JAMES J. STONE, PhD, PE

PERSONAL INFORMATION

Contact Information: Department of Civil and Environmental Engineering
South Dakota School of Mines and Technology
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CURRENT POSITIONS AND AFFILIATIONS

Interim Provost, South Dakota School of Mines and Technology, 2024 to 2025
Department Head, Department of Civil and Environmental Engineering, South Dakota School of Mines and Technology, 2020 to present
Professor, Department of Civil and Environmental Engineering, South Dakota School of Mines and Technology, 2016 to present
Associate Professor, Department of Civil and Environmental Engineering, South Dakota School of Mines and Technology, 2008 to 2016
Assistant Professor, Department of Civil and Environmental Engineering, South Dakota School of Mines and Technology, 2003 to 2008

PAST POSITIONS

Hydrologist, 2010 to 2014, USGS South Dakota Water Science Center, Rapid City, South Dakota
Erskine Fellow, 2013, 2016, 2025 University of Canterbury, Department of Civil and Natural Resources, Christchurch, New Zealand
Postdoctoral Research Associate, 2003, Pennsylvania State University, Department of Civil and Environmental Engineering
Staff Environmental Engineer, 1997 to 1999, TRC-Hydrogeo Consultants, Lakewood, Colorado
Staff Environmental Engineer, 1995 to 1997, Olver Incorporated, Blacksburg, Virginia

EDUCATION

Doctor of Philosophy, 2002, Environmental Engineering, Pennsylvania State University
Masters of Science, 1995, Environmental Engineering, Virginia Polytechnic Institute and State University
Bachelor of Science, 1993, Civil Engineering, Virginia Polytechnic Institute and State University

LICENSURE

Professional Engineer: State of Colorado, 1999-present

LEADERSHIP HIGHLIGHTS *(last 10 years)*

- Implemented a series of nine faculty led strategic initiatives to propel and modernize CEE department.
- Strengthened my relationship with CEE PAB but holding monthly update meetings with PAB leaders, and integrated several members of PAB into are departmental strategic initiatives
- Effectively managing departmental operational budgets, and establish policy to financially assist our faculty, primary through 50% match funding for instrumentation and other various needs.
- Provide research guidance by bringing together teams within CEE to pursue research grants, and tried to reduce match/cost share barriers for faculty members who need financial assistance with proposals.
- Distributed GRA and instrumentation funding (usually with dept providing 50% match) equitably for

faculty in need.

- Ongoing management of research group focusing on sustainability/life cycle assessment and contaminant fate/transport efforts. Research team typically consists of >7 graduate and undergraduate students, research scientists, and post-docs over the past 10 years.
- Implemented and led NSF-funded food/energy/water nexus workshop at SD Mines 2015, attended by 150+ regional policy makers, researchers, and industry personnel.
- Management of Environmental Engineering program (BS EnvE), emphasis area within CEE, and university minor, including course delivery schedule, faculty hiring, focus areas, and administrative tasks.
- Promoted CEE faculty success by supporting teaching, research, and service missions for new faculty mentoring.
- Leading sustainability research focus for ongoing South Dakota Oilseed Initiative, including proposal and publication writing, research coordination for life cycle assessment modeling amongst team, and providing future research direction guidance.
- Facilitator for development of new PhD program proposal for CEE to the SD BOR.
- Chair for departmental promotion & tenure committee, search Chair for five faculty hiring searches, and previous Chair for institutional promotion & tenure committee.
- Participant of year-long SD Mines Leadership Academy, 2018-2019

AWARDS *(last 10 years)*

1. 2018 Distinguished Service Award from the Association of Environmental Engineering and Science Professors.
2. 2017 SD Mines Outstanding Researcher award, Department of Civil and Environmental Engineering Award.
3. 2016, 2013 Erskine Fellowship recipient, University of Canterbury, New Zealand.

PROFESSIONAL MEMBERSHIP

American Society of Civil Engineering (ASCE), 2011-2013
American Water Works Association (AWWA), 2005-2010
President, Executive Council of the South Dakota Section of AWWA, 2008-2009
American Center for Life Cycle Assessment (ACLCA), 2014-present.
Association of Environmental Engineering and Science Professors (AEESP), 2003-present

RESEARCH SCIENTISTS and POST DOCTORIAL RESEARCHERS ADVISING

1. Asato, C., AirForce biogas development. 2015-2018. Currently research scientist at Stonybrook University.
2. Dangelmeyr, M., Power Resources ISR-uranium. 2016-2018. Currently post doc researcher at Los Alamos National Labs.
3. Gonzalez-Estrella. J., AirForce biogas development. 2015-2017. Currently tenure track faculty member at Oklahoma State University.
4. Jeong, H., SunGrant GIS/LCA modeling supply chain modeling. 2015-2016. Currently tenure track faculty member at Arkansas State University.
5. Karim, R., Agricultural LCA modeling. 2019-2020. Currently programmer at EcoInvent
6. Moeller, D., SunGrant GIS/LCA supply chain modeling. 2016-2017. Currently engineer at Black Hills Corporation.
7. Sieverding, H., South Dakota Oilseed Initiative, agricultural LCA modeling. 2013-present. Currently tenure track faculty member at South Dakota Mines

GRADUATE THESIS and DISSERTATION ADVISING

1. Albertus-Benham, A., 2009. Surface water and sediment investigation concerning abandoned uranium mines within the Slim Buttes region, Harding County, South Dakota. M.S. Thesis.
2. Betemarian, H., 2010. Sediment mercury geochemical behavior and watershed influences for South Dakota lakes and impoundments. M.S. Thesis.
3. Delzer, G., 2015. Evaluation of chemical prioritization system calculator and finished-water matrix-spike recoveries to predict the occurrence of anthropogenic organic contaminants in source and finished water of

community water systems supplied by groundwater that use chlorine disinfection. PhD Dissertation.
4. Dreis, E., 2010. The effects of antimicrobial agents CTC and tylosin on manure land application. M.S. Thesis.
5. Hengen, T., 2014. Applications of life cycle assessment modeling for environmental, water resources, and agricultural processes. M.S. Thesis
6. Isola, C., 2017. Applications of life cycle assessment modeling in polymerization/depolymerization processes based on renewable resources. M.S. Thesis
7. Kipp, G., 2009. Metals transport in sediments near abandoned uranium mines in Harding County, South Dakota. M.S. Thesis.
8. Larson, L., 2010. Arsenic and uranium fate and transport within a historical U mining impacted watershed, Harding County, SD. M.S. Thesis.
9. Lupo, C., 2012. A life cycle assessment of the beef cattle production system for the Northern Great Plains, US. M.S. Thesis.
10. Malladi, U., 2006. Assessing the Environmental Impact of Processing with Silver Nanoparticles on M3D System. M.S. Thesis.
11. McCutcheon, C., 2009. Relations between water quality and mercury fish tissue concentrations in South Dakota lakes and impoundments. M.S. Thesis.
12. Paul, C., 2006. Effects of metals during biological hematite reduction, in the presence and absence of soil humic acid, by Shewanella putrefaciens CN32. M.S. Thesis.
13. Pfeifle, B., 2011. Fate and transport of arsenic within the Whitewood Creek, Belle Fourche, and Cheyenne River watersheds. M.S. Thesis.
14. Punsal, J., 2017. Hydrologic analysis of surface water in the Black Hills National Forest and the influence of the mountain pine beetle. M.S. Thesis.
15. Sharma, R., 2016. Heavy metals accumulation within Black Hills Region Reserviors of South Dakota and Wyoming, and downriver of New Idria Mine in San Banito County, California. Ph.D. Dissertation.
16. Shrestha, P., 2019. Life cycle assessment modeling of integrated crop livestock systems. Ph.D. Dissertation.
17. Squillace, M., 2013. Mercury concentration in select South Dakota sediments. M.S. Thesis.
18. Tompkins, T., 2011. The effects of antimicrobial agents CTC and tylosin on swine manure sequencing batch reactor operations. M.S. Thesis.
19. Truax, R., 2015. Generic complexation sorption and transport modeling for the Smith Ranch Highlands uranium in-situ recovery site in Wyoming, USA. M.S. Thesis
20. Tuombe, E., 2008. Surface water and sediment investigation concerning abandoned uranium mines in the South Cave Hills, North Cave Hills, and Flint Buttes region, Harding County, South Dakota. M.S. Thesis.
21. Vik, E., 2016. Potential organic carbon exports within the upper Rapid Creek watershed due to mountain pine beetle infestation. M.S. Thesis.
22. Wong, K., 2007. Development of headspace solid phase microextraction – Flame Ionization gas chromatography procedure for analysis of short chain volatile fatty acids in swine manure. M.S. Thesis.

