

## The McCray Research Group: Current and Former Students and Post Docs

### **Current Students (8, 7 PhD and 1 MS)**

Peggy Altman, PhD Environmental Engineering Science  
Research Topic: Dissolution and attenuation of organic liquid contaminants in fractured aquifers during bioremediation (expected graduation December 2014).  
M.S. Education, Western Carolina University; B.A., Geology, Washington and Lee University  
E-mail: [paltman@mines.edu](mailto:paltman@mines.edu)

Lindsay Bearup, PhD Hydrologic Science and Engineering  
Research Topic: Mountain pine beetle impacts on hydrochemistry of Rocky Mountain National Park (expected graduation, December 2014).  
M.S. Hydrologic Science and Engineering, CSM  
B.S. Agricultural and Biological Engineering, Pennsylvania State University  
E-mail: [lindsaybearup@gmail.com](mailto:lindsaybearup@gmail.com)

Sean Davenport, PhD, Environmental Engineering Science  
Research Topic: Enhanced field-scale remediation of organic chemicals in ground water using polymers and chemical oxidants (expected graduation May 2014).  
BS Chemistry, East Tennessee State University  
E-mail: [sdavenpo@mines.edu](mailto:sdavenpo@mines.edu)

Skuyler Herzog, PhD, Hydrologic Science and Engineering  
Research Topic: Investigation of hyporheic zone flow enhancements to improve contaminant biodegradation (expected graduation May 2017)  
B.S. Environmental Science, Washington State University  
E-mail: [skuylerherzog@gmail.com](mailto:skuylerherzog@gmail.com)

Cynthia Kanno, M.S., Environmental Engineering Science  
Research Topic: Protection of groundwater resources for sustainable shale-gas development (expected graduation May, 2016)  
B.A. Geosciences, Princeton University  
E-mail: [ckanno@mines.edu](mailto:ckanno@mines.edu)

Nicolás Rodríguez Jeangros, PhD, Environmental Engineering Science  
Research Topic: Modelling the Impacts of the Mountain Pine Beetle Infestations on the Carbon and Hydrologic Cycles (expected graduation May, 2017)  
M.S. Environmental Engineering and Management - Los Andes University, Bogotá, Colombia  
B.S. Chemical Engineering & B.S. Environmental Engineering - Los Andes University, Bogotá, Colombia  
E-mail: [nrodrigu@mymail.mines.edu](mailto:nrodrigu@mymail.mines.edu), [nicolairj@gmail.com](mailto:nicolairj@gmail.com)

Christopher Ruybal, PhD, Environmental Engineering Science  
Research Topic: Methane transport in groundwater (expected graduation May 2016).  
M.S. Environmental Science and Engineering, Colorado School of Mines  
B.S. Environmental Science, Regis University  
E-mail: [cruybal@mines.edu](mailto:cruybal@mines.edu)

Jenna Shelton, PhD, Hydrologic Science and Engineering  
Research Topic: Characterization of microbial generation of useable natural gas from expended oil reservoirs (expected graduation May, 2017)  
M.S. Hydrology and Water Resources, University of Arizona  
B.S. Geologic Sciences, University of Illinois.  
E-mail: [jennashelton2@gmail.com](mailto:jennashelton2@gmail.com)

## Former Post-Docs (1)

Alexis Navarre-Sitchler, PhD

Currently: Assistant Professor, Department of Geology and Geological Engineering, Colorado School of Mines

Research Topic: Geochemical reaction and transport associated with CO<sub>2</sub> Sequestration.

PhD Geochemistry, Penn State University

M.S. Geochemistry, Colorado School of Mines

B.S. Environmental Geology, Mesa State College (now Colorado Mesa University)

[aksitchler@gmail.com](mailto:aksitchler@gmail.com)

Mengistu Geza, PhD

Currently: Research Assistant Professor, Civil and Environmental Engineering Department, Colorado School of Mines

Research Topic: Contaminant transport modeling, infiltration of pharmaceuticals, N, and P from wastewater sources at site and watershed scales.

PhD Biosystems Engineering, Oklahoma State University, USA

MS Water Resources Engineering, University of Karlsruhe, Germany

BS Agricultural Engineering, Alemaya University, Ethiopia

E-mail: [mgezanis@mines.edu](mailto:mgezanis@mines.edu)

## Graduated PhD Students (16)

### PhD Students in Academia (7)

Cüneyt Guler, PhD Geological Engineering, Colorado School of Mines, 2002.

