



[Student Services](#) | [Webmail](#) | [Site Map](#)

Roy Haggerty

Year hired: 1996

Specialty: Hydrogeology, hydrology

Research interests: Ground water-surface water interactions, flow and transport in surface and ground water, nutrient transport, modeling, hyporheic exchange, heat transport in streams.

Recent Publications: Gooseff, M. N., J. LaNier, and R. Haggerty, Determining in-channel transient storage by comparing solute transport in a bedrock channel - alluvial channel sequence, Lookout Creek basin, Oregon, USA, submitted to *Water Resources Research*, 2004.

Anderson, J. K., S. M. Wondzell, M. N. Gooseff, and R. Haggerty, Patterns in stream longitudinal profiles and implications for hyporheic exchange flow, *Hydrological Processes*, in press.

Gooseff, M. N., J. K. Anderson, S. M. Wondzell, J. LaNier, and R. Haggerty, A modeling study of hyporheic exchange pattern and the sequence, size, and spacing of stream bedforms in mountain stream networks, Oregon, USA, *Hydrological Processes*, in press.

Zinn, B. A., L. C. Meigs, C. F. Harvey, R. Haggerty, W. Peplinski, and C. Freiherr von Schwerin, experimental visualization of solute transport and mass transfer processes in two-dimensional conductivity fields with connected regions of high conductivity, *Environmental Science and Technology*, 38(14), 3916-3926, 2004.

Haggerty, R., C. F. Harvey, C. F. v. Schwerin, and L. C. Meigs What controls the apparent timescale of solute mass transfer in aquifers and soils? A comparison of diverse experimental results. *Water Resources Research*, 40, W01510, doi:10.1029/2002WR001716 2004.

Gooseff, M. N., S. M. Wondzell, R. Haggerty, and J. Anderson, Comparing transient storage modeling and residence time distribution (RTD) analysis in geomorphically varied reaches in the Lookout Creek basin, Oregon, USA. *Advances in Water Resources*, 26, 925-937, 2003.

Cliff, J.B., P.J. Bottomly, R. Haggerty, and D. D. Myrold, Modeling the effects of diffusion limitation on nitrogen-15 isotope dilution experiments with soil aggregates, *Soil Sci. Soc. Am. J.*, 66(6), 1868-1877, 2002.

Geiger, S., R. Haggerty, J.H. Dilles, M.H. Reed, and S.K. Matthai, New insights from reactive transport modelling: the formation of the sericitic vein envelopes during early hydrothermal alteration at Butte, Montana. *Geofluids* 2(3), 185-201, 2002.



[Home](#)

[People](#)

[Graduate Programs](#)

[Undergraduate Programs](#)

[Research](#)

[Groups & Resources](#)

[News & Events](#)

[Alumni & Philanthropy](#)

[Job & Intern Postings](#)

Google Search

Breemer, C. W., P. U. Clark, R. Haggerty, Modeling the subglacial hydrology of the late Pleistocene Lake Michigan Lobe, Laurentide Ice Sheet, *GSA Bull.*, 114(6), 665-674, 2002.

Cvetkovic, V., and R. Haggerty, Transport with multiple-rate exchange in disordered media, *Phys. Rev. E*, 65(5), DOI 10.1103/PhysRevE.65.051308, 2002.

Haggerty, R., S. M. Wondzell, and M. A. Johnson, Power-law residence time distribution in the hyporheic zone of a 2nd-order mountain stream, *Geophys. Res. Lett.*, 29(13), DOI 10.1029/2002GL014743, 2002.

Haggerty, R., S. W. Fleming, L. C. Meigs, and S. A. McKenna, Tracer tests in a fractured dolomite, 2., Analysis of mass transfer in single-well injection-withdrawal tests, *Water Resources Research*, 37(5), 1129-1142, 2001.

Recent Graduate 2005, MS Jeff Ninnemann, "A study of hyporheic characteristics
Student Titles: along a longitudinal profile of Lookout Creek, Oregon"

2004, PhD Joel Geier, Geosciences, "Groundwater flow and radionuclide transport in fault zones in granitic rock"

2004, MS Louis Arighi, Geosciences, "Quantification of the nitrate attenuation capacity of Missoula Flood Deposits in the Willamette Valley of Oregon"

2002, MS Claudius Freiherr von Schwerin, Geosciences, "Tracer experiments in a non-uniform porous medium: Implications of diffusive mass transfer on the late-time breakthrough behavior". 104 p.

2002, MS Justin Iverson, Geosciences, "Investigation of the Hydraulic, Physical, and Chemical Buffering Capacity of Missoula Flood Deposits for Water Quality and Supply in the Willamette Valley of Oregon", 147 p.

Courses taught: Geo 102 The Surface of the Earth (4 cr)
Geo 487 Hydrogeology (4 cr)
Geo 489/589 Role of Fluids in Geologic Processes (3 cr)
Geo 517 Geologic Report Writing (2 cr)
Geo 691 Heat and Mass Transfer in the Environment (4 cr)

Degrees: PhD in Hydrogeology, Stanford University, 1996
MS in Hydrogeology, Stanford University, 1993
BS in Geology, University of Alberta, Edmonton, 1990

Office: 260 Wilkinson Hall / phone (541) 737-1210

Email: haggertr@geo.oregonstate.edu

[More about Dr. Haggerty](#)

Dept. of Geosciences, 104 Wilkinson Hall
Oregon State University - Corvallis - 97331-5506

Copyright © 2003

Phone (541) 737-1201 | Fax (541) 737-1200

geo-info@science.oregonstate.edu

Disclaimer