TEACHING EXPERIENCE

1. CEE/EnvE 326, Introductory Environmental Engineering Design
2. CEE/EnvE 327, Environmental Engineering Design
3. CEE/EnvE 327L, Environmental Engineering Design Laboratory
4. CEE 425/525, Sustainable Engineering (including Life Cycle Assessment module)
5. CEE/EnvE 426/526, Environmental Engineering Physical and Chemical Process Design (drinking water treatment)
6. CEE/EnvE 427/527, Environmental Engineering Biological Process Design(wastewater treatment)
7. CEE/EnvE 426L/526L, Environmental Engineering Physical and Chemical Process Design Laboratory
8. CEE/EnvE 428/528, Advanced Treatment Plant Design (1/3 of course).
9. CEE/EnvE 464 Capstone Design
10. CEE/EnvE 692, Environmental Remediation (1/3 of course)
11. CEE 791, Mining Environmental Impacts
12. EM 328, Applied Fluid Mechanics
13. EnvE 290, Environmental Engineering Seminar
14. ENNR 322 Ecological Engineering (24 lectures), University of Canterbury, New Zealand
15. ENCN 281 Environmental Engineering (12 lectures), University of Canterbury, New Zealand

YouTube instructional videos: https://www.youtube.com/user/jstonepsuedu

TEACHING SUPPORT *(last 10 years)*

1. "InTeGrate: Engineering, sustainability, and the Geosciences" teaching workshop. Colorado School of Mines. March 2013.
2. "InTeGrate: Interdisciplinary Teaching of Geoscience for a Sustainable Future" teaching workshop. Carlton College. July 2012.
3. ASCE ExCEEd teaching workshop. Florida Gulf Coast University. June 2012.

GOOGLE SCHOLAR PROFILE *(accessed 05/24)*
http://scholar.google.com/citations?user=JfD14B0AAAAJ&hl=en

	All	Since 2019
Citations	1833	1111
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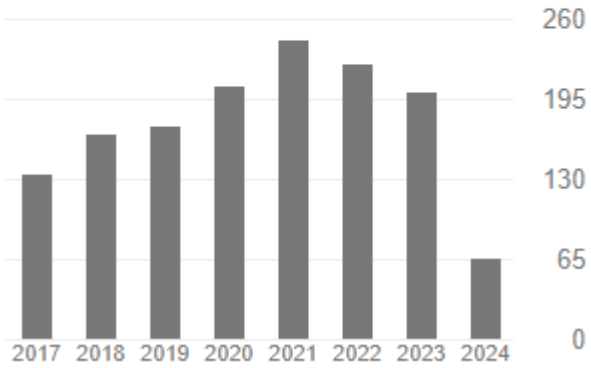

* refers to SD Mines graduate or undergraduate student author

REFEREED JOURNAL ARTICLES *(last 10 years)*

1. Jeong, H., Karim, R., Sieverding, H., Stone, J. 2020. An Application of GIS-Linked Biofuel Supply Chain Optimization Model for Various Transportation Network Scenarios in Northern. *BioEnergy Research* https://doi.org/10.1007/s12155-020-10223-7
2. Shrestha*, P., Karim, R., Sieverding, H., Archer, D., Kumar, S., Nleya, T., Graham, C., Stone, J. 2020. Life cycle assessment of wheat production and wheat-based crop rotations. *Journal of Environmental Quality*. http://dx.doi.org/10.1002/jeq2.20158
3. Kumar, S., Sieverding, H., Lai, L., Thandiew, T., Winhold, B., Redfeam, D., Archer, D., Ussiri, D., Faust, D., Landblom, D., Grings, E., Stone, J.J., Jacquet, J., Pokharel, K., Liebig, M., Schmer, M., Sexton, P., Mitchell, R., Smalley, S., Osborne, S., Ali, Shauket, Senturklu, S., Sehgal, S., Owens, V., Jin, V. 2019. Facilitating crop–livestock reintegration in the Northern Great Plains. *Agronomy Journal*. https://doi.org/10.2134/agronj2018.07.0441
4. Jeong, H., Sieverding, H., Stone, J.J. 2019. Biodiesel supply chain optimization modeled with geographical information system (GIS) and mixed-integer linear programming (MILP) for the Northern Great Plains region. *BioEnergy Research*. 12(1) 229-240. https://doi.org/10.1007/s12155-018-9943-y

5. Squillace*, M., Sieverding, H., Betemariam*, H., Urban, N., Penn, M., DeSutter, T., Chipps, S., Stone, J.J. 2019. Historical sediment mercury deposition for select South Dakota, USA, lakes: implications for watershed transport and flooding. *Journal of Soils and Sediments*. 19(1) 415-428. https://doi.org/10.1007/s11368-018-2014-3
6. Li, N., Kumar, P., Lai, L., Abagandura, G., Kumar, S., Nleye, T., Sieverding, H., Stone, J.J., Gibbons, W. 2019. Response of soil greenhouse gas fluxes and soil properties to nitrogen fertilizer rates under Camelina and Carinata nonfood oilseed crops. *BioEnergy Research*. 12(3) 524-535. https://doi.org/10.1007/s12155-019-09987-4
7. Isola*, C., Sieverding, H., Asato, C., Gonzalez-Estrella, J., Litzen, D., Stone, J.J. 2018. Life cycle assessment of portable two-stage anaerobic digestion of mixed food waste and cardboard. *Resources, Conservation and Recycling*. 139, 114-121. https://doi.org/10.1016/j.resconrec.2018.08.008.
8. Pfiefle*, B., Stamm, J., Stone, J.J. 2018. Arsenic Geochemistry of Alluvial Sediments and Pore Waters Affected by Mine Tailings along the Belle Fourche and Cheyenne River Floodplains. *Water, Air, & Soil Pollution.* 229 (6), 183. https://doi.org/10.1007/s11270-018-3836-8.
9. Dangelmayr, M., Reimus, P., Johnson, R., Clay, J., Stone, J.J. 2018. Uncertainty and variability in laboratory derived sorption parameters of sediments from a uranium in situ recovery site. *Journal of Contaminant Hydrology*. 213, 28-39. https://doi.org/10.1016/j.jconhyd.2018.04.001.
10. Moeller, D., Sieverding, H., Stone, J.J. 2017. Comparative farm-gate life cycle assessment of oilseed feedstocks in the Northern Great Plains. *BioPhysical Economics and Resource Quality*. 2 (4) 13. http://dx.doi.org/10.1007/s41247-017-0030-3
11. Isola*, C., Sieverding, H., Numan-Al-Mobin*, N., Rajappagowda*, R., Boakye, E., Raynie, D., Smirnova, A., Stone, J.J. 2018. Vanillin derived from lignin liquefaction: a sustainability evaluation. *International Journal of Life Cycle Assessment*. 23 (9), 1761-1772. http://dx.doi.org/10.1007/s11367-017-1401-0
12. Dangelmayr, M., Reimus., P., Wasserman, N., Punsal*, J., Johnson, R., Clay, J., Stone, J.J. 2017. Laboratory column experiments and transport modeling to evaluate retardation of uranium in an aquifer downgradient of a uranium insitu recovery site. *Applied Geochemistry* (2017) 1-13. http://dx.doi.org/10.1016/j.apgeochem.2017.02.018
13. Vik*., E., Sieverding, H., Punsal*, J., Kenner, S., Kunza, L., Stone, J.J. 2017. Timing of organic carbon release from mountain pine beetle impacted ponderosa pine Forests. *Water Environment Research*. 31 (3), 375-379. http://dx.doi.org/10.1111/wej.12253
14. Gonzalez-Estrella, J., Asato, C., Stone, J.J., Gilcrease, P. 2017. A review of anaerobic digestion of paper and paper board waste. *Reviews in Environmental Science and Bio/Technology*. 16 (3), 569-59. http://dx.doi.org/10.1007/s11157-017-9436-z
15. Gonzalez-Estrella, J., Asato, C., Jerke*, A., Stone, J.J., Gilcrease, P., 2017. Effect of structural carbohydrates and lignin content on the anaerobic digestion of paper and paper board materials by anaerobic granular sludge. *Biotechnology and Bioengineering*. 114 (5), 951-960. http://dx.doi.org/10.1002/bit.26228.
16. Isola*., C., Sieverding, H., Raghunathan, R., Sibi, M., Webster, D., Sivaguru, J., Stone, J.J., 2017. Life cycle assessment of photodegradable polymeric material derived from renewable bioresources. *Journal of Cleaner Production*. 142, 2935-2944. http://dx.doi.org/10.1016/j.jclepro.2016.10.177.
17. Shrestha*, N., Chilkoor*, G., Wilder*, J., Gadhamshetty, V., Stone, J.J., 2017. Potential water resource impacts of hydraulic fracturing from unconventional oil production in the Bakken shale. *Water Research*. 108, 1-24. http://dx.doi.org/10.1016/j.watres.2016.11.006.
18. Sieverding, H., Clay, D., Khan, E., Sivaguruc, J., Pattabiramand, M., Koodalie, R., Ndiva-Mongohf, M., Stone, J.J., 2016. A sustainable rural food-energy-water nexus framework for the upper Great Plains. *Agriculture and Environmental Letters*. 1(1) 1-4. http://dx.doi.org/10.2134/ael2016.02.0008.
19. Asato, C., Gonzalez-Estrella, J., Jerke*, A., Bang, S., Stone, J.J., Gilcrease, P., 2016. Batch anaerobic digestion of synthetic military base food waste and cardboard mixtures. *Bioresource Technology*. 216(2016) 894–903. http://dx.doi.org/10.1016/j.biortech.2016.06.033.
20. Hengen*, T., Sieverding, H., Stone, J.J., 2016. Life cycle assessment analysis of engineered stormwater control methods common to urban watersheds. *ASCE Journal of Water Resources Planning and Management*. 142(7) 1-9. http://dx.doi.org/10.1061/(ASCE)WR.1943-5452.0000647.
21. Johnson, R., Truax*, R., Lankford, D., Stone, J.J., 2016. Sorption testing and generalized composite surface complexation models for determining uranium sorption parameters at a proposed in-situ recovery site. *Mine Water and the Environment* 35 (4), 435-446. https://doi.org/10.1007/s10230-016-0384-6.