Associate Professor, Mersin University (Turkey).

MS, Geological Engineering, Colorado School of Mines (1998),

B.S., Geological Engineering, Istanbul Technical University, Istanbul, Turkey (1994).

Dissertation Title: Hydrogeochemical evaluation of the groundwater resources of Indian Wells-Owens Valley Area, Southeastern California (2002), 262 p.

Website: <http://www.mersin.edu.tr/apbs/apbs.php?id=639>

E-mail: [cguler@mersin.edu.tr](mailto:cguler@mersin.edu.tr)

Jason Gurdak, PhD Geochemistry, 2006.

Assistant Professor, Geological Sciences Department, San Francisco State University

M.S. Environmental Science & Engr., Colorado School of Mines; BS Geology, Bates College

Dissertation Title: Advances in spatial and temporal analysis of ground-water vulnerability to non-point source contamination, High Plains aquifer

Web Page: [tornado.sfsu.edu/](http://tornado.sfsu.edu/)

E-mail: [jgurdak@sfsu.edu](mailto:jgurdak@sfsu.edu)

Kristin Mikkelson, PhD, Hydrologic Science and Engineering, May 2014

Post-doctoral researcher, Civil & Environmental Engineering, Colorado School of Mines

Dissertation Title: Impact of mountain pine beetle on hydrology and water quality in mountain streams and groundwater.

B.S. Environmental Engineering, Cornell University

E-mail: [kmikkelson55@gmail.com](mailto:kmikkelson55@gmail.com)

Kyle Murray, PhD. Geol. Engr. Colorado School of Mines, 2003.  
Assistant Professor, Mewbourne College of Earth & Energy, Oklahoma Geological Survey,  
University of Oklahoma  
M.S. Hydrogeology, Wright State University, B.S. Geography, Shippensburg State.  
Dissertation: Spatial analysis and modeling of water resources in Colorado utilizing Geoscientific  
Information Systems.  
Web page: [http://www.utsa.edu/hydroGIS/Kyle\\_Murray.htm](http://www.utsa.edu/hydroGIS/Kyle_Murray.htm)  
E-mail: [Kyle.Murray@utsa.edu](mailto:Kyle.Murray@utsa.edu)

Magnus Skold, PhD Geological Engineering, (Hydrogeology), 2006.  
Post-Doctoral Research Associate, Department of Geophysics, Colorado School of Mines  
Research Topic: Hydrochemistry and hydrogeophysics of geothermal energy sources.  
M.S. Environmental Science & Engr., Colorado School of Mines; BS Environmental Engineering,  
Lulea University of Technology, Sweden  
E-mail: [skoldmagnus@gmail.com](mailto:skoldmagnus@gmail.com)

Richard Statom, PhD Geology (Hydrogeology), 2004.  
Assistant Professor, Dept. Physics and Earth Science, University of Northern Alabama.  
B.S. Geol. University of Southern Alabama, M.S., Geol., Mississippi State University  
Dissertation: Temporal Trends and Spatial Variations in Leachate Chemistry at a Municipal Solid  
Waste Landfill in Florida  
Website: <http://www2.una.edu/physics/geol.htm>  
E-mail: [rastatom@una.edu](mailto:rastatom@una.edu)

Assaf Wunsch, PhD Hydrologic Science and Engineering, 2013  
Post-doctoral Scholar, Civil & Environmental Engineering Department, Colorado School of Mines  
Dissertation Title: Implications of geological carbon sequestration on shallow freshwater aquifers  
geochemistry  
B.S. Geology and Environmental Studies, Hebrew University of Jerusalem, Israel  
E-mail: [assafwunsch@gmail.com](mailto:assafwunsch@gmail.com)

#### PhD Students in non-University Research Positions (5)

Kaneen Christensen, PhD Environmental Science and Engineering, 2011  
Currently: U.S. Anartic Program, Lakewood Colorado  
Dissertation Title: Dissolution of organic liquid contaminants in fractured aquifers during chemical-  
oxidation remediation.  
M.S. Geology, University of New Hampshire;  
B.S. Environ Science and B.S. Geology – SUNY Binghamton University  
E-mail: [kachrist@mines.edu](mailto:kachrist@mines.edu)

