- **Bladon, K.D.,** *Puntenney, K.C., and Silins, U. 2015. Runoff and sediment transport through riparian buffers following forest harvesting of a Rocky Mountain headwater catchment. *NCASI Forest Watersheds Science Symposium*. Sept. 23, 2015. Vancouver, WA.
- **Bladon, K.D.,** Wagner, M.J., Silins, U., *Williams, C.H.S., Martens, A.M., Stone, M., and Emelko, M.B. 2015. On the complexity of catchment-scale stream temperature response to land disturbance by wildfire and post-fire salvage logging in the Rocky Mountains. *145th Annual Meeting of the American Fisheries Society*. Aug. 16-20, 2015. Portland, OR.
- **Bladon, K.D.,** Dixon, J., Silins, U., and Emelko, M.B. 2015. Mitigating the impacts of events 2: Watershed monitoring and why it's worth it. *AWWOA Workshop – Fires, Floods and Other Extreme Events: Is Your Utility Ready?* Mar. 9, 2015. Banff, AB.
- **Bladon, K.D.,** Silins, U., Emelko, M.B., Flannigan, M.D., Dupont, D.P., Kienzle, S.W., Parisien, M.-A., Robinne, F.,-N., Schroeder, D., Stone, M., Thompson, D.K., Tymstra, C., Wang, X. 2014. Assessing the impact of active land management in mitigating wildfire threat to source water supply quality. *American Geophysical Union Fall Meeting*. Dec. 15-19, 2014. San Francisco, CA.
- **Bladon, K.D.,** Silins, U., Emelko, M.B., Dupont, D.P., Flannigan, M.D., Kienzle, S.W., Parisien, M.-A., Robinne, S., Schroeder, D., Thompson, D.K., Tymstra, C., Waddington, J.M., Wang, X., Woolford, D.G., and Wotton, B.M. 2013. Minimizing wildfire risk to municipal water works by active source water protection. *AWWA Water Quality Technology Conference*. Long Beach, CA.
- **Bladon, K.D.,** Silins, U., Emelko, M.B., Stone, M., and Williams, C.H.S.* 2013. The Milk River Fire and lessons learned from the Lost Creek Wildfire. *Milk River Watershed Council Canada 8th Annual General Meeting*. Milk River, AB.
- **Bladon, K.D.,** Silins, U., Emelko, M.B., Stone, M., Wagner, M.J., and Williams, C.H.S.* 2013. Southern Rockies Watershed Project: The legacy of wildfire effects on hydrology, water quality, and

aquatic ecosystem health. *Oldman Watershed Council 7th Annual Holding the Reins Landowners Summit: Fire Impacts and Stewardship in the Watershed*. Fort Macleod, AB

- **Bladon, K.D.** 2011. Watershed disturbance by wildfire and salvage logging: the legacy of effects on hydrology, heavy metals, nutrients, and aquatic ecology. *Coldwater Indian Band Water Workshop*. Merritt, BC.
- **Bladon, K.D.** 2011. After the fire's out: the legacy of wildfire effects on hydrology, water quality, and aquatic ecosystems. *Thompson Rivers University Environmental Sciences Seminar Series*. Kamloops, BC.
- **Bladon, K.D.** 2011. Ecohydrology: sustainable water resource and ecosystem management. *Eco-Health, Ecosystems, and Watersheds Workshop*. Merritt, BC.
- **Bladon, K.D.**, Silins, U., Williams, C.H.S., Wagner, M.J., Stone, M., Emelko, M.B., Boon, S. 2011. Phosphorus and nitrogen linkages to changes in aquatic ecosystems after wildfire in the Rocky Mountains of Alberta, Canada. *American Chemical Society National Meeting and Expo*, Denver, CO.
- **Bladon, K.D.**, Boon, S., Burles, K., Williams, C., Wagner, M., Silins, U., Stone, M., Emelko, M. 2011. Changes in snow accumulation and melt after wildfire in the southern Rocky Mountains of Alberta, Canada. *American Chemical Society National Meeting and Expo*, Denver, CO.
- **Bladon, K.D.** 2009. Wildfire effects on water quality. Science, Sustainability, and Innovation – Disturbance Effects on Watershed Function. *Canadian Institute of Forestry National Electronic Lecture Series*. Canada.
- **Bladon, K.D.**, and Silins, U. 2008. Cascading ecohydrological effects of wildfire and post-fire salvage logging in the Eastern Slopes, Alberta. *North American Lake Management Society*. Lake Louise, AB.
- **Bladon, K.D.**, Silins, U., Landhäusser, S.M., and Lieffers, V.J. 2007. Lessons learned from observations of mortality of residual trees following partial harvesting in west-central Alberta. Overcoming Obstacles to Variable Retention in Forest Management. *FORREX Annual General Meeting & Science Forum*. Prince George, BC.
- Silins, U. and **Bladon, K.D.** 2007. Integrated forest-watershed planning tools: case studies with ECA-Alberta. *Sustainable Forest Management Network. Management of Aquatic Systems in Forested Landscapes Workshop*. Winnipeg, MB.

Oral Presentations (* Graduate student)

- *Cole, R.P., **Bladon, K.D.**, Wagenbrenner, J.W., and Coe, D. 2018. Post-fire land management: Comparative effects of different strategies on hillslope sediment yield and vegetative recovery. *39th Annual Forest Vegetation Management Conference*. Jan. 16-18, 2018. Anderson, CA.
- **Bladon, K.D.**, Bywater-Reyes, S., LeBoldus, J.M., Segura, C., Ritokova, G., and Shaw, D.C. 2017. Increased annual runoff ratios in Pacific Northwest catchments impacted by epidemic foliage disease of Douglas-fir. *American Geophysical Meeting Fall Meeting*. Dec. 11-15, 2017, New Orleans, LA.
- Dymond, S.F., **Bladon, K.D.**, McDonnell, J.J., and McNamara, J.P. 2017. Rainfall-runoff relationships and tree water use in a coast redwood forest. *American Geophysical Meeting Fall Meeting*. Dec. 11-15, 2017, New Orleans, LA.
- *Steadman, C.L., **Bladon, K.D.**, Argerich, A., and Johnson, S.L. 2017. An evaluation of nitrogen and phosphorus responses to rain events in a forested watershed. *American Geophysical Meeting Fall Meeting*. Dec. 11-15, 2017, New Orleans, LA.