22. Sharma*, R, Putirka, K., Stone, J.J., 2016. Stream sediment geochemistry of the Cheyenne River and its drainages in the abandoned uranium mining region of the southern Black Hills, South Dakota U.S. *Environmental Earth Sciences.* 75(9) 1-12. http://dx.doi.org/10.1007/s12665-016-5522-8.
23. Mbonimpa, E., Kumar, S., Owens, V., Chintala, R., Sieverding, H., Stone, J.J., 2016. Nitrogen rate and landscape impacts on life cycle energy use and emissions from switchgrass-derived ethanol. *Global Change Biology, Bioenergy*. 8(4) 750–763. http://dx.doi.org/10.1111/gcbb.12296.
24. Hengen*, T., Sieverding, H., Cole, N., Ham, J., Stone, J.J., 2016. Eco-efficiency model for evaluating feedlot rations in the Great Plains, United States. *Journal of Environmental Quality*. http://dx.doi.org/10.2134/jeq2015.09.0464.
25. Sieverding, H., Zhau, X., Wei, L., Stone, J.J., 2016. Life cycle assessment of oilseeds for biojet production using localized cold-press extraction. *Journal of Environmental Quality.* 45(3) 967-976. http://dx.doi.org/10.2134/jeq2015.06.0313
26. Sieverding, H., Bailey*, L., Hengen*, T., Clay, D., Stone, J.J., 2015. Meta-analysis of soybean-based biodiesel for the northern Great Plains using global comparisons. *Journal of Environmental Quality*. 44(4) 1038-1048. http://dx.doi.org/10.2134/jeq2014.07.0320
27. Sharma*, R., Stone, J.J., 2015. Mineralogical and chemical composition of bottom sediments within Black Hills region reservoirs of South Dakota and Wyoming. *Environmental Earth Sciences*. 74(5) 4381-4393. http://dx.doi.org/10.1007/s12665-015-4444-1
28. Clay, D., Reicks, Graig, Carlson, G., Miller, J., Stone, J.J., Clay, S., 2015. Tillage and corn residue harvesting impact surface and subsurface carbon sequestration. *Journal of Environmental Quality*. 44(3) 803-809. http://dx.doi.org/10.2134/jeq2014.07.0322
29. O'Sullivan, A., Wicke, D., Hengen*, T., Sieverding, H., Stone, J.J., 2015. Life cycle assessment modeling of stormwater treatment systems. *Journal of Environmental Management*. 149(2015) 236-244. http://dx.doi.org/10.1016/j.jenvman.2014.10.025
30. Clay, D., Clay, S., Reitsma, K., Dunn, B., Calrson, G., Horvath, D., Stone, J.J., 2014. Does the conversion of grasslands to row crop production in semi-arid areas threaten global food security? *Global Food Security*. 3(1): 22-30. http://dx.doi.org/10.1016/j.gfs.2013.12.002
31. Hengen*, T., Squillace*, M., O'Sullivan, A., Stone, J.J., 2014. Life cycle assessment analysis of active and passive acid mine drainage treatment technologies. *Resources, Conservation and Recycling*. 86: 160-167. http://dx.doi.org/10.1016/j.resconrec.2014.01.003
32. Troyer, L., Stone, J.J., Borch, T. 2014. Impact of biogeochemical redox processes on the fate and transport of As and U at an abandoned uranium mine site: An X-ray absorbance spectroscopy study. *Environmental Chemistry*. 11(1): 18-27. http://dx.doi.org/10.1071/EN13129
33. Lupo*, C., Clay, D., Benning, J., Stone, J.J., 2013. A life cycle assessment of the beef cattle production system for the Northern Great Plains, US. *Journal of Environmental Quality*. 42(5): 1386-1394. http://dx.doi.org/10.2134/jeq2013.03.0101
34. Betemariam*, H., Davis, A., Stetler, L., McCutcheon, C., Desutter, T., Penn, M., Stone, J.J., 2013. Geochemical behavior and watershed influences associated with sediment-bound mercury for South Dakota lakes and impoundments. *Water, Air, and Soil Pollution*. 225(2013): 1497-1511 http://dx.doi.org/10.1007/s11270-013-1497-1
35. Lupo, C* and Stone, J.J., 2013. Bulk atmospheric mercury fluxes for the Northern Great Plains U.S. *Water, Air, and Soil Pollution*. 224(2013) 1437-1449. http://dx.doi.org/10.1007/s11270-013-1437-0
36. Dreher*, T., Mott, H., Lupo*, C., Oswald*, A., Clay, S., Stone, J.J., 2012. Effects of chlortetracycline amended feed on anaerobic sequencing batch reactor performance of swine manure digestion. *Bioresource Technology*. 125(2012) 65-74 http://dx.doi.org/10.1016/j.biortech.2012.08.077.
37. Clay, D., Chang, J., Clay, S., Stone, J.J., Gelderman, R., Carlson, G., Reitsma, K., Jones, M., Janssen, L., Schumacher, T., 2012. Corn yields and no-tillage affects carbon sequestration and carbon footprints. *Agronomy Journal.* 104(3) 763-770. http://dx.doi.org/10.2134/agronj2011.0353.
38. Clay, D., Carlson, G., Clay, S., Stone, J.J., Reitsma, D., Gelderman, R., 2012. Great Plains soils may be C sinks. *Better Crops*. 96(2) 22-24. http://www.ipni.net/publication/bettercrops.nsf
39. Stone, J.J., Dollarhide*, C., Benning, J., Carlson, C., Clay, D., 2012. The life cycle impacts of feed for modern Northern Great Plains U.S. swine production. *Agricultural Systems*. 106(1) 1-10. http://dx.doi.org/10.1016/j.agsy.2011.11.002.
40. Larson*, L., Kipp*, G., Mott, H., Stone, J.J. 2012. Sediment pore-water interactions associated with transport of arsenic and uranium within a watershed impacted by historical uranium mining activity, North