Katie Guerra, PhD Environmental Science and Engineering  
Currently: U.S. Bureau of Reclamation, Lakewood CO  
Dissertation Title: Reducing the cost of water treatment through membrane material selection and  
optimization of operational variables  
M.S. Environmental Science and Engineering, Colorado School of Mines  
B.S. Chemical Engineering, University of Colorado  
Email: [kguerra@mymail.mines.edu](mailto:kguerra@mymail.mines.edu)

Megan Smith, PhD Hydrologic Science and Engineering, Colorado School of Mines, 2010.  
Currently: Hydrochemist, Lawrence Livermore National Laboratory

Dissertation: Polymer-enhanced chemical-oxidation remediation in ground water,  
M.S. Geochemistry, University of California Berkeley; B.S. Geology, University of Oregon  
E-mail: [megsmith@mines.edu](mailto:megsmith@mines.edu)

Raymond H. Johnson, Ph.D., Geological Engineering, Colorado School of Mines, 2003  
Currently: Research Geologist and Mendenhall Postdoctoral Fellow with the U.S. Geological  
Survey, Denver CO.  
M.S. Earth Sciences, University of Waterloo, Waterloo, Ontario, Canada  
B.S. Geology, Allegheny College, Meadville, Pennsylvania  
Dissertation: Characterization of subsurface DNAPL movement with ground penetrating radar and  
inverse multiphase flow simulations  
Website: <http://geology.usgs.gov/postdoc/profiles/johnson.html>

Schaun Smith, PhD Geology (Hydrogeology), Colorado School of Mines, 2008.  
Currently: Senior Scientist, Environmental Technology Center, Chevron  
Dissertation: Paleohydrogeologic Modeling of Groundwater Resources from A.D. 600 to 1300 and  
the Relationship to Ancestral Pueblo Settlement Population Dynamics, Central Mesa Verde  
Region, Southwest Colorado M.S. Environmental Science & Engineering, Colorado School of  
Mines;  
M.S. Geology, Louisiana Tech University; B.S. Geological Sciences, University of Texas at Austin.  
E-mail: [SchaunMSmith@chevron.com](mailto:SchaunMSmith@chevron.com)

#### PhD Students in Consulting and Industry (4)

Craig Divine, PhD Geochemistry (Hydrogeology), Colorado School of Mines, 2004  
Currently: Senior Hydrogeologist, ARCADIS G&M, Highlands Ranch, CO  
MS, Watershed Science, Colorado State University, BS, Biology, Wheaton College  
Dissertation: Advances in subsurface contaminant characterization.  
E-mail: [CDivine@arcadis-us.com](mailto:CDivine@arcadis-us.com)

Kelly Greaser, PhD Geological Engineering (Hydrochemistry), Colorado School of Mines, 2004.  
Currently: Senior Project Hydrogeologist/Geochemist, Golder Associates Inc.  
B.S., Geology, Old Dominion University  
Dissertation: Modeling solid-water interactions in mineralized areas: An example from Red Dog,  
Alaska  
E-mail: [KGreaser@golder.com](mailto:KGreaser@golder.com)

David Lipson, PhD Geological Engineering (Hydrogeology), Colorado School of Mines, 2008.  
Currently: Senior Hydrogeologist, Arcadis, Lakewood, CO  
Dissertation: Evaluation of Geologic Controls on Solute Transport in Fractured Rock: Field,  
Modeling, and Laboratory Investigations  
M.S. Earth Sciences, Syracuse University; BS Environ Science-Forestry, SUNY  
E-mail: [lipsond@msn.com](mailto:lipsond@msn.com)

Jeff Silva, PhD Environmental Science and Engineering, 2011  
Currently: Senior Hydrologist, HIES Inc., Kailua, HI  
Dissertation: The utility of polymer amendment for enhancing in situ remediation effectiveness  
M.S., B.S, Hydrology, University of Arizona  
E-mail: [jeffaksilva@gmail.com](mailto:jeffaksilva@gmail.com)

## Graduated M.S. Students (29)

### MS Students in Academia or Research

Deborah (Beach) Huntzinger, M.S. Geological Engineering (Hydrogeology), Colorado School of Mines, 2001.

PhD, Michigan Tech, Environmental Engineering

Currently: Assistant Professor, Northern Arizona University

Thesis Title: The use of one-dimensional columns and unsaturated flow modeling to assess the hydraulic processes in soil-based wastewater treatment systems.