- Bywater-Reyes, S., **Bladon, K.D.**, and Segura, C. 2017. Relative influence of landscape variables, discharge, and forest management on sediment yields in temperate mountain catchments. *Geological Society of America Annual Meeting*. Oct. 22-25, 2017, Seattle, WA.
- Segura, C., **Bladon, K.D.**, Hatten, J.A., Bywater-Reyes, S., Cook, N.A., and Reiter, M. 2017. Stream temperature and sediment impacts in managed forests. California Licensed Foresters Association Fall Workshop. Sep. 8, 2017, Chico, CA.
- *Jarecke, K.M., Wondzell, S.M., and **Bladon, K.D.** 2017. Soil-water vegetation: The role of sub-watershed scale topography and hydrologic connectivity. *H.J. Andrews Forest LTER NSF Midterm Review*. Aug. 2, 2017. Blue River, OR.
- LeBoldus, J.M., **Bladon, K.D.**, *Bywater-Reyes, S., Segura, C., Ritóková, G., and Shaw, D.C. 2017. The effects of Swiss needle cast foliage disease on annual streamflow in western Oregon. *Swiss Needle Cast Cooperative Quarterly Meeting*. Jul. 27, 2017. Corvallis, OR.
- Segura, C., **Bladon, K.D.**, *Cook, N.A., *Bywater-Reyes, S., and Reiter, M. 2017. Studies of the impacts of contemporary forest management on stream temperature in western Oregon. *National Council for Air and Stream Improvement Annual Meeting*. Jul. 14, 2017. Eugene, OR.
- **Bladon, K.D.** 2017. Hydrology, water quality, and aquatic ecosystem responses to wildfire and post-fire land management. *OSU Fire Symposium*. May 5, 2017. Corvallis, OR.
- *Robinne, F.-N., Parisien, M.-A., Flannigan, M., Miller, C., and **Bladon, K.D.** 2017. A global evaluation of wildfire risks to human and environmental water security. *European Geophysical Union Meeting*. Apr. 23-28, 2017. Vienna, Austria.
- *Jarecke, K.M. Wondzell, S.M., and **Bladon, K.D.** 2017. Topographic influences on soil moisture availability in the western Cascades of central Oregon. *Western Forestry Graduate Research Symposium*. Apr. 21, 2017. Corvallis, OR.
- *Bywater-Reyes, S., Segura, C., and **Bladon, K.D.** 2017. Relative influence of landscape physiography, hydrologic conditions, and land management on sediment yield in a temperate mountain watershed. *U.S. Geological Survey Assessing Trends in Sediment Processes in Puget Sound Watersheds Workshop*. Apr. 11-12, 2017, Seattle, WA.
- *Cook, N.A., **Bladon, K.D.**, and Segura, C. 2016. An analysis of the downstream propagation of stream temperature changes following headwater forest management in western Oregon. *American Geophysical Union Fall Meeting*, Dec. 12-16, 2016. San Francisco, CA.
- Stone, M., Emelko, M.B., Silins, U., Collins, A.L., *Williams, C.H.S., Martens, A.M., and **Bladon, K.D.** 2016. The impact of wildfire on phosphorus speciation and sorption behavior of sediment in Alberta rivers. *IAGLR 59th Annual Conference on Great Lakes Research*. Jun. 6-10, 2016. Guelph, ON.
- *Puntenney, K.C., **Bladon, K.D.**, and Silins, U. 2016. Quantifying shallow subsurface runoff and sediment transport through forested buffers in the Rocky Mountains. *Western Forestry Graduate Research Symposium*. Apr. 22, 2016. Corvallis, OR.
- *Puntenney, K.C., **Bladon, K.D.**, and Silins, U. 2016. Putting riparian buffers to the test: The influence of antecedent soil moisture on runoff and sediment transport during high intensity precipitation events. *6th Annual Hydrophiles Water Research Symposium*. Apr. 18-19, 2016. Corvallis, OR.
- *Puntenney, K.C., **Bladon, K.D.**, and Silins, U. 2016. Runoff and sediment transport through riparian buffers in a Rocky Mountain headwater catchment. *36th American Geophysical Union Hydrology Days*. Mar. 21-23, 2016. Fort Collins, CO.
- Stone, M., Silins, U., Emelko, M.B., **Bladon, K.D.**, Martens, A.M., *Williams, C.H.S., and Collins, A.L. 2015. Exploring the linkage between fine sediment, phosphorus, and stream ecology in wildfire

impacted watersheds. *9th International SedNet Conference - Solving Societal Challenges: Working With Sediments*. Sept. 23-26, 2015. Krakow, Poland.