Cave Hills region, South Dakota. *Applied Geochemistry*. 27(4) 879-891. http://dx.doi.org/10.1016/j.apgeochem.2012.01.008

41. Stone, J.J., Oswald*, A., Lupo*, C, Clay, S., Mott, H., 2011. Impact of chlortetracycline on sequencing batch reactor performance for swine manure treatment. *Bioresource Technology*. 102(2011): 7807–7814. http://dx.doi.org/10.1016/j.biortech.2011.06.038
42. Stone, J.J., McCutcheon*, C., Stetler, L., Chipps, S., 2011. Interrelationships between fish tissue mercury concentrations and water quality for South Dakota natural lakes and impoundment. *Water, Air and Soil Pollution*. 222(1-4): 337-349. http://dx.doi.org/10.1007/s11270-011-0828-3
43. Stone, J.J., Dreis*, E., Lupo*, C., Clay, S., 2011. Land application of tylosin and chlortetracycline swine manure: impacts to soil nutrients and soil microbial community structure. *Journal of Environmental Science and Health, Part B Pesticides, Food Contaminants, and Agricultural Wastes*. 46: 1-11. http://www.tandfonline.com/doi/abs/10.1080/03601234.2011.603988
44. Larson*, L., Stone, J.J., 2011. Sediment-bound arsenic and uranium within the Bowman-Haley Reservoir, North Dakota. *Water, Air, and Soil Pollution*. 219(1): 27-42. http://dx.doi.org/10.1007/s11270-010-0681-9
45. Hayer, C., Chipps, S., Stone, J.J., 2011. Influence of physiochemical and watershed characteristics on mercury concentration in walleye, *Sander vitreus, M*. *Bulletin of Environmental Contamination and Toxicology*. 86(2): 163-167. http://dx.doi.org/10.1007/s00128-010-0166-y
46. Stone, J.J., Aurand*, K., Dollarhide*, C., Jinka*, R., Thaler, R., Clay, D., Clay, S., 2011. Determination of environmental impacts of antimicrobial usage for Northern Great Plains U.S. swine production facilities: a life cycle assessment approach. *International Journal of Life Cycle Assessment.* 16(1): 27-39. http://dx.doi.org/10.1007/s11367-010-0241-y

CURRENT RESEARCH SUPPORT

1. A pilot-scale, portable water treatment train for remediation of per- and polyfluoroalkyl substances (PFAS). AFCEC. Oct 2021 to Sept 2024. PI: Kunza L ($480,000), co-PI Stone, others.
2. BioWRAP (bioplastics with regenerative agricultural properties). National Science Foundation R2 Track 2. Dec 2021 to Dec 2025. PI Sharda (Kansas State U $1,800,000), senior personnel Stone, many others
3. Increasing the Partnership, Technical Training, and Exchange of Students between UPC, Lima, PE, and SDSMT, Rapid City, SD USA. US State Dept 100k program. July 2023 – July 2024. PI Dixon D ($100,000), others
4. Viaflex Student Fellowship Proposal 2023: Installation and Performance of Liners in Cold Weather. ViaFlex. Sept 2023 to Sept 2024. PI Lingwall B ($47,627)

PAST EXTERNAL RESEARCH SUPPORT *(last 10 years)*

1. Creating corn premiums through precision conservation and sustainability documentation. SD Corn Utilization Council. PI: Clay D (SDSU $267,385), co-PI: Stone, J.J. ($161,916), others
2. Back to the Future: Enhancing food security and farm production with integrated crop-livestock production systems. USDA NIFA AFRI CAP. March 2016 to December 2021. PI: Kumar, S (SDSU; $3,984,596), co-PI: Stone, J.J. ($363,000), many others.
3. Agronomy, processing, meal utilization, economics, and LCA of ethiopian mustard (Carinata) and winter camelina as alternative oilseed crops for South Dakota. South Dakota Oilseed Initiative. July 2019 to June 2020. PI: Stone, J.J. ($60,000), co-PI: Sieverding, H.
4. Stormwater management and ecosystems health: the complementary role of green infrastructure in urban environments. USGS104B – South Dakota. August 2018 to August 2020. PI: Stone, J.J. ($12,000), co-PI: Sieverding, H., Fenster, C. (SDSU).
5. Hydrologic life cycle impacts of mountain pine beetle infestations. USGS104G. Sept 2015 to Sept 2019. PI: Stone, J.J. ($250,000), co-PI: Sieverding, H., Kenner, S.
6. Quantifying the contribution of native and non-native pollinators to Brassica carinata yield and carinata's impact on pollinator health. North Central Regional Sun Grant Center/USDA-NIFA. July 2016 to June 2019. PI: Fenster, C (SDSU; $141,408), co-PI: Stone, J.J. ($28,200), Sieverding, H.
7. Detection and monitoring of brine spills in rangeland using remote sensing. NASA Epscor RIG. January 2018 to September 2018. PI: Li, L. ($45,991), co-PI: Stone ($0), Sieverding, H., Capehart, W., Bruggeman, S.

(SDSU).

8. Agronomy, processing, meal utilization, economics, and LCA of ethiopian mustard (Carinata) and winter camelina as alternative oilseed crops for South Dakota. South Dakota Oilseed Initiative. July 2018 to June 2019. PI: Stone, J.J. ($60,000), co-PI: Sieverding, H.
9. Agronomy, processing, meal utilization, economics, and LCA of ethiopian mustard (Carinata) and winter camelina as alternative oilseed crops for South Dakota. South Dakota Oilseed Initiative. July 2017 to June 2018. PI: Stone, J.J. ($45,000), co-PI Sieverding, H.
10. Geochemical uranium transport modeling with batch calibration. Power Resources. Jan 2016 to Dec 2017. PI: Stone, J.J. ($163,000).
11. Expeditionary and contingency basing: Renewable energy, energy conservation, energy efficient waste disposal, energy management, waste water recovery and reuse. US Air Force BEAR-EST. Nov 2014 to Nov 2017. PI: Winter, R ($4,000,000), co-PI: Stone, J.J. ($200,000), many others.
12. Bio versus fossil oil: Dryland biofuel feedstock production transportation infrastructure challenges. US DOT,DOE-SunGrant. Sept 2014 to Sept 2017. PI: Stone, J.J. ($288,000), co-PI: Sieverding, H.
13. Agronomy, processing, meal utilization, economics, and LCA of ethiopian mustard (Carinata) and winter camelina as alternative oilseed crops for South Dakota. South Dakota Oilseed Initiative. July 2016 to June 2017. PI: Stone, J.J. ($45,000), co-PI Sieverding, H.
14. FEW: A sustainable rural framework workshop for the upper Great Plains. National Science Foundation SEES Food/Energy/Water Nexus workshop. July 2015 to July 2017. PI: Stone, J.J. ($50,000), co-PI: Sieverding, H., Khan, E. (NDSU), Clay, D. (SDSU), Koodali, R. (USD), Pattabiraman, M. (UNe-K).
15. DakotaBioCon: life cycle analysis. National Science Foundation South Dakota Epscor R2T2. June 2015 to June 2016. PI: Stone, J.J. ($100,000), co-PI Sieverding, H.
16. Agronomy, processing, meal utilization, economics, and LCA of ethiopian mustard (Carinata) and winter camelina as alternative oilseed crops for South Dakota. South Dakota Oilseed Initiative. Sept 2015 to June 2016. PI: Stone, J.J. ($45,000), co-PI Sieverding, H.
17. Source water implications associated with the current Black Hills mountain pine-beetle infestation. USGS104B. Feb 2013 to Dec 2015. PI: Stone, J.J. ($19,330), co-PI: Stamm, J. (USGS).
18. Critical evaluation of restoration goals based on improved geochemical and toxicological characterization of baseline- and post-mining site conditions, University of Wyoming School of Energy Resources, legislature of State of Wyoming In-Situ Recovery of Uranium Research Program. December 2012 to February 2014. PI: Borch, T., Colorado State University, co-PI: Johnson, T., Colorado State University, Stone, J.J. ($88,000).
19. MRI: Acquisition of a high resolution liquid chromatograph coupled to a high resolution and high mass accuracy ion trap time of flight mass spectrometer, National Science Foundation Major Research Instrumentation, September 2013 to September 2016. PI: Christopher, L., SDSM&T ($390,014), co-PIs: Stone, J.J., others.
20. Agronomy, processing, meal utilization, economics, and LCA of ethiopian mustard (*Carinata*) and winter camelina as alternative oilseed crops for South Dakota. South Dakota Oilseed Initiative. July 2013 to June 2015. PI: Gibbons, B., South Dakota State University, co-PI: Stone, J.J. ($81,000), others.
21. Extent of off-site uranium contamination from Black Hills National Forest abandoned uranium minesites, US Environmental Protection Agency Region 8, US Department of Agriculture, and US Forest Service – Northern Region Office, August 2010 to May 2014, PI: Stone, J.J. ($98,500)
22. Extent of off-site uranium contamination from Custer National Forest abandoned uranium minesites, US Environmental Protection Agency Region 8, US Department of Agriculture, and US Forest Service – Northern Region Office, March 2006 to May 2014, PI: Stone, J.J. ($600,000), co-PI: Stetler, L.D., SDSM&T, Schwalm, A., Oglala Lakota College.
23. Life cycle assessment model development for Colorado beef production. Colorado State University. September 2012 to June 2013. PI: Stone, J.J., ($11,000).
24. Life cycle assessment analysis of engineered stormwater control methods common to South Dakota, USGS 104B, May 2011 to March 2013, PI: Gribb, M., co-PI: Stone, J.J., ($19,730), Benning, J.
25. Life cycle assessment model development for South Dakota Soybean Research and Promotion Council (South Dakota State University sub-award), September 2013 to June 2014. PI: Stone, J.J., ($25,000).
26. Life cycle assessment model development for South Dakota Soybean Research and Promotion Council (South Dakota State University sub-award), September 2012 to June 2013. PI: Stone, J.J., ($22,500).
27. Swine facility life cycle assessment model development, South Dakota Corn Council (South Dakota State University sub-award), August 2011 to June 2012, PI: Stone, J.J. ($29,400).