Website: <http://www.geo.mtu.edu/~dnbeach/>

e-mail: [dnhuntzi@mtu.edu](mailto:dnhuntzi@mtu.edu)

Sophia Seo, PhD, Geological Engineering (co-Advisor, Eileen Poeter)

Currently: Research Associate, International Ground Water Modeling Center, Colorado School of Mines

Research Topic: NAPL mixture dynamics and multiphase flow modeling, (expected graduation May 2010).

M.S. Geochemistry, Ewha Womens' University, Korea.

E-mail: [hseo@mines.edu](mailto:hseo@mines.edu)

Nate Rothe, M.S. Environmental Science and Engineering (Wastewater Treatment), 2006.

Currently: PhD student with Dr John Spear, Environmental Science and Engineering Division, Colorado School of Mines

B.S Environmental Engineering, Colorado School of Mines

Thesis title: Comparison of raw wastewater and septic tank effluent composition through literature and field investigations,

E-mail: [nrothe@mines.edu](mailto:nrothe@mines.edu)

Heather Smith, M.S. Geological Engineering (Hydrogeology), Colorado School of Mines, 2004.

Currently: Director of Environmental Remediation, U.S. Antarctic Program, NSF- Raytheon, Denver  
B.S. Geological Sciences, University of Washington

Thesis Title: Hydrogeologic and geochemical analysis of the Blue River Watershed, Colorado.

Lindsay Bearup, M.S. Hydrologic Science and Engineering, 2011

Currently: PhD program, Hydrologic Science and Engineering, Colorado School of Mines

Thesis Title: Relevance Of Metal Desorption And Mineral-Dissolution Kinetics For Modeling Metal Release Following Carbon Dioxide Leakage Into Aquifers From Geosequestration

B.S. Agricultural and Biological Engineering, Pennsylvania State University

E-mail: [lindsaybearup@gmail.com](mailto:lindsaybearup@gmail.com)

Katy Mouzakis, M.S. Environmental Science and Engineering, 2012

Currently: PhD Program, Hydrologic Science and Engineering, Colorado School of Mines

Thesis Title: Porosity and Pore Networks of Caprocks: A nanoscale experimental approach investigating the Gothic Shale and marine Tuscaloosa shale Implications to Carbon Sequestration,

B.S. Environmental Engineering, University of Florida

E-mail: [katymoo13@hotmail.com](mailto:katymoo13@hotmail.com)

Hanna Menke, MS, Environmental Science and Engineering, December 2012

PhD Student, Imperial College

Research Topic: Injectivity, and storage leakage in faulted geosystems during carbon sequestration.

B.S. Environmental Engineering, Columbia University

E-mail: hannah.menke@gmail.com

#### MS Students in Government

Marina Kopytkovskiy, M.S Environmental Science and Engineering, December 2012.

Civil Engineer, Aurora Water, Aurora Colorado.

M.S. Thesis: A Study of Climate Change Impacts of the Upper Colorado River Basin on Water Resources and Hydropower Production.

B.S. Civil and Environmental Engineering, University of Washington

E-mail: marina3k@gmail.com

Sarah Roberts, M.S. Hydrologic Science and Engineering

Currently: US EPA Region 8, Denver Colorado

Research Topic: Transport and transformation of wastewater-derived pharmaceuticals in the unsaturated zone, (expected graduation December 2009).

B.S. Geology, James Madison University

E-mail: [roberts.sarah@epa.gov](mailto:roberts.sarah@epa.gov)

Jason Deardorff, M.S., Environmental Science and Engineering

Currently: US EPA Region 8, Denver Colorado

Research Topic: Carbon dioxide sequestration in geologic media

B.S. Geology, Appalachian State University

E-mail: [jdeardor@mines.edu](mailto:jdeardor@mines.edu)

Karen Morgan, M.S. Geology, Colorado School of Mines, 2000.

Currently: GIS Specialist, Colorado Geological Survey, Denver CO.