- **Bladon, K.D.**, Winkler, A.D., and Ganio, L.M. 2015. In-stream phosphorus and nitrogen response to logging in high elevation, forested catchments. *IUFRO 4th International Conference on Forests and Water in a Changing Environment*. Jul. 6-9, 2015. Kelowna, BC.
- *Spencer, S.A., Anderson, A., Silins, U., **Bladon, K.D.**, and Collins, A.L. 2015. Groundwater-surface water interactions in a Rocky Mountain catchment in Alberta, Canada. *IUFRO 4th International Conference on Forests and Water in a Changing Environment*. Jul. 6-9, 2015. Kelowna, BC.
- Segura, C., and **Bladon, K.D.** 2015. Investigation of the scaling properties of the rainfall runoff generation processes and its relation to nutrient flushing mechanisms in the Oregon Cascade Mountains: A nested approach. *IUFRO 4th International Conference on Forests and Water in a Changing Environment*. Jul. 6-9, 2015. Kelowna, BC.
- *Robinne, F.-N., Flannigan, M.D., Parisien, M.-A., Bladon, K.D., Miller, C., Emelko, M.B., and Silins, U. 2015. Provincial-scale assessment of fire risks to water resources. *IUFRO 4th International Conference on Forests and Water in a Changing Environment*. Jul. 6-9, 2015. Kelowna, BC.
- Silins, U., **Bladon, K.D.**, Emelko, M.B., and Stone, M. 2015. Mitigating the impacts of events 1: Active source water protection through watershed management. *AWWOA Workshop – Fires, Floods and Other Extreme Events: Is Your Utility Ready?* Mar. 9, 2015. Banff, AB.
- Emelko, M.B., Stone, M., Silins, U., and **Bladon, K.D.** 2014. Wildfire impacts on sediment and nutrient storage and downstream delivery to drinking water treatment plants. *ICCE/IAHS International Symposium on Sediment Dynamics: From the Summit to the Sea*. Dec. 11-14, 2014. New Orleans, LA.
- Silins, U., **Bladon, K.D.**, Wang, X., Robinne, F.-N., Emelko, M.B., Flannigan, M.D., Dupont, D.P., Parisien, M.-A., Thompson, D.K., Tymstra, C., Schroeder, D., Kienzle, S.W., Reid, D., Waddington, J.M., Woolford, D.G., and Wotton, B.M. 2014. Management of wildfire risk in forested regions of Alberta to downstream municipal drinking water treatment. *Wildland Fire Canada Conference*. Oct. 7-9, 2014. Halifax, NS.
- Emelko, M.B., Silins, U., **Bladon, K.D.**, and Stone, M. 2014. Linking upstream watershed activity/disturbance to downstream treatment performance. *OWWA Spring Treatment Seminar*. March 27, 2014. Vaughan, ON.
- *Shams, S., Emelko, M.B., Silins, U., **Bladon, K.D.**, Stone, M., Williams, C.H.S., and Martens, A.M. 2014. Long-term wildfire impacts on THM formation potential. *248th American Chemical Society National Meeting*. Aug. 10-14, 2014. San Francisco, CA.
- **Bladon, K.D.**, Silins, U., Flannigan, M.D., Emelko, M.B., Dupont, D.P., Kienzle, S.W., Parisien, M.-A., Schroeder, D., Thompson, D.K., Tymstra, C., Waddington, J.M., Wang, X., Woolford, D.G., and Wotton, B.M. 2013. Management of wildfire risk in forested regions of Alberta to downstream municipal drinking water treatment. *AWRA Healthy Forests=Healthy Waters Conference*. Hartford, CT.
- **Bladon, K.D.**, Silins, U., Flannigan, M.D., Emelko, M.B., Dupont, D.P., Kienzle, S.W., Parisien, M.-A., Schroeder, D., Thompson, D.K., Tymstra, C., Waddington, J.M., Wang, X., Woolford, D.G., and Wotton, B.M. 2013. Integrated watershed management to identify and mitigate wildfire risk in forested regions of Alberta to downstream drinking water treatment. *CMOS-CGU-CWRA Congress*. Saskatoon, SK.
- **Bladon, K.D.**, Silins, U., Dixon, J., and Emelko, M.B. 2012. Historical analysis of water quantity and quality in the Elbow River watershed, Alberta, Canada. *American Geophysical Union Fall Meeting*. San Francisco, CA.

- Emelko, M.B., Geng, K., **Bladon, K.D.**, and Silins, U. Climate change effects in Canadian source watersheds: Implications to NOM character and treatability. *15th Canadian National Conference and 6th Policy Forum on Drinking Water*. Kelowna, BC.
- **Bladon, K.D.**, Silins, U., Stone, M., Emelko, M.B., Boon, S., Williams, C.H.S., and Wagner, M.J., 2012. Limiting nutrients, algae, and macroinvertebrates: A cascading series of ecohydrological effects after wildfire in Canada's Rocky Mountains. *IAHS-ICCE International Conference. Wildfire and Water Quality: Process, Impacts and Challenges*, Banff, AB.
- **Bladon, K.D.**, Silins, U., Stone, M., Boon, S., Emelko, M.B., Williams, C.H.S., and Wagner, M.J., 2012. Incomplete recovery of water quality after wildfire in Alberta's Rocky Mountains: insights from eight years of watershed research. *Canadian Water Resources Association – Canadian Geophysical Union National Conference*, Banff, AB.
- **Bladon, K.D.** 2009. Wildfire and salvage harvesting in the Rocky Mountains: Linked effects on water quality and aquatic ecology. *Wildfire and Watershed Hydrology Workshop*. Kelowna, BC.
- Silins, U., Lieffers, V., Reid D., Brabender, B., **Bladon, K.D.**, and Piña, P. 2007. Stand water balance of lodgepole pine forests in the absence of Mountain Pine Beetle: characterizing the processes of the water balance. *FORREX: Mountain Pine Beetle and Watershed Hydrology Workshop*. Kelowna, BC.
- **Bladon, K.D.**, Lieffers, V.J., Silins, U., and Landhäusser, S. 2006. A health check-up for three tree species following variable retention harvesting in boreal mixedwoods. *SFMN Conference – Sustaining Canada's Forests: Building Momentum*. Edmonton, AB.
- **Bladon, K.D.**, Silins, U., Landhäusser, S., and Lieffers, V.J. 2006. Differential ecophysiological responses of three boreal trees species following variable retention harvesting. *IUFRO Uneven-aged Silviculture Research Group 1.14.00 5th Conference and Field Tour*. Rouyn-Noranda, QC.
- **Bladon, K.D.**, Lieffers, V.J., Silins, U., and Landhäusser, S. 2006. Status report: Mortality of residual in mixedwood cutovers. *SFMN Partners Working Group*. Edmonton, AB.
- **Bladon, K.D.**, Silins, U., Landhäusser, S., and Lieffers, V.J. 2006. Differential atmospheric and autecological controls of transpiration in three boreal tree species. *5th CGU Hydrology Section Student Conference*. Edmonton, AB.
- **Bladon, K.D.**, Silins, U., and Lieffers, V.J. 2005. Residual tree water use in response to microclimate change in boreal mixedwood green-tree retention strategies. *5th North American Forest Ecology Workshop*. Aylmer, QC.
- **Bladon, K.D.**, Silins, U., and Lieffers, V.J. 2005. Increased atmospheric moisture demand and variable transpiration rates following green-tree retention harvesting in boreal mixedwood forest. *Canadian Geophysical Union Annual Meeting*. Banff, AB.
- **Bladon, K.D.**, Silins, U., and Lieffers, V.J. 2004. Differential atmospheric controls on transpiration of boreal trees: A potential factor in pre-mature tree mortality in green-tree retention strategies. *Canadian Geophysical Union / American Geophysical Union 2004 Joint Assembly*. Montreal, QC. **CANADIAN AND AMERICAN GEOPHYSICAL UNION 'BEST STUDENT PAPER' (ALL FIELDS)**.