28. South Dakota Sustainability Initiative: building sustainable practice throughout the Missouri River watersheds of South Dakota. SD Epscor SD EPSCoR RII T1 Proposal Planning Grant, March 2012 to August 2012. PI: Stone, J.J. ($7,997), co-PI: Clay, D. and Johnson, C. South Dakota State University; Spellman, G. and Sarver, S. Black Hills State University; Kerby, J. and Sulak, B. University of South Dakota.
29. Integration of remote sensing and life cycle analysis to enhance the sustainability of South Dakota agricultural production, SD NASA EPSCoR, May 2011 to March 2012, PI: Kjaersgaard, J, S South Dakota State University, co-PI: Clay, S., South Dakota State University, Stone, J.J. ($7,097)
30. South Dakota Sustainability Initiative: building sustainable practice throughout the Missouri River watersheds of South Dakota. NSF R2T1 Planning Grant South Dakota EPSCoR, March to September 2012. PI: Stone, J.J., ($8,000)
31. Phase I: Data Collection and Assessment for Mercury TMDL Development, South Dakota Department of Environment and Natural Resources, May 2009 to June 2011. PI: Stone, J.J., ($22,603)
32. Phase I: Data Collection and Assessment for Mercury TMDL Development, South Dakota Department of Environment and Natural Resources, May 2008 to June 2011, PI: Stone, J.J., ($265,424), co-PI: Stetler, L.D., Sundareshwar, P.V., SDSM&T, Chipps, S., South Dakota State University, Penn, M., University of Wisconsin-Platteville.
33. Assessment of Atmospheric Mercury Deposition at Select Northern Great Plains National Parks Service Locations, National Parks Services and Great Plains Cooperative Ecosystem Studies Unit, July 2008 to September 2011, PI: Stone, J.J. ($69,963).
34. Swine facility life cycle assessment model development, South Dakota Corn Council (South Dakota State University sub-award), August 2001 to June 2011, PI: Stone, J.J. ($35,000).

REPORTS AND REPORT CHAPTERS *(last 10 years)*

1. Borch, T., Johnson, T., Stone, J.J., Bhattacharyya, A., Ruedig, E., Truax*, R. 2015. Critical evaluation of restoration goals based on improved geochemical and toxicological characterization of baseline and post-mining site conditions. Prepared for University of Wyoming School of Energy Resources, legislature of State of Wyoming In-Situ Recovery of Uranium Research Program, Laramie, WY.
2. Hansen, R., Stone, J.J. 2011. Mercury total maximum daily load evaluation for the State of South Dakota South Dakota. Prepared for the Department of Environment and Natural Resources, Pierre, SD.
3. Stone, J.J. 2011. Final Report: Phase I data collection and assessment for South Dakota mercury TMDL development. Report No. CEE 05-11. Department of Civil and Environmental Engineering, South Dakota School of Mines and Technology. Prepared for South Dakota Department of Environment and Natural Resources, Pierre, SD.

CONFERENCE PROCEEDINGS *(last 10 years)*

1. Stetler, L., Stone, J.J., 2011. Environmental impacts from wind erosion of abandoned mine lands. Proceedings from the International Symposium on Erosion and Landscape Evolution conference, Anchorage AK.
2. Stone, J.J., Larson*, L., Kipp*, G., 2011. Sediment pore-water equilibria interactions associated with arsenic and uranium transport within a historical uranium mining-impacted watershed in South Dakota. Proceedings from the 28th Annual Meeting of American Society of Mining and Reclamation, Bismarck, ND.
3. Pfiefle*, B., Stone, J.J., Stamm, J., Geible, N., 2011. Arsenic speciation in sediment and pore waters of the historical mining-impacted Belle Fourche and Cheyenne River floodplains. Proceedings from the 28th Annual Meeting of American Society of Mining and Reclamation, Bismarck, ND.

CONFERENCE PRESENTATIONS AND ABSTRACTS *(last 10 years)*

1. Kozak*, P., Sieverding, H., Stone, J.J. Evaluation of USGS LCMAP data products to assess forest condition in western South Dakota. Presented at the 2019 Western South Dakota Hydrology Conference, Rapid City SD, April 2019.
2. Sieverding, H., Vargas-Castano*, A., Hottebrock, H., Fenster, C., Stone, J.J. Using green stormwater infrastructure to create urban biodiversity corridors. Presented at the 2019 Western South Dakota Hydrology Conference, Rapid City SD, April 2019.