B.S. Geology, New Mexico Tech

Thesis Title: Spatial Analysis and Modeling of Geochemical Distribution to Assess Fracture Flow in Turkey Creek Basin, Jefferson County, Colorado

Webpage: <http://geosurvey.state.co.us/>

Raleigh Schmidt, M.S. Environmental Science and Engineering, 2007

Currently: Peace Corp

B.A. Biology, Concordia College (Minnesota)

Thesis Title: Characterization of the bacterial and archaeal communities in coalbed methane aquifers in the WyodakAnderson coal zone of the Powder River Basin, WY using polar lipid analysis techniques

E-mail: [rleighas@yahoo.com](mailto:rleighas@yahoo.com)

#### MS Students in Environmental Consulting/Industry

Cliff Tonsberg, MS, Hydrologic Science and Engineering, August 2014

Currently: HT Itasca, Golden, CO

Thesis: Development of an Analytical Groundwater Contaminant Transport Model

B.S. Environmental Science, The University of Tennessee Knoxville

e-mail: ctonsber@mines.edu

Stephanie Schlosser, M.S. Geochemistry, Colorado School of Mines, 2001.  
Currently: Environmental Specialist, JBR Environmental Consultants, Inc., Elko, NV  
B.S. Environmental Geology and Technology (Hydrogeology), University of North Dakota  
Thesis Title: Vulnerability Assessment of Colorado Aquifers to Pesticide Contamination  
Webpage: [www.jbrenv.com](http://www.jbrenv.com)

Shiloh Kirkland, M.S. Geological Engineering (Hydrogeology), Colorado School of Mines, 2001.  
Currently: Environmental Engineer, The Forrester Group Inc., Springfield, MO  
B.S. Geological Engineering, University of Missouri-Rolla  
Thesis Title: Coupling Site-Scale Fate and Transport with Watershed-Scale Modeling to Assess the Cumulative Effects of Nutrients from Decentralized Wastewater Treatment Systems  
Webpage: [http://www.forrestergroup.com/resumes/shiloh\\_kirkland\\_resume.asp](http://www.forrestergroup.com/resumes/shiloh_kirkland_resume.asp)

Samantha (Tokash) Curtis, Co-advisor with Eileen Poeter  
M.S. Geological Engineering, Colorado School of Mines, 2003.  
Currently: Hydrogeologist, AMEC, Irvine, CA  
B.A. Geology, University of California at Berkeley  
Thesis Title: Evaluating pre-Mining Hydrogeologic Conditions after Mining has Occurred using Surface Data and Modeling Tools, Summit County, Colorado  
Webpage: [www.amec.com](http://www.amec.com)

Joseph McCarthy, M.S. Geological Engineering (Hydrogeology), Colorado School of Mines, 2003.  
Currently: University of Washington, School of Law; Washington Water Trust (Project Consultant);  
Center for Environmental Law and Policy (Project Consultant)  
B.A. Geology & Political Science, Whittier College, Whittier, CA  
Thesis Title: Evaluation of unsaturated atrazine fate and transport using Hydrus-1D simulations:  
Central High Plains.

Paula Jo Lemonds, M.S. Geological Engineering (Hydrogeology), Colorado School of Mines, 2003 .  
Currently: Water Resources Engineer, HDR Inc., Austin TX  
B.S. Geology , Texas A&M University , 2000  
Thesis Title: Modeling pollution transport and fate to assess the effects of onsite wastewater systems on the Lake Dillon Watershed, Colorado.  
Webpage: [hdrinc.com](http://hdrinc.com)

David V. Williams, M.S. Geological Engineering (Hydrogeology), Colorado School of Mines, 2004.  
Currently: Senior Hydrogeologist/Engineer, URS Corporation, Denver CO  
B.S. Agricultural/Environmental Engineering, Texas A&M University  
Thesis Title: Hydrogeological and Hydrochemical Framework for Indian Wells Valley, California:  
Evidence for Interbasin Flow in the Southern Sierra Nevada  
E-mail: [dwilliams95@mac.com](mailto:dwilliams95@mac.com)

Kirk Heatwole, M.S. Environmental Science & Engineering (Water Resources), 2005.  
Currently: Geomega Inc., Boulder CO.  
B.S. Geological Engineering and Geology & Geophysics, University of Wisconsin Madison  
Thesis Title: Modeling subsurface fate and transport of nitrogen from onsite wastewater systems  
email: [kheatwol@mines.edu](mailto:kheatwol@mines.edu)  
website: <http://www.mines.edu/academic/envsci/people/student/KirkHeatwole.pdf>

Sarah Doyle, MS Environmental Science and Engineering (Contaminant Hydrology), 2005.