Poster Presentations (* Graduate student)

- *Martens, A.M., Silins, U., Emelko, M.B., Stone, M., Bladon, K.D., Williams, C.H.S., Wagner, M.J., Proctor, H.C., Luchkow, E., and Herlein, K. 2018. The Lost Creek Wildfire: Long-term impacts on aquatic ecology. *Canadian Conference for Fisheries Research*. Jan. 4-7, 2018. Edmonton, AB.
- *Cole, R.P., Bladon, K.D., Wagenbrenner, J.W., and Coe, D. 2017. Post-fire land management: Comparative effects of different strategies on hillslope sediment yield. *American Geophysical Meeting Fall Meeting*. Dec. 11-15, 2017, New Orleans, LA.
- *Rachels, A.A., Bladon, K.D., and Bywater-Reyes, S. 2017. Quantifying ratios of suspended sediment sources in forested headwater streams following timber-harvesting operations. *American Geophysical Meeting Fall Meeting*. Dec. 11-15, 2017, New Orleans, LA.
- *Cole, R.P., Bladon, K.D., Wagenbrenner, J.W., and Coe, D. 2017. Comparative effects of different post-fire land management strategies on hillslope sediment yield. *Geological Society of America Annual Meeting*. Oct. 22-25, 2017, Seattle, WA.
- *Rachels, A.A., Bladon, K.D., and *Bywater-Reyes, S. 2017. Determining the sources of suspended sediment in Oregon Coast Range headwater streams following forest-harvesting operations. *Geological Society of America Annual Meeting*. Oct. 22-25, 2017, Seattle, WA.
- *Jarecke, K.M., Wondzell, S.M., and **Bladon, K.D.** 2017. Topographic influences on spatiotemporal variability of soil moisture in the Western Cascades of Central Oregon. *Ecological Society of America 102nd Annual Meeting*. Aug. 6-11, 2017. Portland, OR.
- **Bladon, K.D.**, and *Cole, R.P. 2017. Soil hydraulic properties and subsurface flow pathways following wildfire in the Cascade Mountains, Oregon. *Canadian Geophysical Union Annual Meeting*. May 29-31, 2017. Vancouver, BC.
- Martens, A.M., Silins, U., **Bladon, K.D.**, *Williams, C.H.S., Wagner, M.J., and Luchkow, E. 2017. Stable isotope analysis of food web dynamics in aquatic ecosystems following severe wildfire in Alberta's Rocky Mountains. *Canadian Geophysical Union Annual Meeting*. May 29-31, 2017. Vancouver, BC.
- *Williams, C.H.S., Silins, U., **Bladon, K.D.**, and Anderson, A. 2017. Muted rainfall-runoff response to increased net rainfall after wildfire in Alberta's mountain headwaters. *Canadian Geophysical Union Annual Meeting*. May 29-31, 2017. Vancouver, BC.
- Hallema, D.W., Sun, G., Caldwell, P.V., Norman, S.P., Cohen, E.C., Liu, Y., **Bladon, K.D.**, Moussa, R., and McNulty, S.G. 2017. Contribution of wildland fires to water supply augmentation in the lower 48 states. *NC State University 6th Annual Postdoctoral Research Symposium*. May 24, 2017. Raleigh, NC.
- *Robinne, F.-N., Parisien, M.-A., Flannigan, M.D., Miller, C., and **Bladon, K.D.** 2017. Creating a spatially-explicit index: A method for assessing the global wildfire-water risk. *European Geophysical Union General Assembly*. Apr. 23-28, 2017. Vienna, Austria.
- *Rachels, A.A., **Bladon, K.D.**, and Bywater-Reyes, S. 2017. Quantifying ratios of suspended sediment sources in forested headwater streams following timber harvest operations. *Western Forestry Graduate Research Symposium*. Apr. 21, 2017. Corvallis, OR.
- *Steadman, C.L., **Bladon, K.D.**, Argerich, A., and Johnson, S.L. 2017. Spatial and temporal variability of stream water nitrogen and phosphorus in a forested Oregon Coast Range watershed. *Western Forestry Graduate Research Symposium*. Apr. 21, 2017. Corvallis, OR.
- *Rachels, A.A., **Bladon, K.D.**, and Bywater-Reyes, S. 2017. Identifying the primary sources of suspended sediment in Oregon Coast Range headwater streams following forest harvesting. *7th Annual Pacific Northwest Water Research Symposium*. Mar. 6-7, 2017. Corvallis, OR.