3. Sieverding, H., Stone, J.J. Reducing life cycle impacts of oilseed crops. Presented at the 2019 Carinata Summit, Quincy FL, March 2019.
4. Sieverding, H., Stone, J.J. Oilseed life cycle sensitivity to crop management. Presented at the 2019 Carinata Summit, Quincy FL, March 2019.
5. Sieverding, H., Stone, J.J.. RIN sensitivity model progress. Presented at the South Dakota Ag Horizons conference, Pierre SD, December 2018.
6. Borch, T., Bhattacharyya, A., Roebbert, Y., Stone, J.J., Weyer, S., Clay, J., Bernier-Latmani, R., Campbell, K. Biogeochemical characterization of sediment and groundwater before and after in-situ recovery (ISR) mining of uranium in Wyoming, USA. Presented at the International Conference of Uranium Biogeochemistry, Ascona, Switzerland, October 2018.
7. Stone, J.J., Shrestha*, P., Sieverding, H. Should life cycle assessments of agricultural products consider midpoints or endpoints?. Presented at the 18th annual American Center of Life Cycle Assessment conference, Fort Collins CO, September 2018.
8. Kozak*, P., Li, L., Capehart, W., Sieverding, H., Stone, J.J. Determination of the potential for detection and monitoring of brine spills in rangeland using remote sensing. Presented at the annual Black Hills Digital Mapping Association meeting, Rapid City SD, September 2018.
9. Shrestha*, P., Sieverding, H., Stone, J.J. LCA modeling – integrating crop and livestock in the Northern Great Plains (NGP) USA. Presented at the 2018 American Society of Agricultural and Biological Engineers, Detroit MI, July 2018.
10. Kozak*, P., Li, L., Capehart, W., Sieverding, H., Stone, J.J. Determination of the potential for detection and monitoring of brine spills in rangeland using remote sensing. Presented at the 2018 Western South Dakota Hydrology Conference, Rapid City SD, April 2018.
11. Punsal*, J., Stone, J.J., Sieverding, H., Rhoades, C., Kenner, S., Fegel, T. The impact of mountain pine beetle infestation on surface water quality within the upper Rapid Creek watershed of the Black Hills National Forest. Presented at the 2018 Western South Dakota Hydrology Conference, Rapid City SD, April 2018.
12. Sieverding, H., Stone, J.J. What farmers and researchers need to know about carinata Life Cycle Analyses (LCAs). Presented at the 2018 Carinata Summit, Panama City FL, February 2018.
13. Sieverding, H., Stone, J.J.. Life cycle sustainability of carinata production. Presented at the South Dakota Ag Horizons conference, Pierre SD, December 2017.
14. Shaw*, P., Kenner, S., Stone, J.J., Sieverding, H. Comparisons between EROS continuous change detection classification system and USFS Forest Health Technology Mapping for the current mountain pine beetle outbreak. Presented at the Black Hills Digital Mapping Conference, Rapid City SD, October 2017.
15. Dangelmayr, M., Stone, J.J., Remius, P., Johnson, R., Clay, J. Modeling uranium attenuation at a uranium in situ recovery (ISR) facility. Presented at the National Mining Association Uranium Recovery Workshop 2017, Denver CO, June 2017
16. Gonzalez-Estrella, J., Asato, C., Jerke*, A., Stone, J,J., Gilcrease, P. Predicting anaerobic degradability of paper and paper board waste. Presented at the 2017 Association of Environmental Engineering and Science Professors conference, Anne Arbor MI, June 2017.
17. Skilling*, D., Asato, C., Gonzalez-Estrella, J., Malzahn, J., Stone, J.J., Gilcrease, P. Modeling anaerobic digestion of food waste and paper board waste mixtures. Presented at the 2017 Association of Environmental Engineering and Science Professors conference, Anne Arbor MI, June 2017.
18. Dangelmayr, M., Stone, J.J., Johnson, R., Reimus, P., Clay, J. Modeling uranium attenuation at a uranium in situ recovery (ISR) facility. Presented at the 2017 Western South Dakota Hydrology Conference, Rapid City SD, April 2017.
19. Punsal*, J., Stone, J.J., Sieverding, H., Rhoades, C., Kunza, L. Quantitative and fluorescence analyses of dissolved organic carbon emanating from mountain pine beetle-impacted watersheds of upper Rapid Creek. Presented at the 2017 Western South Dakota Hydrology Conference, Rapid City SD, April 2017.
20. Shaw, P., Kenner, S., Stone, J.J., Sieverding, H. Comparisons between EROS continuous change detection classification system and USFS forest health technology mapping for the current mountain pine beetle outbreak. Presented at the 2017 Western South Dakota Hydrology Conference, Rapid City SD, April 2017
21. Shaw, P., Kenner, S., Stone, J.J., Sieverding, H. Modeling the hydrological impact of land cover change for the current Black Hills mountain pine beetle outbreak. Presented at the 2017 Western South Dakota Hydrology Conference, Rapid City SD, April 2017
22. Dangelmayr, M., Stone, J.J., Johnson, R., Reimus, P., Clay, J. Modeling uranium attenuation at a uranium in

situ recovery (ISR) facility. Presented at the 2017 South Dakota Department of Environmental and Natural Resources Groundwater Conference, Pierre SD, March 2017.

23. Punsal*, J., Stone, J.J., Sieverding, H., Rhoades, C., Kunza, L. Quantitative and fluorescence analyses of dissolved organic carbon emanating from mountain pine beetle-impacted watersheds of upper Rapid Creek. Presented at the 2017 South Dakota Department of Environmental and Natural Resources Groundwater Conference, Pierre SD, March 2017.
24. Sieverding, H., Moeller, D., Stone, J.J. South Dakota Life Cycle Analysis update. Presented at the 2017 Carinata Summit, Quincy FL, March 2017.
25. Jeong, H., Sieverding, H., Stone, J.J. Optimization model for biodiesel supply chain and infrastructure development in the Northern Great Plains Region. Presented at the 2016 Renewable Energy Conference, Jonesboro AR, October 2016
26. Johnson, R., Stone, J.J., Truax*, R., Dangelmayr, M., Reimus, P., Clay, J. Water quality issues related to uranium in situ recovery sites. Presented at the annual Geologic Society of America conference, Denver, CO, September 2016.
27. Sieverding, H., Stone, J.J. Reconciling food-energy-water security in the Northern Great Plains. Presented at the annual Geologic Society of America conference, Denver, CO, September 2016.
28. Isola*, C., Sieverding, H., Stone, J.J. Life cycle assessment of photodegradable polymeric material derived from renewable bioresources. Presented at the Life Cycle Assessment XVI conference, Charleston, SC, September 2016.
29. Jeong, H., Sieverding, H., Stone, J.J. Biodiesel supply chain optimization in the Northern Great Plains (NGP) region. Presented at the 2016 Western South Dakota Hydrology Conference, Rapid City, SD, April 2016.
30. Punsal*, J., Vik*, E., Sieverding, H., Kenner, S., Kunza, L., Stone, J.J. Geochemical impacts of mountain pine beetles on Rapid Creek, SD. Presented at the 2016 Western South Dakota Hydrology Conference, Rapid City, SD, April 2016.
31. Sieverding, H., Stone, J.J. Food-Energy-Water Nexus: critical sustainability thresholds for the upper Great Plains. Presented at the 2016 Western South Dakota Hydrology Conference, Rapid City, SD, April 2016.
32. Sieverding, H., Stone, J.J., Life cycle analysis of South Dakota Carinata. Presented at the University of Florida Brassica carinata Summit 2016, Quincy, FL, March 2016.
33. Vik*, E., Stone, J.J. Potential organic carbon exports within the upper Rapid Creek watershed due to the current mountain pine beetle outbreak. Presented at the 2015 South Dakota Water and Wastewater Association Annual Meeting, Spearfish, SD, September 2015.
34. Stone, J.J., Sieverding, H., Gibbons, B. Bio versus fossil oil: Dryland biofuel feedstock production transportation infrastructure challenges. Presented at the 2015 Associated of Environmental Engineering and Science Professors AEESP annual conference, New Haven CT, June 2015.
35. Borch, T., Troyer, L., Campbell, K., Stone, J.J., Lezama-Pacheco, J., Bargar, J. Fate of U and As in biostimulated mine trailings sediments. Presented at the Spring 2015 American Chemical Society meeting, Denver, CO, April 2015.
36. Borch, T., Johnson, T., Stone, J.J. Critical evaluation of restoration goals based on improved geochemical and toxicological characterization of baseline- and post-mining site conditions. Presented at the 2015 In-Situ Recovery of Uranium Research Symposium, Laramie, WY, April 2015.
37. Vik*, E., Stone, J.J., Kenner, S., Sieverding, H., Kunza, L., Stamm, J. Potential organic carbon exports within the upper Rapid Creek watershed due to the current mountain pine beetle outbreak. Presented at the 2015 Western South Dakota Hydrology Conference, Rapid City, SD, April 2015.
38. Truax*, R., Stone, J.J., Borch, T., Johnson, R., Clay, J. Reactive transport modeling to evaluate post-mining site conditions at an in situ recovery uranium. Presented at the 2015 Western South Dakota Hydrology Conference, Rapid City, SD, April 2015.
39. Stone, J.J., Truax*, R., Borch, T., Johnson, R., Clay, J. Reactive transport modeling to evaluate post-mining site conditions at an in situ recovery uranium site. Presented at the 2015 Environmental and Groundwater Quality Conference, Pierre, SD, March 2015.
40. Mbonimpa, E., Kumar, S., Owens, V., Chintala, R., Stone, J.J. Assessing fertilization and landscape impacts on the overall life cycle of switchgrass used to produce cellulosic ethanol. Presented at the 2014 American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America International Annual Meetings, Long Beach, CA, November 2014.
41. Stone, J.J., Truax*. R., Borch, T., Johnson, R. Geochemical modeling of the down gradient transport potential of uranium at an In-Situ Recovery (ISR) facility. Presented at the 2014 American Society of

Agronomy, Crop Science Society of America, and Soil Science Society of America International Annual Meetings, Long Beach, CA, November 2014.