Currently: Golder Inc., Golden CO.  
BS Chemistry, University of Texas at Austin  
Thesis title: Phosphorus transport and fate during onsite wastewater treatment  
E-mail: [sedoyle@golder.com](mailto:sedoyle@golder.com)

Johnathon Bumgarner, M.S., Geological Sciences (Hydrogeology), University of Texas - Austin, 2005.

Currently: Water Resources Engineer, QEA LLC, Austin TX  
B.S. Geological Sciences (Hydrogeology), University of Texas  
Thesis Title: Estimating biozone hydraulic conductivity in wastewater soil absorption systems using inverse numerical modeling.  
E-mail: [jbumgarner@qeallc.com](mailto:jbumgarner@qeallc.com)

Danielle Bailey, M.S., Hydrogeology, (at University of Texas at Austin), 2006.

Currently: Consulting Hydrogeologist, Houston Texas.  
B.S. Geol., Texas A&M University  
Thesis Title: Methods comparison and spatial analysis of field parameter quantification of unsaturated flow at an existing wastewater infiltration system: Mines Park, Golden Colorado.  
email: [bailey\\_danny@hotmail.com](mailto:bailey_danny@hotmail.com)

Neal Jordan Dimick, M.S. Hydrologic Science and Engineering, 2007.

Currently: Water Resources Engineer for Cam Dresser and McKee (ground water modeling, remediation, geophysics)  
B.S. Geophysical Engineering, Colorado School of Mines.  
Thesis Title: The ability to predict groundwater flow in a structurally faulted river basin valley with naturally occurring hot springs using multivariate geochemical analyses (co-advisor, Mike Baetzle, Geophysics).  
E-mail: [ndimick@mines.edu](mailto:ndimick@mines.edu)

Mia Tucholke, M.S. Hydrologic Science and Engineering, 2007

Currently: Research Associate, Colorado School of Mines (Civil and Environmental Engineering).  
B.S. Environmental Science, Metropolitan State College of Denver  
Thesis title: Statistical assessment of relationships between denitrification and easily measurable soil properties: a simple predictive tool for watershed-scale modeling  
E-mail: [mtucholk@mines.edu](mailto:mtucholk@mines.edu)

Tamee Albrecht, M.S., Hydrologic Science and Engineering, 2007

Currently: Independent Hydrochemist  
B.S. Geology, University of Massachusetts  
Thesis Title: Characterization of the hydrochemical variability of water resources in the southeast Piceance Basin, Colorado.  
Co-advisor Prof. Geoffrey Thyne.  
E-mail: [talbrech@mines.edu](mailto:talbrech@mines.edu)

Gretchen Oldham, M.S., Environmental Science & Engineering (Hydrology & Water Resources), 2008.

Currently: Environmental Engineer, Arcadis, Portland, Or  
Co-advisor: Prof. Jorg Drewes.  
BS Geology, Western Washington University.  
Thesis Title: Contaminant transport of emerging organic chemicals in riverbank filtration systems: experiments and modeling.  
E-mail: [buscemifan@hotmail.com](mailto:buscemifan@hotmail.com)



Kathleen Bendall Lindstrom, M.S., Hydrologic Science and Engineering, 2009  
Currently: Barr Engineering, Ann Arbor MI  
Research Topic: Contaminant transport and hydrologic modeling.  
B.S. Civil & Environmental Engineering, Michigan Tech.  
E-mail: [kbendall@mines.edu](mailto:kbendall@mines.edu)

Jared King, M.S. Environmental Science and Engineering (Contaminant Hydrology), 2009  
Currently: Golder, Lakewood CO  
Research Topic: Contaminant Transport and Storage in Fractured Rock  
B.S. Environmental Science, University of New Mexico  
E-mail: [jaking@mines.edu](mailto:jaking@mines.edu)

Carter, Thurman, M.S., Hydrologic Science and Engineering, 2009  
Currently: Legal Intern, Georgia Supreme Court.  
Research Topic: Characterization and optimizing remediation of an oil-refinery site.  
B.S. Geological Sciences, University of the South, J.D., Emory University School of Law  
E-mail: [carterthurman@gmail.com](mailto:carterthurman@gmail.com)