- *Steadman, C.L., **Bladon, K.D.**, Argerich, A., and Johnson, S.L. 2017. Geological and hydrological influences on nitrogen and phosphorus concentrations in forested headwater catchments of the northern coast range of Oregon. *7th Annual Pacific Northwest Water Research Symposium*. Mar. 6-7, 2017. Corvallis, OR.
- Robinne, F.-N., Miller, C., Parisien, M.-A., **Bladon, K.D.**, Emelko, M.B., Silins, U., and Flannigan, M.D. 2017. A spatial evaluation of wildfire-water risks to human and natural systems at a global scale. *Spatial Knowledge and Information - Canada*. Feb. 23-25, 2017. Banff, AB.
- **Bladon, K.D.**, and *Cole, R. 2016. Wildfire effects on soil hydraulic properties and subsurface flow pathways in southwestern Oregon. *American Geophysical Union Fall Meeting*. Dec. 12-16, 2016. San Francisco, CA.
- *Bywater-Reyes, S., Segura, C., and **Bladon, K.D.** 2016. Non-stationary suspended sediment dynamics in western Oregon: From temporal patterns to processes and controls. *American Geophysical Union Fall Meeting*. Dec. 12-16, 2016. San Francisco, CA.
- Dymond, S.F., Miniati, C.F., **Bladon, K.D.**, Keppeler, E.T., and Caldwell, P.V. 2016. Disentangling the response of streamflow to forest management and climate. *American Geophysical Union Fall Meeting*. Dec. 12-16, 2016. San Francisco, CA.
- *Jarecke, K.M., **Bladon, K.D.**, and Wondzell, S.M. 2016. Spatiotemporal variability of hillslope soil moisture across steep, highly dissected topography. *American Geophysical Union Fall Meeting*. Dec. 12-16, 2016. San Francisco, CA.
- *Puntenney, K.C., **Bladon, K.D.**, and Silins, U. 2016. Surface runoff and sediment transport through a riparian buffer of a steep Rocky Mountain catchment. *American Geophysical Union Fall Meeting*. Dec. 12-16, 2016. San Francisco, CA.
- *Steadman, C.L., **Bladon, K.D.**, Argerich, A., and Johnson, S.L. 2016. Spatial and temporal heterogeneity of nitrogen in headwater catchments of the Northern Coast Range of Oregon. *American Geophysical Union Fall Meeting*. Dec. 12-16, 2016. San Francisco, CA.
- *Steadman, C.L., Argerich, A., **Bladon, K.D.**, and Johnson, S.L. 2016. Early trajectory of chemical water quality response to disturbance by forest harvesting in the Northern Coast Range of Oregon. *Society for Freshwater Science*. May. 21-26, 2016. Sacramento, CA.
- *Jarecke, K.M., Wondzell, S.M., and **Bladon, K.D.** 2016. How do topography and soils interact to influence the spatiotemporal variability of hillslope soil moisture and soil-water retention at the H.J. Andrews Experimental Forest? *Western Forestry Graduate Research Symposium*. Apr. 22, 2016. Corvallis, OR.
- *Steadman, C.L., Argerich, A., **Bladon, K.D.**, and Johnson, S.L. 2016. Effects of disturbance by forest harvesting on limiting nutrients in the Trask Watershed of the northern Coast Range of Oregon. *Western Forestry Graduate Research Symposium*. Apr. 22, 2016. Corvallis, OR.
- *Jarecke, K.M., Wondzell, S.M., and **Bladon, K.D.** 2016. Measuring soil moisture to understand landscape controls on soil water retention at the H.J. Andrews Experimental Forest. *6th Annual Hydrophiles Water Research Symposium*. Apr. 18-19, 2016. Corvallis, OR.
- *Minson, C., Segura, C., and **Bladon, K.D.** 2016. A preliminary analysis of micrometeorological data collected at two elevations in the McDonald Research Forest. *6th Annual Hydrophiles Water Research Symposium*. Apr. 18-19, 2016. Corvallis, OR.
- *Steadman, C.L., **Bladon, K.D.**, Argerich, A., and Johnson, S.L. 2016. Spatial and temporal variability of nitrogen and phosphorus in headwater catchments of the northern Coast Range of Oregon. *6th Annual Hydrophiles Water Research Symposium*. Apr. 18-19, 2016. Corvallis, OR.

- *Puntenney, K., **Bladon, K.D.**, and Silins, U. 2015. Forest harvesting of a Rocky Mountain headwater catchment: Assessing the impacts on runoff and sediment transport into and through riparian buffers. *American Geophysical Union Fall Meeting*. Dec. 14-18, 2015. San Francisco, CA.
- **Bladon, K.D.**, *Cook, N.A., Light, J.T., Segura, C., and Teply, M. 2015. Spatial and temporal stream temperature response to contemporary forest harvesting in the Oregon Coast Range. *American Geophysical Union Fall Meeting*. Dec. 14-18, 2015. San Francisco, CA.
- *Williams, C.H.S., Silins, U., **Bladon, K.D.**, Martens, A.M., Wagner, M.J., and Anderson, A. 2015. Rainfall-runoff dynamics following wildfire in mountainous headwater catchments, Alberta, Canada. *American Geophysical Union Fall Meeting*. Dec. 14-18, 2015. San Francisco, CA.
- *Martens, A.M., Silins, U., **Bladon, K.D.**, *Williams, C.H.S., Wagner, M.J., and Luchkow, E. 2015. Stable isotope analysis of energy dynamics in aquatic ecosystems suggests trophic shifts following severe wildfire. *American Geophysical Union Fall Meeting*. Dec. 14-18, 2015. San Francisco, CA.
- Silins, U., Emelko, M.B., **Bladon, K.D.**, *Williams, C.H.S., Stone, M., Martens, A.M., and Wagner, M.J. 2015. Longer-term stream nitrogen dynamics after wildfire and salvage harvesting: Implications for management concepts based on trajectories of post-disturbance watershed recovery. *American Geophysical Union Fall Meeting*. Dec. 14-18, 2015. San Francisco, CA.
- Redding, T., Pike, R.G., Winkler, R.D., Moore, R.D., and **Bladon, K.D.** 2015. Compendium of Forest Hydrology and Geomorphology in BC. *IUFRO 4th International Conference on Forests and Water in a Changing Environment*. Jul. 6-9, 2015. Kelowna, BC.
- *Robinne, F.-N., Flannigan, M.D., Parisien, M.-A., Bladon, K.D., Miller, C., Emelko, M.B., and Silins, U. 2015. Managing wildfires for water security: A risk-based approach. *IUFRO 4th International Conference on Forests and Water in a Changing Environment*. Jul. 6-9, 2015. Kelowna, BC.
- *Puntenney, K., **Bladon, K.D.**, and Silins, U. 2015. Assessing riparian buffer effectiveness: the role of antecedent moisture conditions in predicting erosion and sediment transport. *Western Forestry Graduate Research Symposium*. Apr. 27-28, 2015. Corvallis, OR
- *Puntenney, K., **Bladon, K.D.**, and Silins, U. 2015. The role of antecedent soil moisture conditions in erosion and sediment transport to streams in managed, headwater catchments. *5th Annual Hydrophiles Water Research Symposium*. Apr. 26-28, 2015. Corvallis, OR.
- Segura, C., Nickolas, L., and **Bladon, K.D.** 2015. Scaling properties of rainfall runoff generation processes as nutrient flushing mechanisms in the Oregon Cascade Mountains. *HJ Andrews Experimental Forest Long-Term Ecological Research Program (LTER) Symposium: Leveraging Long-Term Research*. Jan. 29, 2015. Corvallis, OR.
- *Williams, C.H.S., Silins, U., Wagner, M.J., **Bladon, K.D.**, Martens, A.M., Anderson, A., Stone, M., and Emelko, M.B. 2014. Impacts of wildfire on interception losses and net precipitation in a sub-alpine Rocky Mountain watershed in Alberta, Canada. *American Geophysical Union Fall Meeting*. Dec. 15-19, 2014. San Francisco, CA.
- **Bladon, K.D.**, Silins, U., Williams, C.H.S., Martens, A.M., Wagner, M.J., Emelko, M.B., and Stone, M. 2014. Impacts of wildfire and salvage harvesting on stream nitrogen across nine years of watershed research. *American Geophysical Union Fall Meeting*. Dec. 15-19, 2014 San Francisco, CA.
- Silins, U., Stone, M., Hawthorn, K., Allin, D., Emelko, M.B., **Bladon, K.D.**, Martens, A.M., Williams, C.H.S., Anderson, A., and Collins, A.L. 2014. Channel storage of sediment-phosphorus governs legacy forest disturbance effects on stream benthos decades after wildfire and forest harvest. *ICCE/IAHS International Symposium on Sediment Dynamics: From the Summit to the Sea*. Dec. 11-14, 2014. New Orleans, LA.