42. Stone, J.J., Borch, T., Bhattacharyya, A., Johnson, T., Ruedig, E., Johnson, R. Restoration challenges for in-situ recovery uranium mining. Presented the 7th Conference of Uranium Mining and Hydrogeology, Freiberg, Germany, September 2014.
43. Truax*, R., Stone, J.J., Borch, T., Johnson, T., Johnson, R. Geochemical modeling of uranium in-situ recovery (ISR) post-mining site conditions. Presented at the Rocky Mountain Geologic Society of America meeting, Bozeman, MT, May 2014.
44. Truax*, R., Stone, J.J., Borch, T., Johnson, T., Johnson, R. In-situ recovery uranium mining restoration challenges: geochemical modeling of post-mining site conditions. Presented at the 2014 Western South Dakota Hydrology Conference, Rapid City, SD, April 2014.
45. Stone, J.J., Borch, T., Bhattacharyya, A., Johnson, T., Ruedig, E., Johnson, R. In-situ recovery uranium mining restoration challenges. Presented at the 2014 Western South Dakota Hydrology Conference, Rapid City, SD, April 2014.
46. Stone, J.J., Borch, T., Bhattacharyya, A., Johnson, T., Ruedig, E., Johnson, R. In-situ recovery uranium mining restoration challenges. Presented at the 2014 Environmental and Groundwater Quality Conference, Ft. Pierre, SD, March 2014.
47. Sharma*, R, Stone, J.J., Putirka, K., Sediment geochemistry of the Cheyenne River and Angostura Reservoir delta in the abandoned uranium mining region of the Southern Black Hills. Presented at the 2014 AGU Oceans Sciences Meeting, Honolulu, HI, February 2014.
48. Bhattacharyya, A., Borch, T., Johnson, T., Stone, J.J., Geochemical characterization of uranium from baseline- and post-mining site conditions at an in-situ recovery uranium mine. Presented at the U2013 conference, San Antonio, TX, September 2013.
49. Truax*, R., Stone, J.J., Borch, T., Johnson, T., Johnson, R., Geochemical characterization of uranium from baseline- and post-mining site conditions at an in-situ recovery uranium mine. Presented at the 2013 Midwestern Groundwater Conference, Bismarck, ND, September 2013.
50. Troyer, L., Stone, J.J., Borch, T., Impact of As(V) on abiotic reduction of U(VI) by mackinawite. Presented at Goldschmidt Conference, Italy, July 2013.
51. Borch, T., Troyer, L., Stone, J.J., Impact of biogeochemical redox processes on transport and fate of arsenic and uranium: from molecular to field scales. Presented at the University of Guelph Spring 2013 Consortium meeting, Guelph Ontario Canada, May 2013.
52. Squillace*, M., Stone, J.J., Investigation of mercury and arsenic sediment concentrations within the Cheyenne River basin of the Cheyenne River Sioux Tribe Reservation. presented at the 2013 Western South Dakota Hydrology Conference, Rapid City, SD, April 2013.
53. Troyer, L., Stone, J.J., Borch, T., Impact of biogeochemical redox processes on arsenic and uranium dynamics in mine tailings contaminated sediments presented at American Chemical Society annual spring meeting, New Orleans LA, March 2013
54. Hengen*, T., Squillace*. M., O'Sullivan, A., Crombie, F., Stone, J.J., Life Cycle Assessment Analysis for Active and Passive Acid Mine Drainage Treatment Options for the Stockton Coal Mine, New Zealand presented at the Eastern South Dakota Water Conference, Brookings SD, October 2012
55. Stone, J.J., Hengen*, T., Squillace*. M., Life Cycle Assessment Analysis for Active and Passive Acid Mine Drainage Treatment presented at the Life Cycle Assessment XII Conference, Tacoma WA, September 2012
56. Hengen*, T., Stone, J. Life cycle assessment analysis of engineered stormwater control methods common to urban South Dakota watersheds, presented at the South Dakota Water and Wastewater conference, Rapid City, SD, September 2012
57. Stone, J.J., Truax*, R., Bailey*, L., Carlson, G., Clay, D., 'Well to Tank' GREET LCA model for South Dakota ethanol production. Presented at the Center for Bioenergy Research and Development meeting, Raleigh, NC May 2012.
58. Stone, J.J., Pfiefle*, B., Arsenic distribution in sediment and pore waters of the historical mining-impacted Belle Fourche and Cheyenne River floodplains, South Dakota. Presented at the U.S. EPA Hardrock Mining Conference, Denver CO, April 2012.
59. Hengen*, T., Squillace*. M., O'Sullivan, A., Crombie, F., Stone, J.J., Life cycle assessment analysis for active and passive acid mine drainage treatment options for the Stockton Coal Mine, New Zealand. Presented at the U.S. EPA Hardrock Mining Conference, Denver CO, April 2012.
60. Hengen*, T., Squillace*, M., Stone, J.J., O'Sullivan, A., Crombie, F., Life cycle assessment analysis of various

active and passive acid mine drainage treatment options for the Stockton Coal Mine, New Zealand. Presented at the 2012 Western South Dakota Hydrology Conference, Rapid City, SD, April 2012.

61. Lupo*, C., Stone, J.J., Olson, K., Clay, D., Estimating potential environmental impacts associated with beef cattle production in the Northern Great Plains, US using life cycle assessment. Presented at the 2012 Western South Dakota Hydrology Conference, Rapid City, SD, April 2012.
62. Squillace*, M., Stone, J.J., Chipps, S., Historical trends associated with sediment-bound mercury for select South Dakota lakes. Presented at the 2012 Western South Dakota Hydrology Conference, Rapid City, SD, April 2012.
63. Hengen*, T., Stone, J.J., Life cycle assessment analysis of engineered stormwater control methods common to urban South Dakota watersheds. Presented at the 2012 Western South Dakota Hydrology Conference, Rapid City, SD, April 2012.
64. Jones*, T., Metzler*, E., Rohde*, C., McKaskey*, J., Stetler, L., Stone, J.J., Solutions for mine-tailing leachate affecting the floodplain south of Creede, CO. Presented at the 2012 Western South Dakota Hydrology Conference, Rapid City, SD, April 2012.
65. Tisher*, K., Squillace*, M., Hoyle*, J., Muraveva*, A., Stetler, L., Stone, J.J., Reclamation of the Holy Moses Mine to prevent the contamination of East Willow Creek and its aquatic resources. Presented at the 2012 Western South Dakota Hydrology Conference, Rapid City, SD, April 2012.
66. Lupo*, C., Morris*, D., Shagla*, C., Stetler, L., Stone, J.J., Reclamation of the last chance waste rock pile near Creede, CO. Presented at the 2012 Western South Dakota Hydrology Conference, Rapid City, SD, April 2012.
67. Borch, T., Troyer, L., Larson, L., Stone, J.J., Impact of biogeochemical redox processes on U and As dynamics within a U mining impacted watershed. Presented at the International Workshop on Uranium Biogeochemistry: transformations and applications, Ascona Switzerland, March 2012.
68. Squillace*, M., Stone, J.J., Chipps, S., Historical trends associated with sediment-bound mercury for select South Dakota lakes. Presented at the annual Dakota Chapter American Fisheries Society meeting, Chamberlain SD, February 2012.
69. Hengen*, T., Stone, J.J., Life cycle assessment analysis of engineered stormwater control methods common to urban South Dakota Watersheds. Presented at the 2011 Eastern South Dakota Water Conference, Brookings, SD, October 2011.
70. Hengen*, T., Stone, J.J., Life cycle assessment analysis of engineered stormwater control methods common to urban South Dakota Watersheds. Presented at the 2011 South Dakota Water and Wastewater Association annual conference, Huron, SD, September 2011.
71. Stetler, L., Stone, J.J., Geological Engineering senior design experience: abandoned uranium mine site characterization. Presented at the Frontiers in Education Conference, Rapid City, SD, October 2011.
72. Stone, J.J., Sediment pore-water equilibria interactions associated with arsenic and uranium transport within a historical uranium mining-impacted watershed in South Dakota. Presented at the U2011 Uranium Symposium, Casper, WY, September 2011.
73. Stetler, L., Stone, J.J., Environmental impacts from wind erosion of abandoned mine lands. Presented at the American Society of Agricultural and Biological Engineers International Symposium on Erosion and Landscape Evolution, Anchorage, AK, September 2011.
74. Pfiefle*, B, Stone, J.J., Stamm, J., Geibel, N. Arsenic speciation in sediment and pore waters of the historical mining-impacted Belle Fourche and Cheyenne River floodplains. Presented at the 28th annual meeting of the American Society of Mining Reclamation Conference, Bismarck, ND, June 2011.
75. Stone, J.J., Larson*, L., Kipp*, G. Sediment pore-water equilibria interactions associated with arsenic and uranium transport within a historical uranium mining-impacted watershed in South Dakota. Presented at the 28th annual meeting of the American Society of Mining Reclamation Conference, Bismarck, ND, June 2011
76. Pfiefle,*, B., Stone, J.J., Stamm, J., Geibel, N., Arsenic speciation in sediment and pore waters of the historical mining-impacted Belle Fourche and Cheyenne River floodplains. Presented at the St. Petersburg University undergraduate research symposia, St. Petersburg, Russia, April 2011.
77. Hengen*, T., Stone, J.J., Life cycle assessment analysis of engineered stormwater control methods common to urban South Dakota watersheds. Presented at the 2011 Western South Dakota Hydrology Conference, Rapid City, SD, April 2011.
78. Kelly*, M., Stone, J.J., Sharma*, R., Oswald*, A., Lupo*, C., Analysis of bottom sediments for metal and radionuclide concentrations within Black Hills reservoirs. Presented at the 2011 Western South Dakota Hydrology Conference, Rapid City, SD, April 2011.