### **Graduated M.S. Non-thesis Students with Significant Engineering Report (2)**

Sonya Cadle, M.E., Geological Engineering (Hydrogeology), Colorado School of Mines, 2002.  
Currently: Project Hydrologist, Arcadis, Lakewood, CO  
B.S. Geology, Northern Illinois University  
Report Title: Ground-water Model for a Fractured Bedrock Aquifer in Aspen Park, CO.  
[Sonya.Cadle@arcadis-us.com](mailto:Sonya.Cadle@arcadis-us.com)

Kyle Richards, M.S. HSE, 2006.  
Currently: Research Associate, Environmental Science and Engineering Division, Colorado School of Mines  
B.S. Forestry, Colorado State University  
[Kyle.Richards@arcadis-us.com](mailto:Kyle.Richards@arcadis-us.com)

### **Current Graduate Student Thesis Committees (13)**

Sarah Christopherson, PhD Univ. Minnesota, Phosphorus reactive transport in the vadose zone.  
Jenn Jefferson, PhD HSE, Behavior of evapotranspiration across scales and subsurface regimes  
Alejandra Tarrell, PhD ESE, Radionuclide transport and reactions.  
Katharine Hyland, PhD ESE, Accumulation of Emerging organics in land-applied biosolids  
Matt Minnick, PhD GE, Modeling water resources for oil shale development, Colorado River Basin.  
Mike Morse, PhD HSE-CEE, Hillslope hydrology in forested regions.  
Bryant Reyes, PhD, CEE, Modeling groundwater resources in the LA Basin.  
Luca Trevisan, PhD ESE, Capillary and dissolution trapping during CO<sub>2</sub> sequestration injections.  
Andrew Trautz, PhD, HSE-CEE, Evaporation and condensation at the soil-atmosphere interface

HSE = Hydrologic Science and Engineering, ESE = Environmental Science and Engineering

### **Former Committee Students (43)**

Jennifer Guelfo, PhD HSE-CEE, Transport of fire retardant chemicals in groundwater

Erica Siirilla, PhD, HSE-GE (2013), Risk assessment for CO<sub>2</sub> leakage in aquifers during sequestration  
Adam Atchley, PhD HSE-GE (2013), Hydrochemical transport using stream-tube approach.  
Kato Dee, PhD Geochemistry (2013), Uranium transport in soils.  
Drew Beck, MS HSE-CEE (2014), Distributed stormwater BMP modeling in Los Angeles.  
Celena Cui, MS HSE-GE (2014), Florida's aquifer sensitivity to nitrate contamination: GIS assessment  
Colin Penn, MS HSE-GE (2014) - Effects of bark beetle infestation on hydrology and land-energy feedbacks