- *Robinne, F.-N., **Bladon, K.D.**, Parisien, M.-A., Flannigan, M.D., Silins, U., Emelko, M.B., and Wang, X. 2014 Spatial analysis of wildfire risk to Alberta's drinking water supply. *Large Wildland Fires Conference*. May 19-22, 2014. Missoula, MT.
- *Spencer, S.A., Anderson, A., Silins, U., **Bladon, K.D.**, and Collins, A.L. 2014. Towards understanding the spatial and temporal characteristics of stream, hillslope, and groundwater runoff processes in a Rocky Mountain headwater catchment in Alberta, Canada. *European Geosciences Union*. Apr. 27-May 2, 2014. Vienna, Austria.
- **Bladon, K.D.**, Silins, U., Kelly, E.N., Stone, M., Emelko, M.B., Boon, S., Williams, C.H.S., Wagner, M.J., Esch, E., and Spence, J.R. 2010. Ecohydrological linkages between water quality and aquatic ecology after severe wildfire in Rocky Mountain catchments. *Joint Canadian Meteorological and Oceanographic Society-Canadian Geophysical Union Congress*. Ottawa, ON.
- **Bladon, K.D.**, Emelko, M.B., Silins, U., and Stone, M. 2009. Treatability implications of upstream land disturbance in a changing environment. *American Water Works Association – Water Quality and Technology Conference*. Seattle, WA. **AWARDED 1ST PRIZE - BEST POSTER**.
- **Bladon, K.D.**, Silins, U., Wagner, M.J., Stone, M., Emelko, M.B., Devito, K.J., Mendoza, C.A., and Boon, S. 2008. Wildfire and salvage logging impacts on stream water nitrogen in southern Alberta's Rocky Mountains. *American Geophysical Union Fall Meeting*. San Francisco, CA.
- **Bladon, K.D.**, Silins, U., Wagner, M.J., Schindler, D.W., Kelly, E.N., Stone, M., and Emelko, M.B. 2007. Natural disturbance effects from severe wildfire on watershed function in high water yielding Rocky Mountain catchments in southern Alberta. *Hydrologic Implications of Mountain Pine Beetle: Learning from the B.C. Experience*. Edmonton, AB.
- **Bladon, K.D.**, Silins, U., Lieffers, V.J., and Landhäusser, S. 2007. Effect of an abrupt change in microclimate on boreal tree species water use. *Hydrologic Implications of Mountain Pine Beetle: Learning from the B.C. Experience*. Edmonton, AB.
- **Bladon, K.D.**, Landhäusser, S., Lieffers, V.J., and Silins, U. 2006. Fate of residual tree species following harvesting in the boreal forest. *IUFRO Uneven-aged Silviculture Research Group 1.14.00 5th Conference and Field Tour*. Rouyn-Noranda, QC.
- **Bladon, K.D.**, Landhäusser, S., Lieffers, V.J., and Silins, U. 2006. Post-harvest fate of residual trees in boreal mixedwood partial cutovers. *Forest Industry Lecture Series No. 54*. University of Alberta, Edmonton, AB. **AWARDED 1ST PRIZE - BEST POSTER**.
- **Bladon, K.D.**, Silins, U., and Lieffers, V.J. 2004. Pre-mature tree mortality as a limit to success of green-tree retention harvest strategies. *Forest Industry Lecture Series No. 51*. University of Alberta, Edmonton, AB.

Grants and Scholarships

- 'Trees to Taps: Oregon municipal water supply study' – Oregon Forest Resources Institute (\$119,917; Co-PI; Souder and 3 others) 2018-2018
- 'Multiscale investigation of perennial flow and thermal influence of headwater streams into fish bearing systems' – CalFire (\$210,763; Co-PI; Segura and Bladon) 2017-2019
- 'Post-fire response to forest management: Mitigations for improved water quality performance' – USFS PSW and CalFire (\$134,191; PI; Bladon) 2017-2019
- Forested wetlands effectiveness project: Technical writing and advisory group – Washington State Department of Natural Resources (\$16,600; PI; Bladon)