79. Pfiefle*, B, Stone, J.J., Stamm, J., Geibel, N., Arsenic speciation in sediment and pore waters of the historical mining-impacted Belle Fourche and Cheyenne River floodplains. Presented at the 2011 Western South Dakota Hydrology Conference, Rapid City, SD, April 2011.
80. Sharma*, R., Stone, J.J., Kelly*, M., Oswald*, A., Lupo*, C., Reconnaissance investigation of bottom sediment metals and radionuclide concentrations within Black Hills region lakes and impoundments. Presented at the 2011 Western South Dakota Hydrology Conference, Rapid City, SD, April 2011.
81. Stone, J.J., Biogeochemical factors controlling arsenic fate and transport within historical mining-impacted watersheds of western South Dakota. Presented at the 2011 Western South Dakota Hydrology Conference, Rapid City, SD, April 2011.
82. Kelly*, M., Stone, J.J., Methods of extraction and preparation for analysis of bottom sediment core samples from Black Hills area lakes and reservoirs. Presented at the SDSM&T Undergraduate Research Symposium, Rapid City, SD, April 2011.

INVITED LECTURES *(last 10 years)*

1. South Dakota Engineering Society Fall Conference, Rapid City, SD. "The GasCube – turning remote base waste into energy." October 2018.
2. University of Nebraska Lincoln 2017 Water Conference, Lincoln NE. "Consideration of triple bottom line (TBL) – economy, environment, and society – for nitrogen management." October 2017.
3. SDSM&T Chemical/Biological Engineering REU Luncheon, Rapid City, SD. "Life cycle assessment modeling." June 2016.
4. 2016 Western South Dakota Hydrology Conference, Rapid City, SD. Keynote luncheon presentation "Food/Energy/Water Nexus challenges and potential solutions for the northern Great Plains." April 2016.
5. University of Nebraska-Lincoln Food Energy Water Nexus workshop, Lincoln NE. Keynote presentation "Life cycle assessment modeling challenges and opportunities for the FEW nexus." February 2016.
6. SDSM&T Chemical/Biological Engineering REU Luncheon, Rapid City, SD. "Life cycle assessment modeling." June 2015.
7. SDSM&T Green Chemistry Summer Camp 2015, Rapid City, SD. "Life cycle assessment modeling." July 2015.
8. Annual SunGrant PI meeting, Minneapolis, MN. "Bio versus fossil oil: dryland biofueld feedstock production transportation infrastructure challenges." March 2015.
9. Annual South Dakota American Water Works Association Water Seminar, Spearfish, SD. "In-situ recovery (ISR) uranium mining and potential effects on groundwater quality." February 2015.
10. North Central Development Committee 227 Brassica carinata Second Annual Meeting, Pierre, SD. "Camelina and Carinata LCA." December 2014.
11. 2014 American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America International Annual Meetings, Long Beach CA. "Geochemical modeling of the down gradient transport potential of uranium at an In-Situ Recovery (ISR) facility." November 2014.
12. Honors College Energy Colloquium, South Dakota State University, Brookings, SD. "Life Cycle Assessment modeling- sustainability metric for environmental and agricultural systems." November 2014.
13. Department of Civil and Natural Resources weekly seminar series, University of Canterbury, Christchurch, New Zealand. "The use of life cycle assessment as a sustainability metric for environmental and agricultural systems." August 2013.
14. University of Canterbury Engineers without Boarders, Christchurch, New Zealand. "EWB project in Rwanda – case study on drinking water collection and treatment." August, 2013.
15. South Dakota Engineering Society Awards Luncheon, Rapid City, SD. "Life cycle assessment modeling: methodology and current applications at SDSM&T." February 2013.
16. University of South Dakota Sustainability Seminar Series, Vermillion SD. "The use of Life Cycle Assessment as a sustainability metric for environmental and agricultural systems." October 2012.
17. South Dakota Academy of Sciences, Vermillion, SD. "Sustainability-research efforts in South Dakota." April 2012.
18. SDSM&T CEE graduate student seminar series, Rapid City, SD. "Life cycle assessment modeling: methodology and current research efforts." March 2011.
19. SDSM&T Sustainability and Green Energy Conference, Rapid City, SD. "Life cycle assessment modeling: current research efforts." April 2011.
20. Black Hills State University, A to Z Science Seminar, Spearfish, SD. "Life cycle assessment modeling:

methodology and current research efforts." March 2011.
21. National Parks Service Northern Great Plains Technical Committee Meeting, Rapid City, SD. "Assessment of atmospheric mercury deposition at select Northern Great Plains National Parks." January 2010.

PROFESSIONAL SERVICE *(last 10 years)*

Department:

Chair, Faculty Search Committees: Water Resources (2016/2017), Environmental Engineering (2011/2012), 2012/2013), Sustainable Engineering (2009/2010, 2019/2020)
Chair, Promotion & Tenure committee. 2016-2019
EnvE minor program coordinator. 20011-2017
Graduate Program Co-Coordinator. 2016-2020
Sustainability minor coordinator. 2019-present

University:

Chair, University Promotion & Tenure Committee. 2018, 2019
Chair, University Sustainability Committee. 2019-2021
Co-director: Biogeochemistry Core Facility. 2009-2013
Committee Member: Council of Graduate Education. 2017-2020
Committee Member: Graduate Education strategic enrollment planning. 2018-2019
Committee Member: Office of Sponsored Programs indirect return. 2019-2020
Steering Committee Member: Institute of Sustainable Solutions. 2019-2021

External:

Advisory Committee Member, McGrawHill Access Engineering. 2019-present
Committee Member and Chair: AEESP awards committee 2015-2017
Committee Member: ACLCA education committee. 2018-present
External Evaluator for Promotion and/or Tenure cases: typically one case every other year
Hydrologist, USGS Rapid City SD, 2010-2014
Journal Reviewer: typically 10 articles/year
Online Content Developer, McGrawHill. 2013-present
Organizer: NSF sponsored Food Energy Water Nexus workshop, SD Mines 2015
President, Executive Council of the South Dakota Section of American Water Works Association, 2009