Bryant Reeves, MS CEE (2013), Modeling groundwater resources for Los Angeles  
Andrew Trautz, MS HSE (2013), Multiphase flows in carbon geosequestration.  
Steve Meyerhoff, PhD. HSE-GE (2013), Modeling runoff on heterogeneous slopes  
Katie Kirsch, M.S. HSE-CEE (2013), Release of metals from injection formation during carbon sequestration  
Sophie Hancock, PhD Geol, Geohydrology of a uranium deposit at Lost Creek, WY.  
Christiana Hoppe, PhD ESE, (2012) Riverbank filtration of pharmaceuticals  
Simon Ferrell, M.S. ESE (2013), Wastewater reclamation via vadose zone infiltration.  
Jennifer (JT) Teerlink, PhD ESE (2012), Soil infiltration & treatment of pharmaceuticals in wastewater  
Adrienne Dean, M.S. HSE-GE (2012), Contaminant transport in heterogeneous media  
Joseph Wiley, MS ESE, (2011) Impacts of mountain pine beetle on soil-water chemistry  
Katharine Dahm, PhD ESE, Water management for water co-produced with natural gas  
Nathan Hancock, PhD ESE (2011), Water reclamation using membranes.  
Emily Leshner, PhD ESE (2011), Transport of radionuclides in soil.  
Andy Miller, PhD ESE (2010), Transport of uranium in ground water  
Diana Cook, PhD GE 92008), Slope stability and drainage  
Judith Schenk, PhD, GE (2008), Ground-water modeling and optimization  
Sarah Stetson, PhD Chemistry (2008), Using Stable isotopes to evaluate mercury and mine pollution.  
Kathy DeJong, PhD ESE, (2008), Pharmaceutical fate /transport in onsite wastewater systems.  
Jordan Revielle, M.S., HSE/GE, (2008) Fractal analysis of dispersion  
Jose Gago, PhD ESE, (2007) Contaminant hydrology , NAPL transport  
Teresa Nealon, M.S., HSE/ESE, (2008) Watershed modeling of Upper Colorado River Basin  
Ruth Tinnacher, PhD ESE (2008), Radioactive metal transport  
Kimberly McDugal, MS HSE, (2008) Contaminant transport modeling optimization.  
Jim McKinley, PhD ESE, (2007) Biozone formation in onsite wastewater systems  
Marla Knebl, PhD, Univ. Texas at Austin (2006), weather/ flood modeling for San Antonio River basis  
Derrick Rodriguez, PhD ESE (2006), NAPL migration in the subsurface  
Barbara Harvey Butler, PhD, ESE (2005), Metals transport in aqueous, mine-impacted systems.  
Kaylene Ritter, PhD, Chem (2005), dissolved organic matter in natural waters.  
Anthony Ranelli, PhD, Chem (2005), mountain watershed hydrology.  
Tonja Rauch, PhD, ESE (2005), treatment of emerging organics in riverbank filtration systems.  
Sheila van Cuyk, PhD, ESE (2003), wastewater microbial transformation during transport in soils.  
Lee Landkamer, PhD, ESE, (2003), radioactive metal transport and sorption.  
Satawat "Pom" Saenton, PhD ESE, (2003), metal transport in natural aqueous systems.  
Cetin Kantar, PhD, ESE (2002), radioactive metal transport and sorption.  
Tristan Wellman, PhD, GE (2005), optimized ground-water modeling in mountain aquifers.  
Elizabeth Conover, M.S., HSE/Geol, Plume characterization with statistical and inverse methods  
Taylor Dixon, M.S. HSE/Chem, hyporheic solute transformation an agricultural headwater stream  
Nate Walker, M.S., ESE, water reclamation & desalination for a geothermal power plant  
Amber Patrick M.S., Environmental Science, University of Texas at San Antonio  
Ryan Oesterreich, MS ESE, Volatilization of organic contaminants during sampling  
Fritz Krembs, MS ESE, Chemical-oxidation remediation design  
Craig Harran, M.S., GE, Unsaturated zone modeling at mine sites

Rebecca Parzen, M.S. ESE (2007), Onsite wastewater infiltration and isotopic analysis  
Amanda Dolezal, MS, ESE (2007), Mine site remediation in Colorado  
Melissa Northcutt, MS, GE (2007), Unsaturated zone modeling at Antarctic Lakes  
Ryan Walsh, M.S., ESE (2006), soil-based wastewater treatment.  
Ben Petri, M.S. ESE (2006), chemical-oxidation remediation of NAPLs.  
Charlotte Zarter Dimick, M.S., ESE (2005), wastewater nitrogen treatment at the field scale  
Jason Sahl, M.S., ESE (2005), microbial attenuation of organics after chemical oxidation.  
Sarah Seitz, M.S., ESE (2004), chemical-oxidation remediation of organic pollutants.  
Liane Storer, M.S. GE (2004), surface-water ground-water interactions for a mountain stream.  
Greg VanderBeek, M.S. GE (2004), Ground-water modeling in a mountain watershed.  
Kathy Dano, M.S., GC (2004), impact of septic systems on watershed-scale water quality.  
Kelly Keese, M.S. Geos, University of Texas, (2004). Modeling climate change and recharge  
Katy Kier, M.S. Geos, University of Texas, (2004). Modeling ground-water quality at regional scales.  
Samantha Tokash, M.S. GE (2003). Hydrochemical analysis of mine pollution, Snake River, Co  
Margaret Dodds Osburne, M.S., Geol. (2003), transport of organic contaminants in a landfill.  
Zachary Ceplecha, M.S. Colorado State University (2002). Aquifer vulnerability to nitrate pollution.  
Eric Vestal, M.S., ESE (2002), Modeling NAPL dissolution and transport.  
Tom Peebles, M.S., GE (2002), vadose-zone modeling.  
Quintin Moore, MS ESE (2001), modeling NAPL transport in the subsurface.  
Elizabeth Fischer, M.S., ESE (1999), nitrogen transformation in soil based wastewater treatment.  
Amanda Struse, M.S., ESE (1999), chemical oxidation remediation of organic pollutants.  
Sharon Day Yacob, M.S., Geol. (2003), aquifer-scale water quality and hydrochemical analysis.