- ‘Rapid proposal: Fire effects on soil and aquatic organic matter in a southern Appalachian hardwood forest: A rapid assessment across the terrestrial-aquatic interface following the Great Smokey National Park Fire of 2016’ – National Science Foundation; (\$159,483; Co-PI, Hatten and 4 others) 2017-2018
- ‘Alsea Watershed Study revisited: Forest management effects on suspended sediment’ – National Council for Air and Stream Improvement (\$31,114; Co-PI; Hatten and 3 others) 2017-2018
- ‘Predicting stream nutrient concentrations from landscape metrics to develop better nutrient criteria’ – OSU Forest Research Laboratory, Fish and Wildlife Habitat in Managed Forests Research Program (\$114,423; Co-PI; Argerich and 3 others) 2016-2017
- ‘The role of catchment storage in controlling stream temperature response to forest harvesting’ – OSU Forest Research Laboratory, Fish and Wildlife Habitat in Managed Forests Research Program (\$57,925; Co-PI; Segura and 2 others) 2016-2017
- ‘Using sediment-fingerprinting techniques to perform a preliminary analysis of the effects of contemporary harvesting practices on sediment source in the Phase 3 experiment of the Caspar Creek Watershed’ – CalFire (\$64,000; Co-PI; Hatten and 2 others) 2016-2017
- ‘Towards improved understanding of the spatial and temporal variability of suspended sediment and turbidity in Oregon’ – OSU Foundation/Weyerhaeuser Co. (\$45,000; PI; Bladon) 2016-2017
- ‘From chaos to consistency: Moving towards data stewardship and sharing for the Watershed Research Cooperative’ – OSU Forest Research Laboratory, Fish and Wildlife Habitat in Managed Forests Research Program (\$24,274; Co-PI; Souder and 3 others) 2016
- ‘Rapid proposal: Fires and floods: Acquisition and analysis of perishable data on the sustainability of reservoirs following wildfires’ – National Science Foundation; CBET – Environmental Sustainability (\$83,117; Co-PI, Tullos and Bladon) 2015-2016
- ‘Alsea watershed project, Phase II’ – National Council for Air and Stream Improvement (\$60,000; PI; Bladon) 2015-2016
- ‘Spatial and temporal dynamics of stream temperature in Oregon’ – Oregon Forest Industries Council (\$63,624; Co-PI, Segura and Bladon) 2015-2016
- ‘Testing sediment removal efficiency of riparian buffers during high intensity precipitation events’ – OSU General Research Fund (\$9,963; PI; Bladon) 2015-2017
- ‘Identifying primary and secondary controls on turbidity and sediment yield in Oregon’s long-term paired watershed studies’ – OSU Forest Research Laboratory, Fish and Wildlife Habitat in Managed Forests Research Program (\$126,956; PI; Bladon and 3 others) 2015-2017
- ‘Technology to enhance student learning experiences in forest hydrology, soil science, and watershed management’ – OSU Learning Innovation Grant (\$9,997; PI; Bladon and 2 others) 2015-2016
- ‘Water Quality and Economic Benefits of Forested Watershed Protection’ – Water Research Foundation, RFP #4595 (\$80,000; Collaborator; Paulson and 8 others) 2015
- BOV-SEEDS Mentor-Protégé Program, College of Forestry, Oregon State University (\$11,340; Mentor) 2015-2016

- ‘Toward Integrated Source Water Management in Alberta’ – Alberta Innovates – Energy and Environment Solutions (\$1,801,660; Co-Investigator; Silins and 10 others) 2015-2018
- ‘Management of wildfire risk to municipal waterworks systems in Alberta’ – Canadian Water Network (CWN) (\$600,000; Collaborator; Silins and 4 others) 2012-2015
- ‘Linking upland, riparian, and stream hydrological and biogeochemical processes’ – TRU Research Enhancement Fund (\$5,000; PI; Bladon) 2012
- ‘Reducing vulnerabilities and promoting resilience of BC’s natural and human systems through adaptation of post-disturbance land management options’ – Future Forest Ecosystems Scientific Council, Climate Change Adaptation Research for Forest & Rangeland Ecosystems (\$339,150; PI; Bladon and 6 others) 2010-2012
- ‘Enabling Integrated Source Water Supply and Protection’ – Alberta Water Research Institute (\$1,496,100; Co-Investigator; Silins and 4 others) 2010-2012
- ‘Comprehensive synthesis of forested watershed science and climate change impacts’ – Future Forest Ecosystems Scientific Council, Climate Change Adaptation Research for Forest & Rangeland Ecosystems (\$76,125; Collaborator; Redding and 5 others) 2010-2012
- West Fraser Scholarship in Enhanced Forest Management (\$50,000) 2004-2005; 2005-2006
- Max MacLaggan Scholarship (\$3,100) 2004
- Alberta Conservation Association Grant in Biodiversity (\$8,600) 2004
- Alberta Learning Graduate Student Scholarship (\$2,000) 2003-2004
- Desmond I. Crossley Memorial Scholarship (\$13,000) 2003-2004

Major Awards

- Emerald Challenge Award in Water, 23rd Annual Emerald Awards – Alberta Emerald Foundation. “This award celebrates and showcases environmental leadership in water, setting an example of environmental excellence for all to follow.” (Co-Recipient, Southern Rockies Watershed Project) 2014
- Excellence in Water Stewardship Award – The Council of the Federation, Water Stewardship Council. “This award recognizes outstanding achievement, innovative practice, and leadership in the area of water stewardship in Canada.” (Co-Recipient, Southern Rockies Watershed Project) 2014
- American Water Works Association, Water Quality and Technology Conference, Seattle, WA. Award for Best Poster 2009
- Canadian and American Geophysical Union, Montreal, QC. Award for Best Student Paper 2004

Post-Doctoral Scholar Mentoring

Dates	Name	PhD University	Research Foci
2015-2017	Sharon Bywater-Reyes	U. Montana	Primary and secondary controls on turbidity and sediment yield
2015-2016	Nicholas A. Cook	Virginia Tech	Stream temperature variability across Oregon's long-term paired watershed studies

Graduate Student Advising (Major Professor or Co-Advisor)

Date Graduated	Name	Degree	University
2020 (Expected)	Karla M. Jarecke	Ph.D.	OSU
2019 (Expected)	Adam Pate	M.S.	OSU
2019 (Expected)	Ryan P. Cole	M.S.	OSU
2018 (Expected)	Aaron A. Rachels	M.S.	OSU
2015-2017	Casey L. Steadman	M.S.	OSU
2014-2018	Kira C. Punttenney	M.S.	OSU

Faculty Research Assistant Mentoring

Dates	Name	University	Research Foci
2015-2016	Douglas Bateman	OSU	Alsea Watershed Study
2015-2016	David Leer	OSU	Alsea Watershed Study

Graduate Student Committee Membership

Date Graduated	Name	Degree	University
2019 (Expected)	Andy Wilson	M.S.	OSU
2018 (Expected)	Trevor Grandy	M.S.	OSU
2017	Francois-Nicolas Robinne	Ph.D.	U. of Alberta
2017	Phil Caruso	M.S.	OSU
2016	Jaycee Leonard	M.Ag.	OSU
2016	Marie Perrin Miller	MNR	OSU
2014	Kirk Hawthorn	M.Sc.	U. of Alberta

Undergraduate Student Mentoring

Year Mentored	Name	Year of Program	University
2017-	Danica Ruud	Junior (Honors Thesis)	OSU
2016-2018	Jerry Risk	Junior-Senior	OSU
2015-2018	Noah Kanzig	Junior-Senior	OSU
2015-2017	Cameron Minson	Junior	OSU
2015-2016	Ryan Cole	Senior (Honors Thesis)	OSU

Teaching Activities

Number	Title	Years Taught	Enrollment
<i>Oregon State University</i>			
FE 434	Forest Watershed Management	3	54, 59, 56
FE 436/ FE 536	Forest Disturbance Hydrology	In prep	
FE 532	Forest Hydrology	4	6, 7, 11, 8
<i>Thompson Rivers University</i>			
ENVS 5480	Fundamentals of Hillslope Hydrology	1	6
NRSC 4110	Watershed Management	3	23, 26, 27
NRSC 4130	Fire Ecology and Management	2	27, 26
NRSC 4230	Graduating Essay in Natural Resource Sciences	3	3, 6, 5
NRSC 1120	Dendrology/Tree Physiology 1	2	32, 53
NRSC 1220	Dendrology/Tree Physiology 2	3	38, 27, 37
<i>University of Alberta</i>			
RENr 350	Physical Hydrology	1	30
RENr 452	Watershed Management	2	8, 6
RENr 501	Precipitation-Runoff Relationships and Landscape Sediment Dynamics	1	4

External Service Activities

- Associate Editor – Forest Ecology and Management 2017-
- Associate Editor – Confluence: Journal of Watershed Science and Management 2016-
- Consortium of Universities for the Advancement of Hydrological Science – Representative for Oregon State University 2014-2016
- Ad hoc Proposal Reviewer: Canadian Foundation for Climate and Atmospheric Sciences, MITACS, National Science Foundation (NSF), Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grants, NSERC Collaborative Research and Development Grants 2006-
- Journal Peer Reviewer (39 reviews to date): Canadian Journal of Forest Research, Ecohydrology, Environmental Pollution, Environmental Science & Technology (ES&T), Fire Ecology, Forests, Forest Ecology and Management, Global Change Biology, Hydrological Processes, International Journal of Wildland Fire, Journal of the American Water Resources Association, Journal of Ecology and Management, Journal of Hydrology, Journal of Soils and Sediments, PLOS ONE, Science of the Total Environment, Streamline, Water, Water Research, Water Resources Research 2002-
- Association of British Columbia Forestry Professionals Credentials Committee (Dendrology) 2010-2012
- CGU-HS - D.M. Gray Best Student Paper in Hydrology Award Committee 2007-2008
- CGU-HS - Campbell Scientific Best Student Paper in Hydrology Award Committee 2007-2008

Conference and Workshop Organization

- Water Quality and Economic Benefits of Forested Watershed Protection, Water Research Foundation Grant, San Francisco, CA 2015
- Wildfire and Watershed Hydrology Workshop, Kelowna, BC (77 participants) 2009
- Mountain Pine Beetle and Water Management Workshop, Kelowna, BC (79 participants) 2009

Conference Session Organization

- American Geophysical Union Fall Meeting, Session on *Comparative Disturbance Hydrology: Hydrologic and Geomorphic Effects of Wildland Fire and Other Disturbances from Point to Regional Scales*, co-conveners: Brian A. Ebel (USGS), Joseph W. Wagenbrenner (USFS PSW), and Nicolas Zegre (West Virginia University), New Orleans, LA 2017
- American Geophysical Union Fall Meeting, Session on *Disturbance Hydrology: Exploring Immediate and Long-term Impacts of Abrupt Changes on Hydrological Processes and Earth* 2016

Systems, co-conveners: Christian Mohr (University of Potsdam), Joseph W. Wagenbrenner (USFS PSW), and Nicolas Zegre (West Virginia University), San Francisco, CA

- American Geophysical Union Fall Meeting, Session on *Interactions of Land Management, Wildfire, and Water at Multiple Scales*, co-conveners: Ge Sun (USDA Forest Service) and Li Chen (Desert Research Institute), San Francisco, CA 2014

Oregon State University Service

- Committee Member: Diversity, Equity, and Inclusion Committee, College of Forestry 2017-
- Committee Member: Promotion and Tenure Committee, FERM Department 2016-
- Committee Member: Task Force on Water, Oregon State University 2015
- Committee Member: Watersheds Research Cooperative (WRC) Communications Committee, College of Forestry 2015
- Committee Member: Forest Science Complex Steering Committee, College of Forestry 2015
- Committee Member: Forest Watershed Hydrology Extension Specialist Search Committee, FERM Department 2015
- Committee Member: Research Associate Search Committee, Center for Intensive Planted-forest Silviculture (CIPS), FERM Department 2015

Professional Affiliations

- American Geophysical Union (AGU) – Hydrology Section 2012-
- American Institute of Hydrology 2009-
- International Association of Hydrological Sciences 2008-
- American Water Resources Association 2006-
- Canadian Geophysical Union (CGU) – Hydrology Section 2002-
- Alberta Institute of Agrologists (Professional Agrologist) 2012-2015
- British Columbia Institute of Agrologists (Professional Agrologist) 2009-2012
- Canadian Water Resources Association 2005-2014
- Canadian Institute of Forestry – Rocky Mountain Section 2005-2013